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Learning difficulty, L2 proficiency, and implicit and explicit knowledge: a replication  
study

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## ABSTRACT

LEARNING DIFFICULTY, L2 PROFICIENCY, AND IMPLICIT AND EXPLICIT

KNOWLEDGE: A REPLICATION STUDY

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UNIVERSIDADE FEDERAL DE SANTA CATARINA

2010

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Based on the claim that the replication of studies is an important item in the agenda of Applied Linguistics, the present study aimed at determining the extent to which the findings of Ellis (2006) can be replicated in a context where participants are foreign language learners. More specifically, the present study aimed at (1) examining some grammatical structures in the light of students' learning difficulty towards an implicit and explicit scope, and (2) examining the relationship between implicit and explicit knowledge of the grammatical structures investigated here and general L2 proficiency. Data was gathered at Universidade Federal de Santa Catarina, from 45 Brazilian students of English as an L2. All participants performed the four tests proposed by Ellis (2006). Thirty-one participants volunteered to take the proficiency test (PET). Combined means scores were computed in order to compare the scores of implicit and explicit knowledge towards the seventeen grammatical structures investigated. The statistical analysis employed indicated that the easy structure for implicit knowledge was *embedded questions*, for explicit knowledge the easy structures found were: *verb complement*, *since/for*, *relative clauses*, *question tags*, *indefinite article*, *dative alternation*, *comparative*, and, *3<sup>rd</sup> person –s*. Difficult structures for implicit knowledge were: *yes/no questions*, *unreal conditionals*, *since/for*, *relative*

*clauses, question tags, possessive –s, plural –s, indefinite article, and 3<sup>rd</sup> person –s.* Moreover, significant correlations were found between the grammatical structures and the proficiency test (PET). A multiple regression analysis demonstrated that both types of knowledge predict general language proficiency.

Keywords: implicit knowledge, explicit knowledge, learning difficulty, L2 proficiency.

RESUMO

DIFICULDADE NA APRENDIZAGEM, PROFICIÊNCIA NA L2, E  
CONHECIMENTO IMPLÍCITO E EXPLÍCITO: UM ESTUDO REPLICADO

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Baseado na afirmação de que a replicação de estudos é um item importante na pauta da Linguística Aplicada, o presente estudo foi baseado no estudo de Ellis (2006) e teve como objetivo (1) examinar algumas estruturas gramaticais considerando a dificuldade de aprendizado dos alunos a partir de um escopo implícito e explícito, e (2) examinar a relação entre o conhecimento implícito e explícito das estruturas gramaticais investigadas neste estudo e a proficiência da L2. Os dados foram coletados na Universidade Federal de Santa Catarina, com 45 alunos estudantes de inglês como língua estrangeira. Todos os participantes fizeram os 4 testes propostos por Ellis (2006) e 31 fizeram um teste de proficiência (PET). A média dos resultados combinados foi calculada para comparar os resultados do conhecimento implícito e explícito em relação as 17 estruturas gramaticais investigadas. A análise estatística empregada demonstrou que a estrutura fácil para conhecimento implícito foi *perguntas encaixadas (embedded questions)*. Para conhecimento explícito as estruturas fáceis foram: complemento verbal, desde/por, orações relativas, perguntas no final da frase (*question tags*), *artigo indefinido, construções bitransitivas (dative alternation), comparativo, e 3<sup>a</sup>. pessoa –s*. Estruturas difíceis para conhecimento implícito foram: perguntas sim/não, condicionais irreais, desde/por, orações relativas, perguntas no final da frase (*question tags*),

possessivo –s, plural –s, artigo indefinido e 3ª. pessoa –s. Além disso, correlações significativas foram encontradas entre os resultados das estruturas gramaticais e o teste de proficiência (PET). A análise de regressão múltipla demonstrou que ambos os tipos de conhecimento prevêm a proficiência da língua de um modo geral.

Palavras-chave: conhecimento implícito, conhecimento explícito, dificuldade na aprendizagem, proficiência na L2

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# CHAPTER 1

## INTRODUCTION

### 1.1 Preliminaries

Based on my experience as an EFL teacher I have noticed that students learn some things more easily than others. How can we explain that sometimes without any instruction on adverb placement, students start producing it correctly, while they struggle with a seemingly easier target structure such as yes/no questions (Ellis, 2004) With this question in mind, the present study, which is an approximate replication of Ellis (2006), will (1) examine some grammatical structures in the light of students' learning difficulty towards an implicit and explicit scope, and (2) examine the relationship between implicit and explicit knowledge of the grammatical structures investigated here and general L2 proficiency . Following Ellis (2006), the notion of difficulty in the learning of L2 grammatical structures will be addressed in the frame of the theoretical discussion of implicit and explicit knowledge. In doing so, the present study draws on the literature addressing the concepts of difficulty of grammatical features (DeKeyser, 2003), and on the literature on implicit and explicit knowledge (for instance, N. Ellis, 2005).

The assumption underlying the distinction between explicit and implicit knowledge is that L2 acquisition<sup>1</sup> involves both implicit and explicit learning and that the result of these processes is a fusion of implicit and explicit L2 knowledge. The terms implicit and explicit learning were first brought by Reber, when, in his 1967 seminal paper, he demonstrated individuals' ability to learn implicitly. His experiment

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<sup>1</sup> L2 acquisition refers to unconscious knowledge, whereas L2 learning refers to conscious knowledge.

used artificial grammar (AG) to demonstrate that when information was isolated from the environment, making it impossible for participants to resort to explicit strategies, participants could transfer the information in recognition tasks. This fascinating human ability to grasp information about the world in an unconscious, non-reflective way, called implicit learning, is, understandably, appealing to L2 language researchers. The first studies involved artificial grammar learning (Reber, 1967) and probability learning (Millward & Reber, 1968, 1972 in Reber 1989). Experiments that are based on artificial grammars (AG) make use of letter strings, whereas experiments that employ the use of probability learning (PL) make use of a sequence of events predicted by the subjects. Both artificial grammar and probability learning remain the basis for current experimental research (Cleeremans, Destrebecqz, & Boyer, 1998).

Following the seminal studies by Reber (1967, 1972) R. Ellis (1993, 1994, 2004, 2005) have attempted to distinguish between implicit and explicit L2 knowledge. R. Ellis (2009) reviews the criteria set to identify this distinction, which still generates discussions among applied linguists. According to R. Ellis (2009) implicit knowledge is intuitive whereas explicit knowledge is conscious. This assumption may justify the fact that sometimes a learner knows that a sentence is ungrammatical but does not know which grammatical rule is being broken; or sometimes the learner goes beyond and may give a semi-technical (James & Garrett, 1992) explanation for a determined rule, and still does not have conscious awareness of that rule.

According to R. Ellis (1994), implicit knowledge is rapidly accessed in informal situations, on the other hand, explicit knowledge demands controlled processing, generally not available for spontaneous language use. An important question raised here is that explicit knowledge can be automatized through practice (DeKeyser, 2003). N.

Ellis (1994) suggests that, what is automatized, is the sequences of declarative rules produced, and not the rules themselves.

In an attempt to shed some light in the Applied Linguistics research area, the present study pursued the same line of enquiry as Ellis (2006). However, Ellis (2006) is a large scale study, part of a major project named Marsden, carried out at the University of Auckland, in New Zealand. The Marsden study took place from 2002 to 2005 and had as contributors seven researchers from the University of Auckland. The main objectives of the project was (1) to develop tests to measure implicit and explicit knowledge; (2) to identify any significant relation between language proficiency and implicit and explicit knowledge; and (3) to investigate whether form-focused instruction has a role on the acquisition of L2 explicit and implicit knowledge (Ellis, 2009).

A total of 224 participants took part of the Marsden project and the majority were international students enrolled in language schools or undergraduate students at the University of Auckland. The nationalities were mixed, although most of them were Chinese. There was a group of Japanese learners and another of Malaysian. English proficiency was very mixed, from beginning to advanced learners.

Ellis (2006) revisits a thorny question, that is, “what makes some grammatical structures more difficult to learn than others” (p. 431). According to him this question can only be properly investigated if one considers implicit and explicit knowledge of such structures.

As regards the instruments used to measure implicit and explicit knowledge, Han and Ellis (1998) built a study which they called the Marsden study, with the



purpose of developing a battery of tests that could provide separate<sup>2</sup> measures of implicit and explicit knowledge. A total of five tests were developed by the Marsden researchers<sup>3</sup> in order to provide measures of learners' knowledge of 17 English grammatical structures. The tests were: (1) Elicited Oral Imitation Test, (2) Oral Narrative Test, (3) Timed Grammaticality Judgement Test, (4) Untimed Grammaticality Judgement Test, and (5) Metalinguistic Knowledge Test. Han and Ellis (1998) designed the tests<sup>4</sup> following the criteria that distinguishes implicit from explicit knowledge. For instance, it was predicted that the Oral Imitation Test and the Oral Narrative Test would measure implicit knowledge because test-takers would rely on their feeling; moreover, they would not have time to access their metalanguage once they would be under time pressure. On the other hand, Han and Ellis (1998) predicted that the Metalinguistic Knowledge Test would measure explicit knowledge because there was no time pressure, facilitating the access to metalanguage. In the case of the two Grammaticality Judgement Tests, both required test-takers to focus on form when judging whether the sentences were grammatically correct or not. However, the Timed Grammaticality Judgement Test encouraged the use of "feel" since it was time pressured; the Untimed Grammaticality Judgement Test, on the other hand, was expected to measure explicit knowledge since it was not time pressured (which made one more prone to resort to one's metalinguistic knowledge).

The same battery of tests used in Ellis (2006) was used in the present study. The seventeen grammatical structures analysed in the study were chosen according to the

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<sup>2</sup> The authors made it clear, however, that the tests would only predispose, and not guarantee, learners access to one or other type of knowledge, since a number of researchers (Breen, 1989; Coughan & Duff, 1994) have stated that tests do not necessarily correspond to learners' performance.

<sup>3</sup> The Marsden study was built on the Han and Ellis (1998) study, and it was composed by the following researchers: Rod Ellis, Catherine Elder, Shawn Loewen, Rosemary Erlam, Jenefer Philp, and the research assistants: Satomi Mizutani, Keiko Sakui and Thomas Delaney.

<sup>4</sup> Besides these tests, the Marsden study also investigated language proficiency and the effects of instruction on the acquisition of implicit and explicit L2 knowledge.

following criteria: (1) they were inherently problematic to all learners; (2) some structures, as is the case of *verb complements*, involve both item learning and system learning, for instance 3<sup>rd</sup> person; (3) they included morphological and syntactic structures; finally (4) they were structures which typically are covered in teaching syllabus.

Besides investigating L2 knowledge, Ellis (2006) also explored the implication of L2 proficiency in terms of implicit and explicit knowledge. In other words, Ellis (2006) hypothesized that grammar knowledge and L2 proficiency permeate the same path. Ellis (2006) also explored whether grammatical structures benefit one type of knowledge as regards proficiency.

An important issue brought to mind when measuring implicit knowledge is that ‘free production’ is the ideal measure, but when specific linguistic features are being investigated, as is the case in the Marsden study and also in Ellis’s (2006), it is more effective to apply tests that make it possible to capture the target structures and provide a measure of implicit knowledge. Probably this is the reason why explicit knowledge is found easier to measure, due to its declarative nature.

## **1.2 Statement of the problem**

The question of what makes some grammatical structures more difficult to learn than others has been addressed by R. Ellis (1997). He conducted a study in New Zealand with 220 international students, most of which were Chinese students of mixed language proficiency, who were studying English as an L2. His results show that (1) the difficulty of grammatical structures varied according to whether one is considering implicit or explicit knowledge of the structures, that (2) structures vary as to whether it

is implicit or explicit knowledge of them that is related to general language proficiency, that (3) measures of both implicit and explicit grammatical knowledge predict general language proficiency and that (4) together, implicit and explicit measures of grammatical structures can predict a substantial amount of the variance in general language proficiency scores (Ellis, 2006). The objective of the present research proposal is to investigate whether the same findings apply to Brazilian learners of English as a foreign language.

### **1.3 Significance of the research**

Research has shown that easiness or difficulty in the learning of grammatical structures may be a universal phenomenon (N. Ellis, 2005). Also, the notion of difficulty and easiness might be interpreted in different forms, and in different contexts, i.e., what is easy for one learner may be difficult for another. With the present study, I hope to gain a better understanding of the concept of difficulty in the learning of L2 grammatical structures and of how this notion is related to implicit and explicit knowledge. In addition to that, and perhaps more importantly, by replicating a previous study (Ellis, 2006), I hope to contribute not only with new knowledge to the area of Second Language Acquisition – since a different population will be tested - but also with consistent data, since constructive replications may provide stronger support for the original theories and findings, making it possible to generalize outcomes.

The idea of replicating studies is based on the fact that a replication study plays a significant role in the field, giving more consistency and importance to previous sound studies, throwing more light on the area of SLA (Language Teaching,

2008). Once results are replicated, there are more chances that they will be generalizable, contributing, thus, to a more solid basis for research in SLA.

#### **1.4 Organization of the thesis**

Besides this introduction (Chapter 1), this dissertation contains 4 chapters. Chapter 2 lays the theoretical background for this study. It starts by discussing L2 grammar rules and the question of how we learn L2 grammar, implicitly or explicitly. The chapter also makes an appraisal of the L2 learning debate, briefly covering implicit and explicit learning, knowledge and memory. Following Ellis (2006), a theorization of learning difficulty as implicit and explicit knowledge and language proficiency and of the assessment of both implicit and explicit knowledge is attempted. Finally, it theorizes on the assessment of both, implicit and explicit knowledge.

Chapter 3 describes the method employed to collect data for the present study, including information about the selection of participants, the materials and procedures employed to assess implicit and explicit knowledge, and the statistical procedures used to analyze the data. The chapter also poses the research questions that guided the study.

Chapter 4 reports and discusses the results obtained in the study. This chapter includes first the analysis of the results, followed by the discussion of the results in relation to the research questions pursued.

Finally, chapter 5 points out the limitations of the study provides some suggestions for further research, and considers some pedagogical implications that arose from the results.

## **CHAPTER II**

### **Review of Literature**

The purpose of this review of literature is to present the theoretical foundation on which the present study is based. The review is, therefore, mostly grounded on Ellis (2006). This review focuses on implicit and explicit knowledge and is organized as follows. In the first main section, (2.1), the issue of complexity of L2 grammar rules is discussed. The second main section, (2.2), reviews the debate between implicit and explicit memory, learning and knowledge. The third main section (2.3) of this chapter seeks to define learning difficulty as explicit and implicit knowledge which is followed by a review of implicit and explicit knowledge and L2 proficiency (Section 2.4). Finally, the last section (2.5) aims to offer an overview of the controversial factor that is the measurement of implicit and explicit knowledge (2.5).

#### **2.1 Grammar and grammatical rules in L2 learning**

One of the most empirically researched and interesting aspect of SLA is grammar. Rod Ellis (1993, 1994) claims that making certain forms salient in the input can be beneficial to the rate of second language learning. Reber (1989, 1993) and Krashen (1994), on the other hand, claim that complex rules can only be learned implicitly – for them, conscious explicit learning is only effective if the rules are simple and if, the structure is salient to the learner.

In the discussion on the role of grammar in L2 learning, one issue that is commonly raised is the complexity of grammar rules. Complexity of grammar rules has

been acknowledged by Hulstijn (1995) and Robinson (1996). Robinson (1996) distinguishes the term *rules* into two senses: one sense refers to the form which knowledge is represented in the learner's mind, whereas the other refers to pedagogic rules, which are more simplified versions of linguistic rules and which have a more suitable means of presenting L2 information to learners. The effectiveness of pedagogic rules can be discussed in terms of 3 positions as follows:

- a) the nonisomorphy position, that is, the noninterface position, which states that implicit and explicit competence of pedagogic rules are different in kinds and therefore do not interface (Krashen, 1985);
- b) the attention-focusing position, which claims that pedagogic rules serve as a tool to make learners focus on determined aspects to be learned through an inductive process, not accessible to consciousness (Sharwood Smith, 1993).
- c) the understanding position, according to which the fact of learning pedagogic rules may lead to a conscious understanding of the regularities pattern that apply to the grammar rules (Robinson, 1996).

As Robinson (1996) points out, pedagogic rules do facilitate learning, not only because of the fact that they cause learners to notice the aspects of the grammar rules but also because they lead the learner to understand regularities that happen within a certain rule (Robinson, 1996).

## 2.2 The implicit X explicit L2 learning debate: learning, memory, and knowledge

### 2.2.1 Implicit and Explicit L2 Learning

The contrast between implicit and explicit learning is clear in theory: explicit learning in L2 relates to consciousness whereas implicit relates to unconsciousness (Dörnyei, 2009; Reber, 1967;). The trick is, according to Dörnyei (2009), when we try to unveil the details, mainly because the literature has been using the terms *implicit and explicit* for different purposes, with different meanings (Dörnyei, 2009). The terms are applied to learning, knowledge, and memory.

Language learning, briefly speaking, refers to the process of how individuals acquire a language and knowledge, which is stored in their memory (Dörnyei, 2009). Then, it seems quite reasonable to think that one term would correspond to the other, i.e., explicit knowledge would be acquired by explicit learning and stored in explicit memory. On the other hand, implicit knowledge would be acquired by implicit learning and stored in implicit memory. As far as explicit learning, knowledge and memory are concerned, there is no problem in the sequence above. However, the same does not hold true when the implicit sequence is considered (Dörnyei, 2009).

According to Hulstijn (2005), explicit learning is the most used type of school instruction, where learners consciously try to find regularities and to identify rules that accommodate these regularities. N. Ellis (2005) also states that the way the material is elaborated and the depth of the learning techniques, controlled practice, and in-depth analysis are directly related to the effectiveness of explicit learning.

Berry (1994) concluded that second language learning in general presents great support for explicit learning. The author criticizes the studies in the area for their “inconsistent and unqualified use of the terms implicit and explicit” (p. 161). In her view, besides the blurred distinctions between both terms, the tests designed to tap implicit and explicit learning do not ensure an effective measurement of what is learned explicitly or implicitly.

The earliest experiments involving implicit learning took place in the 1960s (Reber, 1967, 1969, 1976) and were led by two different methodologies. One methodology was artificial grammar learning and the other was probability learning. These methodologies aimed at examining implicit knowledge and its processes. Unlike explicit learning, implicit learning is unconscious and non-reflective. In implicit learning, learners grasp information but are not aware of what is being learned. Mathews, Buss, Stanley, Blanchard-Fields, Cho, and Druhan (1989) claimed that implicit processing, which is the processing of implicitly learned knowledge, is more sophisticated and powerful for complex structures than explicit processing. This finding could, in fact, explain why implicitly learned language is so difficult to articulate, that is, to be talked about.

### **2.2.2 Implicit and Explicit Memory**

Dörnyei (2009) clearly states that implicit and explicit memory is only one of the several memory systems, each system presenting different functional and biological characteristics.



Memory, as a general term, is widely used as a reference to the capacity our brain has to store information. However, in psychology, the term memory is defined with regard to the retrieval of information which is only operationalized through memory tasks. It is implicit memory though, which draws more attention. Paradis (2004), for instance, states that implicit memory is more fundamental than explicit memory. N. Ellis (2002, p.299) refers to explicit memory as a “conscious process of remembering a prior episodic experience”. In the case of explicit memory, the individual is conscious of the knowledge held. On the other hand, implicit memory is still a problematic issue and, the main reason for that is the fact that implicit memory involves intuition, making it hard to find a methodology that is able to identify implicit memory without ambiguity (N. Ellis, 2002).

According to Dekeyser (2003), what lends support to the existence of implicit memory are studies conducted with amnesic patients, who cannot recognize people or learn new names but show sensitivity towards unconscious past experiences and have the capacity to learn new skills. Amnesic patients display normal performance on implicit memory tests, which suggests that implicit memory consists of a different cognitive system (Dörnyei, 2009).

### **2.2.3 Implicit and Explicit Knowledge**

The role of implicit and explicit knowledge has been investigated since the early 1980s (Krashen, 1982, 1985; Hulstijn and Hulstijn, 1984; Reber, 1989). After a study with 317 students of French, Bialystok (1979) inferred from the data that learners make their grammaticality judgment on the basis of implicit knowledge, and only switch to the use of explicit knowledge when more fine-grained decisions are required. She also

stated that implicit and explicit knowledge resides in different areas of the brain and, therefore, should be treated differently. Another important factor, according to her, is that explicit knowledge is not likely to be acquired in early childhood.

According to N. Ellis (1994) implicit knowledge cannot be described by the speaker – for instance, because we acquire the complex structures of our first language automatically and unconsciously, the knowledge of these structures cannot be easily accessed and described. For N. Ellis (1994), some of the characteristics of implicit knowledge are manifested in naturally occurring language behavior and cannot be easily accessed separately from this behavior. Implicit knowledge is also unanalyzed. The learner is not aware of having learned of its existence. Explicit knowledge, on the other hand, according to N. Ellis (1994) is analyzed knowledge (i.e. knowledge that the learner is aware of), that is manifested in metalanguage and in problem-solving activities that call for learners to pay focal attention to linguistic form. It involves awareness and is available for the learner as a conscious representation.

R. Ellis (1993) posits three roles for explicit knowledge: the first one is that of monitoring and would be required, for instance, when students try to use the 3<sup>rd</sup> person-s after having learned the rule. Another role is that of facilitating ‘noticing’: even when students are not communicating they feel encouraged to notice possible mistakes, becoming more sensitive to undertake an adequate analysis which will facilitate “noticing the gap”, the third role (Schmidt, 1994).

R. Ellis (2006) distinguishes implicit and explicit knowledge of an L2 in seven dimensions, which are divided into representation dimensions and processing dimensions. Representation dimensions are subdivided into: (1) awareness, (2) type of knowledge, and (3) systematicity and certainty of L2 knowledge. Processing

dimensions are subdivided into: (1) accessibility of knowledge, (2) use of L2 knowledge, (3) self report and (4) learnability. I will briefly describe them next:

**Awareness:** according to Karmiloff-Smith (1979, in Ellis 2006) both implicit and explicit knowledge involve awareness, although implicit knowledge involves unconscious awareness, associated with epilinguistic behavior, that is, behavior that is demonstrated when the learner promptly recognize that a sentence is incorrect. According to Schmidt (1994), to understand awareness as a conscious or unconscious sense, it is necessary to distinguish it in different levels. Therefore awareness of environmental stimuli may be at a lower level than that awareness one has of a rule or generalization. Explicit knowledge involves conscious awareness, which is demonstrated by the learner's ability to verbalize the rule.

**Type of knowledge:** this representation dimension involves declarative and procedural knowledge. The way declarative and procedural knowledge are represented in our mind is directly related to how they are processed (Ellis, 2006). Bialystok (1991) defines this ability as 'control', and according to her it involves three functions, selective attention, integration, and the ability to handle the language in real time situations.

**Systematicity and certainty of L2 knowledge:** implicit knowledge is more structured than explicit knowledge; besides, it is more systematic (Tarone, 1988). On the other hand, explicit knowledge is imprecise, inaccurate and inconsistent (Sorace, 1985), showing more variation in the standard deviations of test scores used to measure L2 learners' learning.

**Accessibility of knowledge:** Preston (2002) states that L2 learners possess separate grammars. One is the deeply embedded knowledge, or implicit knowledge, and this 'grammar' allows for automatic process. The other is the more weakly represented

knowledge, or explicit knowledge, which requires more controlled processing. Hulstijn (2002) claims that explicit knowledge can be automatized through practice but it will still be explicit knowledge. In contrast, DeKeyser (2003) does not find any difference between automated explicit knowledge and implicit knowledge.

**Use of L2 knowledge:** Yuan and Ellis (2003) showed that when learners are pressured to perform a task they rely on their implicit knowledge, resulting in less accurate speech. Nevertheless, when given plenty of time to perform a task, their production becomes more accurate once they access their explicit knowledge.

**Self report:** in a study where Butler (2002) used a cloze task with Japanese learners of English, he reported that learners could provide some explanation for the choice they made, pointing out the most striking feature of explicit knowledge, which is verbalization.

**Learnability:** some researchers claim that explicit knowledge unlike implicit knowledge can be learned at any age (Bialystok, 1994). However Krashen (1982) states that only simple rules can be learned as explicit knowledge.

In Krashen's view, the relationship between explicit and implicit knowledge in L2 acquisition is controversial, with three basic positions possible:

The non-interface position (Krashen, 1981): this position states that explicit and implicit knowledge are stored separately, thus rejecting the possibility of explicit knowledge transforming directly into implicit knowledge and also the possibility of implicit knowledge becoming explicit. Following Dornyei's words, "explicit learning and implicit acquisition are independent language attainment mechanisms" and, therefore, are "stored in different parts of the brain" (Dornyei 2009, p.160). Krashen's

non-interface position is followed by two other scholars, Jan Hulstijn and Michel Paradis who, however, do not hold an extreme view of this position. Unlike Krashen, who claims that learners cannot count on explicit knowledge for fluent communication, and because of that completely rejects explicit grammar teaching, Hulstijn (2002, p.209) considers explicit knowledge a “worthwhile, sometimes indeed indispensable, form of knowledge to be used as a resource where and when implicit knowledge is not (yet) available”.

The strong interface position (DeKeyser, 1998): according to this position explicit knowledge may convert into implicit knowledge if learners have the opportunity to practice. That is, after practicing a declarative rule, learners can convert it into an implicit representation, although this does not entail the loss of the explicit representation. The strong interface position is the most supported one. It was first promoted by Sharwood Smith (1981), followed by DeKeyser (1998, 2007).

The weak interface position (R. Ellis, 1993): this position has three versions. One version states that explicit knowledge may convert into implicit knowledge through practice, but only if the learner has reached a level of development that permits accommodation of the new material. The second version sees explicit knowledge as a contributor of implicit knowledge. As N. Ellis (1994, p.16) states, declarative rules can have “top-down influences on perception”, enabling learners to ‘notice the gap’ between their input and their linguistic competence (Ellis, 2009). N. Ellis (2005, p.325) also argues that “the degree of influence of metalinguistic information on the nature of that processing is so profound that claims of interface and interaction seem fully justified”. The third version supports the idea that explicit knowledge is used to produce output,

that will serve as ‘auto-input’ to the implicit learning mechanisms (Sharwood Smith, 1981).

### **2.3 Learning difficulty and implicit and explicit knowledge**

According to R. Ellis (2002) we now have plenty of evidence that form-focused instruction contributes to SLA. In the study which the present thesis aims at replicating, Ellis (2006) found that the difficulty of grammatical structures varies according to whether one is considering implicit or explicit knowledge of the structures. Structures that are easy in terms of implicit knowledge may be difficult in terms of explicit knowledge and vice versa. Scores for the individual structures showed that, for instance, relative clauses are considered easy in terms of explicit and implicit knowledge, while adverb placement is considered easy in terms of implicit knowledge and difficult in terms of explicit knowledge.

DeKeyser (2003) distinguishes the ‘objective’ and ‘subjective’ difficulty of grammatical features. According to DeKeyser (2003, p.332), objective difficulty concerns the inherent difficulty of different grammatical features. It is determined by reference to some theory of grammar that allows predictions to be made about which features will be easy and which will be difficult to learn (DeKeyser, 2003 in Ellis, 2006 p.431). Subjective difficulty, on the other hand, refers to the actual difficulty that individual learners experience when learning a second language (L2). Because of learners’ individual differences, the level of difficulty will be different for each learner. Therefore, it is important to determine these two senses of difficulty in order to distinguish if they are referred to as implicit or explicit knowledge and to determine an

effective way to approach these grammatical features in the classroom context through effective instruction.

Both connectionist and symbolist theories have tried to explain how learners develop implicit knowledge (Hulstijn, 2002; Selinker, 1972). These theories propose that implicit knowledge is responsible for L2 acquisition and not explicit knowledge. R. Ellis (2006) followed N. Ellis (1996), Goldschneider and DeKeyser (2001), Hulstijn and De Graaf (1994), and Pienemann (1999) criteria to determine what makes some grammatical features easy or difficult as implicit knowledge:

1. Frequency: N. Ellis (1996, 2002) suggests that learners acquire easily features that occur frequently due to a neural capacity to unconsciously count the elements of language they are exposed to.

2. Saliency: Goldschneider and DeKeyser (2001) concluded that salient features are first acquired in second language learning. For instance *verb -ing* is acquired before *3<sup>rd</sup> person -s*. This finding provides a clearer view of the natural order of acquisition of English as an L2.

3. Functional value: grammatical features that have a distinct function, that is, that are typically non-redundant, are easier to learn than forms that realize multiple functions or are redundant. For instance, *3<sup>rd</sup> person -s* is entirely redundant, while plural *-s* can be redundant in specific contexts.

4. Regularity: regularity concerns regular features, features that have an identifiable pattern. Hulstijn and de Graaf (1994) distinguish two aspects of regularity: scope and reliability. According to them 'scope' concerns the number of cases that a particular rule covers, while 'reliability' concerns the extent to which a rule holds true.

One example given by Hulstijn and de Graaf (1994) is the plural –s rule. The rule is large in scope because it applies to a large number of nouns in English and is also high in reliability because it applies to a large percentage of all nouns (Ellis, 2006).

5. Processability: this criterion analyzes if the grammatical feature is easy to process. Ellis (2006) posits that according to Pienemann (1999) the most difficult structure to process is English relative clauses following a subject noun phrase while the use of ‘not’ as a lexical marker of negation would be an example of the least difficult.

R. Ellis (2004) proposes two independent aspects that according to him comprise explicit knowledge, one consists of analyzed knowledge and the other consists of metalinguistic knowledge. Ellis, (2004, p.231) defines analyzed knowledge as the conscious representation of linguistic structures one can verbalize on demand. On the other hand, metalinguistic knowledge is the capacity learners have to label features of linguistic structures. Based on another study where Ellis (2005) reports a significant correlation between a measure of analyzed knowledge and metalinguistic knowledge, he concludes that there is a great probability that learners with highly developed analyzed knowledge will also possess extensive metalinguistic knowledge.

Also investigating learning difficulty, Robinson (1996) distinguishes two dimensions of what he calls ‘pedagogic rule complexity’, where he relates a complex feature to a complex explanation and a simple feature to a simple explanation. Another author that addressed learning difficulty was Hulstijn (2002). According to him explicit knowledge should be operationalized as ‘knowledge that can be verbalized with the use of labels for concepts’ (p.205) in Ellis (2006). Simply stated, this definition suggests that what is important is the verbalization of the rule, in terms of how easy or difficult learners find it to verbalize a declarative rule, which according to Ellis (2006), will



depend on two principal factors: the concepts involved and also the metalanguage needed to express the rules.

In order to discuss the difficulty of declarative rules of grammar, R. Ellis (2006) addresses the issues of conceptual clarity and metalanguage.

### **2.3.1 Conceptual clarity**

The first important distinction for understanding conceptual clarity concerns structures that are formally or functionally simple (Krashen, 1982). Some structures present a simple system but are very complex when it comes to functionality. Ellis (2006) cites articles and wh-questions as examples of this duality: there are only three forms of articles but they perform different functions. On the other hand, wh-questions are functionally simple but formally complex since they involve the inversion of the subject and the verb. Grammar features which are formally and functionally simple will be easy to learn as explicit knowledge. Conversely, features which are formally and functionally complex will be more difficult to learn as explicit knowledge.

The second important distinction concerns the general rules of a determined grammar feature. Hulstijn and De Graaf (1994) make a distinction between 'rule learning' and 'item learning'. According to them, structures that do not have clear rules should be learned as items, therefore facilitating the learning process, and of course structures that have clear rules can be learned in both ways, as items or as rules. Ellis (2006) assumes that for those structures that do not present clear rules, explicit knowledge will be favored, as opposed to the structures that present clear rules.

### 2.3.2 Metalanguage

According to James and Garrett (1992), metalanguage, that is the language we use to define grammar rules, can be ‘semi-technical’ or ‘technical’. Rules for some grammatical structures can be expressed simply, with little metalanguage. For instance, the rule for the use of the indefinite article with uncountable nouns. On the other hand, other rules require more technical, substantial metalanguage for instance, the rule for dative alternation<sup>5</sup> with verbs like *give* and *send*. All in all, the more technical metalanguage a rule requires, the more difficult that rule will be to be learnt. According to Ellis (2006), we have to rely on empirical rather than theoretical means when distinguishing rules’ difficulty as explicit knowledge. One of the empirical means is to examine the order of the grammar rules in the language syllabi, based on Krashen’s (1981) view, and the other is to rely on applied linguists or experienced language teachers.

### 2.4 Implicit and explicit knowledge and L2 proficiency

Ellis (2006), the study which the present study aims at replicating, explores to what extent L2 proficiency can be understood in terms of a mix of implicit and explicit knowledge. This study will be carefully reviewed now. The author hypothesized that implicit and explicit knowledge are implicated in language proficiency, being able to predict learners’ level of proficiency by investigating to what extent they possess knowledge of grammatical structures that are difficult to acquire as implicit knowledge

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<sup>5</sup> Dative alternation refers to the verb flexibility in sentence patterns, for instance, whereas the verb *give* permits two sentence patterns (...V+IO+DO) and (...V+DO+IO), the verb *explain* only permits one sentence pattern (...V+DO+IO).

and those that are difficult to learn in terms of explicit knowledge. The study presents important features that distinguish both implicit and explicit knowledge. These features are divided into representation dimensions and processing dimensions. Representation dimensions are composed of: (1) awareness (Karmiloff-Smith, 1979); (2) type of knowledge (Bialystok, 1991:72) and (3) systematicity and certainty of L2 knowledge (Tarone, 1988; Sorace, 1985; Zobl, 1995). The processing dimensions group consists of: (1) accessibility of knowledge (Preston, 2002; Hulstijn, 2002; DeKeyser, 2003), (2) use of L2 knowledge (Yuan and Ellis, 2003), (3) self report (Butler, 2002) and (4) learnability (Bialystok, 1994; Krashen, 1982), formerly addressed in section 2.4.3.

In order to investigate the learning difficulty of the selected 17 grammatical structures, Ellis (2006) provided theoretical background introducing characteristics of each type of knowledge. Concerning implicit knowledge, there are five determinants that contribute to the understanding of what makes grammatical features easy or difficult. These, are: (1) frequency (N. Ellis, 1996; Gass and Mackey, 2002), (2) saliency (Goldschneider and DeKeyser, 2001), (3) functional value (Andersen, 1984), (4) regularity (Hulstijn and de Graaf, 1994) and (5) processability (Pienemann, 1999). Regarding explicit knowledge, the author brings conceptual clarity (Krashen, 1982; Hammerly, 1982; Hulstijn and De Graaf, 1994; De Graaf, 1997; Hu, 2002) and metalanguage (James and Garrett, 1992; Krashen, 1981; Robinson, 1996) as important characteristics to explain the easiness or difficulty of grammatical features.

Based on both types of knowledge, implicit and explicit, four tests were administered in the study: the Oral Imitation Test, the Timed Grammaticality Judgment Test, the Untimed Grammaticality Judgment Test and the Metalinguistic Knowledge Test (see section 6.2 for an explanation of each test). The first two tests were designed

to measure implicit knowledge and the last two to measure explicit knowledge. General proficiency was measured by an international proficiency test, IELTS. There were 220 participants in the study, from different countries, including China, Japan and Malaysia. Their English proficiency level was mixed and they all took the battery of four tests, except for the IELTS, because proficiency scores (IELTS) were available for only a subset of 50 participants.

An interesting finding was the comparison of implicit and explicit knowledge of the individual structures. In the case of the implicit knowledge scores, 'easy' structures (mean score higher than 0.60) were verb complement, possessive -s, modals, adverb placement, and relative clauses while 'difficult' structures (score lower than 0.45) were indefinite article, unreal conditionals and question tags. In the case of explicit knowledge, the 'easy structures (score higher than 0.75) were plural -s, indefinite article, possessive -s, regular past tense and relative clauses. 'Difficult structures for explicit knowledge (scores of 0.50 or lower) were adverb placement, ergative verbs and unreal conditionals. Spearman Rank Order Correlation for the two sets of scores was very weak and statistically non-significant. In relation to the IELTS scores, there were some very significant correlations. For instance, implicit scores for comparative, unreal conditionals and since/for were strongly related to the IELTS scores, whereas explicit scores of the same features were weakly related to the IELTS scores. However, the explicit scores for indefinite article, regular past tense, and, in particular, relative clauses were strongly related to the IELTS scores, whereas the implicit scores for these structures were weakly related to the IELTS scores. Interestingly, for some grammatical structures analyzed, for instance, embedded questions and adverb placement both the implicit and explicit scores correlated with the IELTS scores. Some structures did not show a relationship to the IELTS scores for either kind of knowledge.

The findings of the study showed that both implicit and explicit knowledge help contribute to general proficiency total scores, however in different skills. While implicit knowledge was more related to listening and speaking, explicit knowledge was related to writing and reading. Ellis' (2006) findings are of great relevance to the understanding of the relationship between difficulty of L2 grammatical structures, implicit knowledge, explicit knowledge and general language proficiency. It is therefore important to verify if the same findings hold in the case of Brazilian learners of English as an L2.

## **2.5 Measuring implicit and explicit knowledge**

A controversial factor that involves implicit and explicit knowledge is how to validate the measure of these two kinds of knowledge. Han and Ellis (1998), DeKeyser (2003), and Bialystok (1994) have conducted studies to elucidate this matter, mostly regarding the time allowed for the performance of activities, trying to determine what role time plays when assessing implicit and explicit knowledge.

Ellis (2009) claims that the ideal measure for implicit knowledge is free production. However, he does not ignore other tests which can also validate measures of implicit knowledge, such as grammaticality judgement tests, especially when specific linguistic features are investigated, making learners demonstrate whether they know the target features.

Undoubtedly, explicit knowledge is easier to measure. Learners have time to process information that is stored as explicit knowledge. Implicit knowledge, on the other hand, is accessible by means of automatic processing and does not require time to be

accessed. It is of great importance in the assessment of implicit knowledge to ensure that test takers are focused on meaning rather than form (Erlam, 2006).

According to Erlam (2006), Elicited Imitation Tests require learners to process language rather than repeat verbatim what they have heard. A very important factor in this test is time. For an Elicited Imitation test to be a valid measure of implicit knowledge, the test must be performed under time pressure so that participants do not have time to plan their responses.

Another frequently used test to measure implicit and explicit knowledge is the Grammaticality Judgement Tests (GJTs). As R. Ellis (1991) states, there are different options that learners have when performing a GJT. For instance, if the task requires participants to discriminate grammatical and ungrammatical sentences, it is possible that they will respond intuitively. However, if the task requires participants to locate or to describe the error, it will require more conscious analysis. Again, time is an important factor on this test. According to R. Ellis (2004), if participants are given time to perform the test they have the opportunity to reflect on the sentence, and thus draw on explicit knowledge. Nevertheless, that does not guarantee that participants will rely on intuition to judge a sentence. In order to know what knowledge learners use when making the GJT it is necessary to compare the results to other tests. R. Ellis (1998) administered three GJTs in order to compare the result to other tests: elicited imitation and metalanguage. The conclusion was that, when administered within limited time, GJTs predispose participants to draw more on implicit knowledge and when administered without a time limit, participants draw more on explicit knowledge.

In the case of Metalinguistic knowledge test, participants are aware that they are making judgments about the grammaticality of a sentence, and draw completely on their

explicit knowledge. Hu (2002) suggests that learners' ability to apply their knowledge may vary. According to him, two factors can influence that. One is the degree of attention to form and also the time allowed for the task, the other is the relevance of the structures in production for the learners. The more frequent and cognitively prominent they find the form, the more they will be accurate on their judgments.

As De Jong (2005 p. 7) noted:

Testing whether learning is implicit or explicit is very difficult because there are no clear boundaries between implicit and explicit processes and nearly all cognitive processes have both implicit and explicit aspects. This means that implicit learning should not be ruled out as soon as awareness has been established, nor should implicit learning only be assumed when there is no awareness at all of the learning process or product. The same argument holds for implicit and explicit knowledge, which can (and often do) co-exist and operate simultaneously.

In my opinion De Jong (2005) clearly states the challenge faced by researchers in developing tests that separately measure implicit and explicit knowledge. The solution Ellis (2009) proposes is to set some criteria to operationalize the tests: the first one is the degree of awareness, the second is the time available for producing a response, then the focus of attention and the utility of metalanguage in producing a response. Hence, they developed the tests used in his study: the Elicited Oral Imitation Test, the Oral Narrative Test, the Timed Grammaticality Judgment Test, the Untimed Grammaticality Judgment Test, and the Metalinguistic Test.

## **CHAPTER III**

### **Method**

As seen in the review of literature, Ellis (2006) proposed a multi-task investigation by correlating tasks that measure implicit and explicit knowledge and the level of proficiency students have. With this in mind, the main objective of this study is to investigate this correlation in a Brazilian context through an Approximate or Systematic (Language Teaching, 2008) replication of Ellis (2006) study.

To this end, this chapter will describe the methodological procedures of this study, in the following order: the first section of this chapter – section 3.1 – presents the research questions pursued. Section 3.2 presents information about the participants and the context of the research. The next section, section 3.3, describes the instruments applied in the data collection, followed by section 3.4, which presents the procedures for data collection and data analysis.

#### **3.1 Research questions**

Following Ellis (2006, p. 441), the present study pursued the following research questions:

1. Are there some grammatical structures that are easy in terms of implicit knowledge but difficult in terms of explicit knowledge?
2. Conversely, are there some grammatical structures that are difficult in terms of explicit knowledge but difficult in terms of implicit knowledge?



3. To what extent is implicit/explicit knowledge of specific grammatical features related to general L2 proficiency?
4. To what extent does implicit and explicit knowledge of specific grammatical structures predict general L2 proficiency?

### 3.2 Participants

In order to answer these questions, data was collected from native speakers of Brazilian Portuguese performing the four tasks proposed by Ellis (2006) and a proficiency test, PET. First, I contacted the teachers of all levels of the Letras<sup>6</sup> program and the Extra-curricular<sup>7</sup> courses at the Federal University of Santa Catarina, who authorized my visit and also encouraged their students to participate in the study. After that, I visited their classes to talk briefly about the purposes of the study and collect the e-mails from the ones interested in taking part in the study. No financial reward was given. Five book vouchers were raffled as an incentive for those who kindly volunteered for the study. Moreover, the fact that they could have access to their performance on the proficiency test, PET, proved to be a very stimulating factor for those who wanted to check on their current English performance.

A total of 45 participants took part in the present study. There were 7 participants from the first semester of the Letras Program at Universidade Federal de Santa Catarina (UFSC), 6 from the fifth semester, 1 from the seventh semester and 31 participants from the Extra-curricular courses of English at Universidade Federal de

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<sup>6</sup> The Letras Inglês program is an undergraduate course offered at UFSC – Universidade Federal de Santa Catarina – which enables the learner to receive his/her teaching certificate after the full completion of the four-year program.

<sup>7</sup> The Extra-curricular courses were created in the 1970s by UFSC as foreign language teaching program, they assist UFSC students as well as the community in general.

Santa Catarina (UFSC). Except for 2 participants from Level 4, the participants from the Extra-curricular course were from level 5 and above: 8 participants were from level 5; 9 participants were from level 6; 3 participants were from level 7; 5 participants from level 8, and 4 participants were from the Advanced 2 level. The extracurricular English course is composed of ten semesters of studies. Semesters 1 and 2 are considered beginning levels, equivalent to one year of English classes. Semesters 3 and 4 are considered pre-intermediate levels, equivalent to two years of English classes. Semesters 5 and 6 are considered intermediate levels, equivalent to three years of English classes. Semesters 7 and 8 are considered high-intermediate levels, equivalent to four years of English classes and semesters 9 and 10 are considered advanced levels, equivalent to five years of English classes. The correspondence of the semesters in relation to the levels of proficiency is based on an in-house categorization.

Overall, the English proficiency of the participants was very mixed, ranging from low-intermediate to advanced learners who showed a competent command of English. All of the participants were Brazilian speakers of Portuguese and were invited by the researcher during her brief visit to their classes, where she collected the email addresses from the ones interested in taking part in the study. The arrangements for the meetings were all made by email. All the participants signed a consent form (see Appendix A) before performing the battery of tests.

Through information collected through a profile questionnaire (see Appendix B), it was possible to learn that participants' age ranged from 17 to 55 ( $M = 25.29$ ). Thirteen participants reported having spent some time in an English speaking country, with length of stay ranging from 4 days to 9 months. Besides English, some participants also reported learning or having learned other languages, 15 participants mentioned they

have learned or were learning Spanish; 7, German; 4, Italian; 5, French; 1, Greek, and 1 reported having learned Japanese. When asked about the kind of instruction received in the English class at school, 25 participants were emphatic, stating that the focus of their classes was grammar structures.

### **3.3 Instruments**

In the present study, except for the proficiency test, the instruments used were the same used in the original Ellis' study (2006). The instruments consisted of four tests and a proficiency test. A total of 17 grammatical structures were tested. In this section, I will first address the grammatical structures used in the present study and then the battery of tests. As in Ellis (2006), the grammatical structures were: verb complement, 3<sup>rd</sup> person -s, plural -s, indefinite article, possessive -s, regular past tense -ed, yes/no questions, comparative, unreal conditionals, modals, ergative verbs, embedded questions, adverb placement, question tags, since/for, dative alternation, and relative clauses (see Table 1). In his original study, Ellis (2006) chose these structures based on the following criteria: (1) structures which were all problematic to learners, resulting in identifiable production errors; (2) structures which were likely to involve both item learning as in the case of verb complements; and system learning, for instance, 3<sup>rd</sup> person -s; (3) structures which included both morphological and syntactical structures; and (4) structures representing the full range of structures covered in a typical teaching syllabus, from all levels.

Table 1

*The grammar content of the tests battery*

Grammar feature	Description	Typical learner error
Verb complement	Some main verbs (e.g. want) take an infinitive complement whereas others (e.g. suggest) take a gerund complement.	Liao says he wants buying a new car.
3 <sup>rd</sup> person –s	-s is attached to the base form of the verb in the 3 <sup>rd</sup> person of the Present Simple Tense.	Hiroshi live with his friend Koji.
Plural –s	-s is attached to nouns in all contexts where the noun refers to 'more than one'.	Martin sold a few old coins and stamp to a shop.
Indefinite article	'a/an' precedes a countable noun when the referent is non-specific and not already known to the hearer.	They had the very good time at the party.
Possessive –s	-s is attached to a modifying noun to signal it is the possessor	Liao is still living in his rich uncle house.
Regular Past Tense –ed	-ed is added to the base form of the verb to signal past time	Martin completed his assignment and print it out.
Yes/no questions	Yes/no questions are formed by placing an auxiliary verb before the subject and main verb. The auxiliary (not the main verb) is tensed.	Did Keiko completed her homework?
Comparative	Monosyllabic comparative adjectives add –er to the base form of the adjective; polysyllabic adjectives make the comparative by placing 'more' before the base form.	The building is more bigger than your house.
Unreal conditionals	The main clause in an unreal conditional sentence requires the use of a past modal + have + Ven.	If he had been richer, she will marry him.
Modals	Modal verbs such as 'must' and 'can' are followed by the base	I must to brush my teeth

	form of the main verb.	now.
Ergative verbs	Ergative verbs like 'increase' must take the active voice unless the sentence contains an explicit or readily inferred agent that caused the process to occur.	Between 1990 and 2000 the population of New Zealand was increased.
Embedded questions	Questions that are reported (i.e. are indirect rather than direct) require declarative word order (i.e. there is no subject-verb inversion)	Tom wanted to know what had I done.
Adverb placement	Adverbs can be positioned sentence initially and finally and also between the subject and verb but not between the verb and the direct object.	She writes very well English.
Question tags	The choice of auxiliary in a question tag is dependent on the form of the main verb (e.g. the main verb contains an auxiliary then the same auxiliary must be chosen in the question tag).	We will leave tomorrow, isn't it?
Since/For	'Since' denotes a period of time commencing at a specific point in the past and continuing into the present; 'for' is used when the period is denoted in terms of a number of time units.	He has been living in New Zealand since three years.
Dative alternation	Whereas verbs like 'give' permit two sentence patterns (...V+IO+DO and ...V+DO+IO) verbs like 'explain' only permit one sentence pattern (...V+DO+IO).	The teacher explained John the answer.
Relative clauses	Relative clauses in English where the relative pronoun functions as object; such clauses do not allow a resumptive pronoun.	The boat that my father bought it has sunk.

Source: Ellis, 2006

Having presented the 17 grammatical structures used in Ellis (2006), I will now describe the tasks participants were asked to perform in the present study.

**Oral Imitation Test:** The first test consisted of an Oral Imitation Test, in which after listening to a set of 34 belief statements (one grammatical and one ungrammatical sentence per structure) participants were required to say if they agreed with, disagreed with, or were not sure about each statement. Participants were then required to repeat the sentences orally in correct English. An example of the comparative feature is:

*New Zealand is greener and more beautiful than other countries.*

An example of the 3<sup>rd</sup> person –s feature is:

*The film that everyone likes is Star Wars*

An example of the since/for feature is:

*People have been using computers since many years*

The test was described as a Belief Questionnaire, where they would have to give their opinion on different topics. They were told that after listening to the belief statement they should decide whether the statement was true, not true, or if they were not sure about their belief, marking with an x on the test sheet that worked as a distractor.

*New Zealand is greener and more beautiful than other countries.*

( ) True      ( ) Not true      ( ) Not sure

After marking their choice, participants should repeat the statement in correct English in a microphone connected to a computer which recorded every sentence for further analysis. According to Erlam (2006), the test was presented as a Belief

Questionnaire in an attempt to maximize participants' attention to meaning rather than form. With this aim in mind, statements were organized around themes, for instance, education, relationships, etc. Participants' answers were analyzed by identifying obligatory occasions for the use of the target structure. In his study, Ellis (2006) presented the belief statements orally on a cassette player. However, in the present study, these statements were presented on a CD recorded by a native speaker of American English. When a participant failed to imitate a sentence or to create an obligatory context for the target structure, this was coded as 'avoidance'. A score of 1 was allocated for each correctly imitated sentence. For the sentence in which the target structure was either avoided or attempted but incorrectly supplied, a 0 was allocated. The scores were expressed as percentage correct (see Appendix C).

**Timed Grammaticality Judgment Test:** The second test, the Timed Grammaticality Judgment Test, was a computer-delivered test consisting of 34 sentences, evenly divided between grammatical and ungrammatical sentences. The sentences were presented on a computer screen. For each of the seventeen grammatical structures there were four sentences to be judged. Thus, participants were required to indicate whether each sentence was grammatical or ungrammatical by pressing response buttons: the shift button was for incorrect and the enter button for correct, within a fixed time limit, which ranged from 1.8 to 6.24 seconds depending on the sentence. In Ellis (2006), this time was established by timing native speakers' performance on the sentences in a pilot study. After calculating the average of the native speakers' performance, Ellis (2006) added 20 per cent due to the slower processing speed of L2 learners. Each item was scored as correct or incorrect and items not responded were scored as incorrect. A percentage accuracy score was calculated.

**Untimed Grammaticality Judgment Test:** In the third test, the Untimed Grammaticality Judgment Test, participants had the same content as the timed one, the difference being that they could use their own time to do it. Total accuracy scores as well as separate scores for the grammatical and ungrammatical sentences were calculated (see Appendix E). After concluding the test, participants were told to remain in front of the computer for the next test: the Untimed Grammaticality Judgment Test which had the same content as the previous one, and was also computer-delivered. Besides having their own time to answer the test, participants should also indicate how certain they were about their answers and also if they answered based on their feeling or on a rule, however, this data will not be analyzed in this study.

**Metalinguistic Knowledge Test:** Finally, in the fourth test, the Metalinguistic Knowledge Test, participants were presented with seventeen ungrammatical sentences and selected the rule that best explained each error out of four choices provided. A total percentage accuracy score was calculated (see Appendix G). The Metalinguistic Knowledge Test consisted of 17 ungrammatical sentence and was presented on paper, participants should only mark which rule best explained each error out of four choices.

**Preliminary English Test (PET):** In order to verify if the two types of knowledge, implicit and explicit, were implicated in proficiency and also if structures varied in the type of knowledge that was predictive of proficiency, participants were submitted to the Preliminary English Test. The test was in familiar paper-and-pencil format consisting of four parts: Reading, Writing, Listening, and Speaking. The listening part has four sections that involve answering multiple choice questions after listening to a conversation or a monologue. The reading part has three sections. The writing part consists of two sections, one is a functional writing task and the other, a



more formal writing task. The speaking part consists of three sections, an interview, a description of a picture, and a description of a drawing. Scores are based on the Council of Europe Common European Framework.

The Preliminary English Test (PET) is a general proficiency examination provided by the University of Cambridge ESOL (part of UCLES), and it is recognized and used by many education institutions and business corporations around the world. The examination is at level B1 in the Council of Europe Common European Framework. It is at Entry Level 3 in the UK National Qualifications Framework. The ranking of the examinations provided by the University of Cambridge ESOL is described in Table 2:

Table 2

*Cambridge Examinations and its equivalent for Council of Europe Common European Framework*

Examinations	Council of Europe Common European Framework
CPE - Certificate of Proficiency in English	C2 – Proficient User
CAE - Certificate in Advanced English	C1- Proficient User
FCE - First Certificate in English	B2 – Independent User
PET - Preliminary English Test	B1- Independent User
KET – Key English Test	A2 – Basic User

Source: [www.coe.int/T/DG4/Portfolio/?L=E&M=/main\\_pages/levels.html](http://www.coe.int/T/DG4/Portfolio/?L=E&M=/main_pages/levels.html)

The Association of Language Testers in Europe (ALTE) in alignment with the Council of Europe Common European Framework has developed a framework for each of the six levels of language proficiency showing what learners can typically do at each level. At PET level, besides general ability, there is also the required ability in other three contexts: social & tourist, work and study. The table below describes each of the abilities.

Table 3

*Abilities learners can typically show at a passing grade*

Typical abilities	Listening and Speaking	Reading and Writing
Overall general ability	<p>CAN understand straightforward instructions or public announcements.</p> <p>CAN express opinions on abstract/cultural matters in a limited way or offer advice within a known area.</p>	<p>CAN understand routine information and articles.</p> <p>CAN write letters or make notes on familiar or predictable matters.</p>
Social & Tourist	<p>CAN identify the main topic of a news broadcast on TV if there is a strong visual element.</p> <p>CAN ask for information about accommodation and travel.</p>	<p>CAN understand factual articles in newspapers, routine letters from hotels and letters expressing personal opinions.</p> <p>CAN write letters on a limited range of predictable topics related to personal experience.</p>
Work	<p>CAN follow a simple presentation/demonstration.</p> <p>CAN offer advice to clients within own job area on simple matters.</p>	<p>CAN understand the general meaning of non-routine letters and theoretical articles within own work area.</p> <p>CAN make reasonably accurate notes at a meeting</p>

		or seminar where the subject matter is familiar and predictable.
Study	CAN understand instructions on classes and assignments given by a teacher or lecturer. CAN take part in a seminar or tutorial using simple language.	CAN understand most information of a factual nature in his/her study area. CAN take basic notes in a lecture.

Source: <http://www.cambridgeesol.org/exams/exams-info/cefr.html>

The approximate ranges of percentage for each grade at PET are as follows: (1) Passing grades is subdivided in Pass with Merit and Pass. For Pass with Merit the percentage is from 85% and above. For Pass, percentage varies from 70% to 84%. Failing grades are subdivided into Narrow Fail and Fail. For Narrow Fail, the percentage is 65% to 69%, and for Fail it is 64% and below. The test consisted of multiple choice items for the Reading and Listening sections. The Writing section consisted of 5 fill-in-the-blanks items and two descriptive items. The possible maximum score was 100 for each section.

The Reading section consisted of 35 questions. From questions 1 to 5 participants had to mark the letter to the correct explanation of different signs; from questions 6 to 10 participants were given the description of five people and then asked to match them to the appropriate college or course described on the next page; from questions 11 to 20, participants had to look at 10 sentences about European travel, then read a text about it and decide if each sentence was correct or incorrect; from questions 21 to 25 participants were given a text interpretation, and last, from questions 26 to 35, participants had to read a text and choose the correct word out of four alternatives for each missing word.

The writing section was divided in three parts. The first part consisted of questions 1 to 5, and it was presented as a fill-in-the-blanks activity, where participants had to complete the sentences so as to make sense to the previous one given in the test. In the second part, participants were asked to write an email where participants should tell a friend they have joined a club. In addition, participants should explain which club they have joined and should suggest the club to a friend and say what they both could do there. Part three of the writing section consisted of two questions. However participants could choose the one they felt most willing to answer. One was an answer to a letter received from a friend in the USA and the other was a story that the English teacher had asked them to write. Both tasks required participants to write about 100 words.

The Listening section consisted of four parts. There were seven questions in the first part, each question was presented with three pictures, then participants had to listen to the recording and choose the picture that corresponded to it. From questions 8 to 13, the second part of the Listening test, participants were asked to hear an interview and choose the correct answer out of three. In part three, from questions 14 to 19, participants heard a radio announcer talking about activities at a museum. For each question, they had to fill in the missing information in the numbered spaces. Last, in part four, participants were given six sentences. They heard a conversation between a boy and his sister, about school, and were asked to decide if each sentence was correct or incorrect.

The tests, along with a subsection of 5 fill-in-the-blanks questions of the Writing section, were all corrected by this researcher. The Speaking section was also assessed by me, due to logistic constraints. Participants arranged to take the tests in very different

times, making it difficult to have another party available. As for the Writing part, this was corrected by three raters, one native speaker of English and two M.A students, speakers of Brazilian Portuguese as L1. Scores for each section were obtained through a mean score and then correlated to the 17 grammatical structures proposed by Ellis (2006).

Before moving on to the next subsection, a final word on the raters is in order. Rater 1 is a native speaker of English who has lived in Brasil for 10 years with 8 years of experience in English language teaching. Rater 2 is a Brazilian English teacher with 15 years of experience in English language teaching, and rater 3, who is also a Brazilian English teacher with 15 years of experience in English language teaching.

### **3.4 Procedures for data collection**

The present study is a replication of Ellis (2006), and therefore, it follows its method as strictly as possible, making only those adjustments which were found to be necessary because of infra-structure. Data collection was carried out in two stages. The first stage consisted of the same four tasks applied by Ellis (2006) and the second stage consisted of the proficiency test. Both stages were performed in my advisor's office at Centro de Comunicação e Expressão (CCE) inside UFSC complex.

The 45 participants were invited to take the proficiency test PET, data from those whose scores fell between 4.5 and 8 - which were the mean IELTS scores used in Ellis' study were analyzed to address research questions number three and four. Following Ellis (2006), data from all the participants, including the ones who scored below and over the average scores were used to address research questions one and two.

Upon arrival in the office where data would be collected, participants were first asked to read and sign a consent form. Subsequently, the first test and the Oral Imitation Test were explained to them.

Following Ellis (2006), prior to performing each of the four tests – i.e., the Oral Imitation Test, the Timed Grammaticality Judgment Test, the Untimed Grammaticality Judgment Test, and the Metalinguistic Knowledge Test – participants were given a practice session. In addition, participants completed a background questionnaire containing questions about their first language, the age they started learning English, number of years in an English speaking country, other languages they have studied and the kind of instruction in English they received at school (see appendix A) .

Before leaving, participants arranged the date for the proficiency test, PET. At first, I tried to stipulate Fridays for participants to do the proficiency test. However, because of a high number of absences, I decided it was wiser to arrange the test individually in my advisor's office, despite being more time consuming. Data collection started on March 31, 2009 and ended on July 7, 2009. The sessions were all individual and lasted approximately one hour and thirty minutes per participant. The proficiency test lasted approximately two hours and fifteen minutes, except for five pairs who took the test on the same day, the other participants arranged individual meetings at my advisor's office due to their schedule constraints.

Following Ellis (2006), the reliability of the different test measures were determined by Cronbach's Alpha<sup>8</sup>. Again, following Ellis (2006), a combined mean

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<sup>8</sup> Cronbach's alpha measures how well a set of items (or variables) measures a single unidimensional latent construct. When data have a multidimensional structure, Cronbach's alpha will usually be low. Technically speaking, Cronbach's alpha is not a statistical test - it is a coefficient of reliability (or consistency). (UCLA Academic Technologic Services).

score for the Oral Imitation Test and the Timed Grammaticality Judgment Test (total) for each of the seventeen grammatical structures was calculated. A combined mean score using the ungrammatical sentences on the Untimed Grammaticality Judgment Test and the scores from the Metalinguistic Knowledge Test was calculated for each of the seventeen structures. Difference scores for explicit and implicit knowledge for each grammatical structure were calculated by subtracting the mean score for the Untimed GJT/Metalinguistic Knowledge Test. Multiple regression analyses were conducted with the implicit and explicit scores for selected grammatical structures (the same used by Ellis, 2006) as the independent variables and the IELTS scores as the dependent variables. A Principal Component Analysis was conducted to determine the extent to which the Oral Imitation Test and the Timed Grammaticality Judgment Test measure implicit knowledge. The same statistical procedure was used to determine the extent to which the Untimed Grammaticality Judgment Test and the Metalinguistic Test measure explicit knowledge.

Proficiency was measured by the academic version of the Preliminary English Test (PET). Two reasons propelled me to choose PET instead of IELTS, one was the availability, and the other was the possibility to increase the range of participants applying a proficiency test of an intermediate level.

The next chapter will bring the results of the above mentioned analysis as well as a discussion of the results found in this study. All analyses were made using the software SPSS 15.0 for Windows.

## **CHAPTER IV**

### **Data Analysis and Discussion**

#### **4.1 Introduction**

The purpose of the present chapter is to present and discuss the results of the Approximate Replication study which investigated grammar learning difficulty, L2 proficiency, and implicit and explicit knowledge. In order to gain insights from the data, statistical treatments were adopted, and, thus, the organization of the chapter will be as follows. First, I will present the results from the descriptive analysis of the participants' scores on the five implicit/explicit knowledge tests (Metalinguistic Test, Oral Imitation Test, Timed Grammaticality Judgement Test, Untimed Grammaticality Judgement Test, and ungrammatical sentences on the Untimed Grammaticality Judgement Test) and on the proficiency test (PET) (Section 4.2). Second, I will present the results of the Cronbach's Alpha calculated to estimate the reliability of the implicit/explicit knowledge tests (Section 4.3). Third, I will present the participants' combined mean scores for the Oral Imitation Test and the Timed Grammaticality Judgement Test for each of the seventeen grammatical structures being targeted, together with their combined mean scores for the ungrammatical sentences on the Untimed Grammaticality Judgement Test and the scores from the Metalinguistic Knowledge Test will be presented and discussed (Section 4.5). This will be followed by the presentation and discussion of the correlation scores between the implicit and explicit knowledge scores for the seventeen grammatical structures and the PET scores (Section 4.7).



Finally, the results of multiple regression analyses (with the implicit and explicit scores for selected grammatical structures as the independent variables and the PET scores as the dependent variables) will be addressed (Section 4.7).

## 4.2 Descriptive Analysis

This section aims at presenting the descriptive analysis of the scores of the participants in all tests. The descriptive statistics for the implicit/explicit knowledge tests are presented in Table 4.

Table 4

*Descriptive statistics for the implicit/explicit knowledge tests of the whole sample*

	N	Minimum	Maximum	Mean	Std. Deviation
Metalinguistic Test (%)	45	35.29	88.24	60.78	13.79
Untimed GJT (%)	45	52.94	97.06	77.67	11.20
Untimed GJT (ungram.) (%)	45	47.06	100.00	79.41	13.37
Oral Imitation Test (%)	45	0.00	88.64	39.29	22.87
Timed GJT (%)	45	38.24	82.35	51.47	9.55

*Untimed GJT=untimed grammaticality judgement test, Untimed GJT (ungram)=untimed grammaticality test ungrammatical sentences, Timed GJT=timed grammaticality judgement test*

Looking at the means from Table 4 it can be noticed that there is not a great difference in the means between the Untimed Grammaticality Judgement Test Total and Untimed Grammaticality Test for the ungrammatical structures in the present study. Ellis (2006) does not show the results for the entire Untimed Grammaticality Judgement Test, only for the ungrammatical sentences. According to Ellis (2006), the decision of

excluding the grammatical sentences of the Untimed Grammaticality Test was made based on the fact that the Untimed Grammaticality Judgement Test loaded on both, implicit and explicit, factors. Hence, a further factor analysis was run, substituting the Untimed GJT total scores for the Untimed GJT (ungrammatical sentences), which loaded only on factor 2, that is, explicit knowledge.

What can be seen is that, in the present study, the standard deviation for the Oral Imitation Test is higher than all the other tests, indicating that there was a greater variation in the scores on this test. Here, the Oral Imitation Test was the test that presented more difficulty for the participants. This is possibly due to the fact that the recording was done by a native speaker, moreover, participants could hear the sentences only once. Besides, the sentences were presented orally, only, and no written version was available to participants.

In the present study, the test which presented the least variation in scores was the Timed Grammaticality Judgement test. It also showed one of the lowest mean scores. The stimulus for this test was presented in written form and the test was not time pressured. However, the level of difficulty of the sentences may have influenced the low mean score. The highest mean found was that of the Untimed Grammaticality Judgement Test. This test was presented in written form.

Table 5 shows the descriptive statistics for Ellis (2006). Like in Ellis (2006) the results of the present study showed considerable variance for both implicit and explicit measures.

Table 5

*Descriptive statistics for the implicit/explicit knowledge tests of the whole sample in Ellis (2006)*

	N	Mean	Std. Deviation
Metalinguistic Test (%)	228	54.61	15.56
Untimed GJT (ungram.) (%)	225	80.67	13.13
Oral Imitation Test (%)	228	50.44	18.91
Timed GJT (%)	227	56.21	11.88

*Untimed GJT=untimed grammaticality judgement test, Untimed GJT (ungram)=untimed grammaticality test ungrammatical sentences, Timed GJT=timed grammaticality judgement test*

Despite of the difference in number of participants, overall, the mean results for both studies were very approximate. The only discrepancies were presented in the results of the standard deviation for the Oral Imitation Test and for the Timed Grammaticality Judgement Test. Both tests were designed to measure implicit knowledge. Table 6 presents the descriptive statistics for participants' scores on the four skills assessed by the L2 proficiency test (PET). Only 31 of the 45 participants took the proficiency test. The participants who did not take the test claimed not having time availability at that time of the year due to their final exams at the university.

Table 6

*Descriptive statistics for the L2 proficiency test*

	N	Minimum	Maximum	Mean	Std. Deviation
Listening (PET)	31	36.00	96.00	73.74	17.50
Reading (PET)	31	37.00	97.00	77.04	15.19
Writing (PET)	31	10.00	95.00	72.23	15.66
Speaking (PET)	31	60.00	100.00	86.87	9.69
Total (PET)	31	39.25	93.83	77.47	12.75

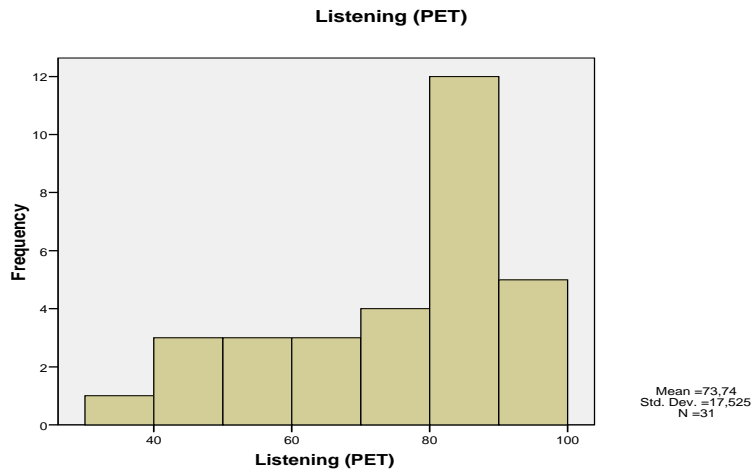
The scores for Listening (PET) presented the highest standard deviation of the PET sample. The lowest standard deviation was presented by Speaking (PET), which means that even though participants demonstrated some variance in their performance of the other PET sections, the same did not hold true for the oral section, where participants demonstrated a more homogeneous performance. Participants performed the lowest in the Listening (PET), and the highest in the Speaking (PET).

The histograms for the PET scores are provided below in order to better visualize the distribution of values. The histogram is a visual summary of the distribution of values and it helps to assess the skewness and kurtosis, checking whether the distribution of values is adequate for each variable. According to Vieira (2009), Toledo and Ovalle (1985), and Levin (1985), many statistical procedures for quantitative data are less reliable when the distribution of data values is markedly non-normal or when the distribution is asymmetric or when there are outliers (with some distant values from the center of the distribution). Assessing skewness and kurtosis allows one to make sure of the normal distribution of the data and the possibility of

employing parametrical tests in the statistic treatment (Vieira, 2009; Toledo & Ovalle, 1985; Levin, 1985).

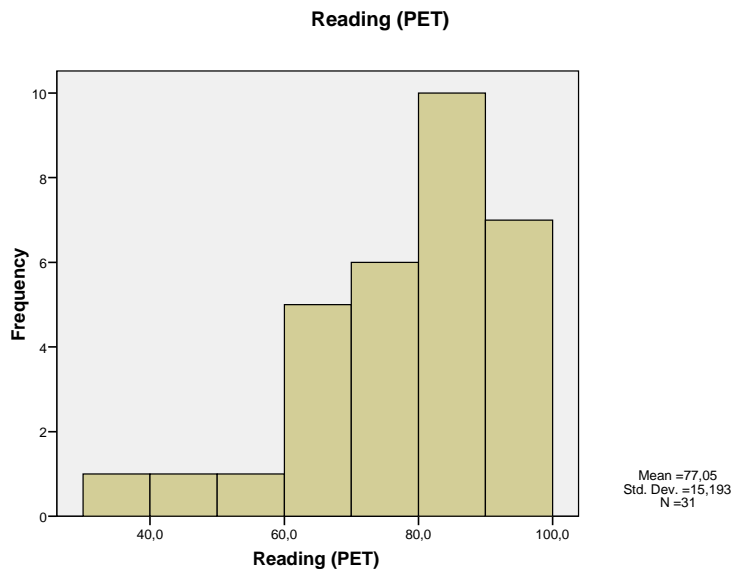
Figure 1

*Histogram for the Listening PET*



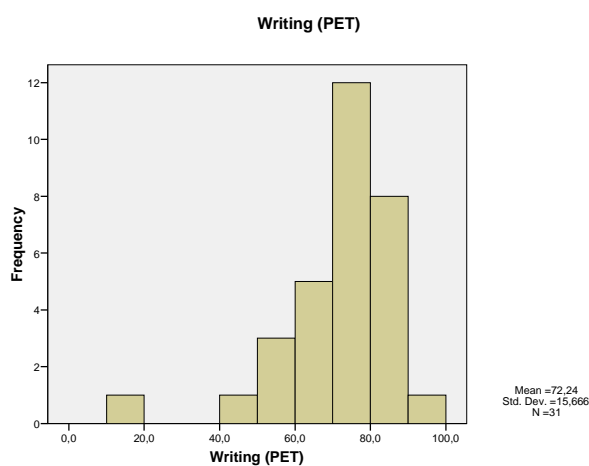
A visual inspection of the chart above indicates that, overall, for the Listening PET, participants showed an above average performance, where 21 participants scored between 70 and 100.

Figure 2

*Histogram for the Reading PET*

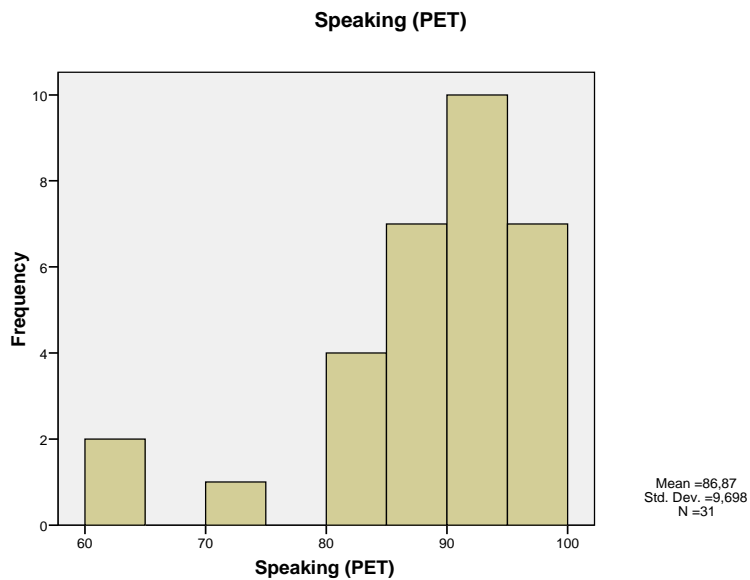
As for the Reading histogram, it can be noticed that 23 participants scored between 70 and 100, with the mean a little higher than the Listening.

Figure 3

*Histogram for the Writing PET*

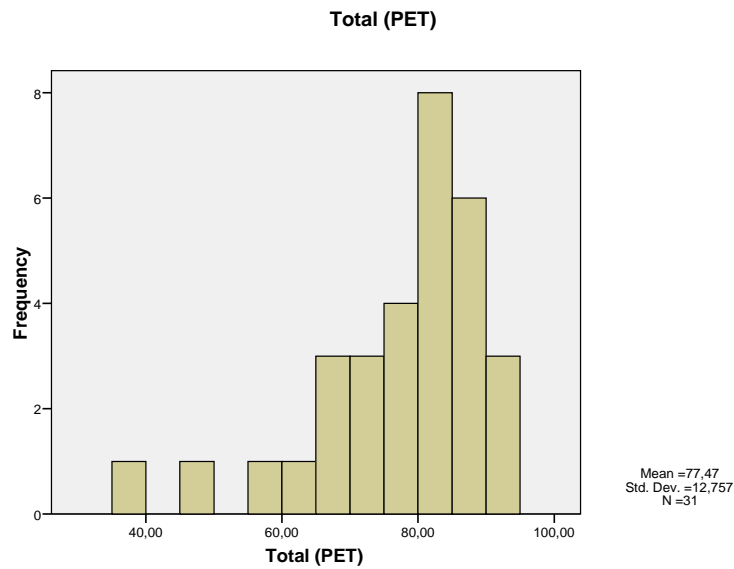
The Writing histogram shows that 21 participants scored above 70. Participants' writing samples were submitted to three independent raters to avoid bias in the evaluation of their writing skills.

Figure 4

*Histogram for the Speaking PET*

Looking at the Speaking histogram it can be noticed that overall participants scored above average, with the mean score of 86.87. None of the participants scored below average, and 29 scored between 70 and 100. Due to logistic matters the results of the speaking section were based only on my evaluation, which, at some level, may have influenced the results.

Figure 5

*Histogram for the Total PET*

Overall, the Total PET histogram shows that the means obtained by the participants indicate a reasonable score in all the four abilities tested. The histograms show that all the distributions of the variables are asymmetric, that is, the data is not normally distributed. However, the asymmetry in the distribution does not forbid further computation of the data.

Table 7 shows the means and standard deviations for the participants who completed the Oral Imitation Test, the Timed Grammaticality Judgement Test, the Untimed Grammaticality Judgement Test (ungrammatical sentences), the Metalinguistic Test and the Proficiency Test (PET).



Table 7

*Means and standard deviations for the PET sub-sample, the whole sample minus the PET sub-sample (No PET) and the whole sample*

Sample		Metalinguistic Test(%)	Untimed GJT(%)	Untimed GJT (ungram.)%	Oral Imitation Test (%)	Timed GJT (%)
PET sub-sample	Mean	59.96	77.27	78.46	38.12	52.56
	Std. Deviation	13.95	11.56	14.09	23.11	10.45
	N	31	31	31	31	31
NO PET	Mean	62.60	78.57	81.51	41.88	49.05
	Std. Deviation	13.76	10.70	11.84	22.98	6.88
	N	14	14	14	14	14
Whole sample	Mean	60.78	77.67	79.41	39.29	51.47
	Std. Deviation	13.79	11.20	13.37	22.87	9.55
	N	45	45	45	45	45

*Untimed GJT=Untimed Grammaticality Judgement Test; Untimed GJT (ungram.)=Untimed Grammaticality Judgement Test ungrammatical; Timed GJT= Timed Grammaticality Judgement Test*

Looking at the means from Table 6 it can be noticed that the PET sub-sample scored overall slightly lower than the whole sample, except on the Timed Grammaticality Judgement Test, which assesses implicit knowledge. These results may indicate that the participants who took the proficiency test might have a slightly lower proficiency level than the participants who did not take the proficiency test. Though the difference between the group who took all the tests and the group who took only the implicit/explicit tests is nonrelevant for my discussion, I would like to highlight this

information because, as will be seen in sections 4.7 and 4.8 , to calculate the correlation and the regression analysis only the PET sample was selected.

### **4.3 Cronbach's Alpha**

The reliability of the different test measures was calculated using Cronbach Alpha. Cronbach's Alpha is the most estimate of internal consistency of items in a scale. Alpha for the Oral Imitation Test was .938, for the Timed Grammaticality Judgement Test was .753, for the Untimed Grammaticality Judgement Test was .830 and for the Metalinguistic Test was .416. These results show that, apart from the Metalinguistic test, all the other implicit/explicit knowledge tests seem to have been quite reliable. The content of the Metalinguistic test can be considered difficult even for advanced learners of English. It was the last test applied in the individual session and even though participants were told they could answer the test on their own time, I noticed that participants did not spend much time thinking over the questions, the main reason for that maybe because of the difficulty of these questions or because of tiredness, thus compromising the results.

### **4.4 Principal Components Analysis**

Like in Ellis (2006), on which the present study is based, a Principal Component Analysis was carried out in order to investigate the extent to which the Oral Imitation Test and the Timed Grammaticality Judgment Test measured implicit knowledge and the Untimed Grammaticality Judgement Test and Metalinguistic Test measured explicit knowledge of the participants. Total scores for the four tests (Metalinguistic Test (%),

Untimed GJT (ungrammatical) (%), Oral Imitation Test (%), and Timed GJT (%) were entered into the analysis.

According to Barbetta (2001) and Toledo (1985), a Principal Component Analysis involves a number of correlated variables and transforms them into a smaller number of uncorrelated variables called principal components. These principal components explain the pattern of correlations within the set of observed variables. This kind of statistical test is useful for the analysis of data obtained on a number of variables and some of these variables are correlated with one another. This pattern of correlations within the set of observed variables makes it possible to reduce these variables into a smaller number of principal components (artificial variables) that “accounts for a maximum amount of total variance in the observed variables” (Hatcher 1994, p. 8).

The components are aggregates of variables and the factor loadings are the measure of the relationship (correlation) between each variable and the factor. What we look for when doing a PCA analysis is the pattern - what variables “load” on what components (Barbetta, 2001; Toledo, 1985;).

As follows, table 8 presents the results of the Principal Component Analysis carried out for the four tests.

Table 8

*Principal Component Analysis*

Component	Total	% of variance	Cumulative %
1	2.7356	68.39	68.39
2	0.5677	14.19	82.58

	Component 1	Component 2
Metalinguistic Test (%)	-0.79	-0.52
Untimed GJT (ungram.) (%)	-0.83	0.43
Oral Imitation Test (%)	-0.85	0.27
Timed GJT (%)	-0.84	-0.20

The results presented in Table 8 show that each test's score loaded highly only on factor 1. This is taken as evidence that the test's scores "belong together" in a scale and the PCA can be used to generate a scale or index by combination of the four test's scores: the first principal component (factor 1). Then it is possible to create a single total score for each individual person (scaling). PCA factor space is illustrated in the graphic representation of the correlation matrix on the next page.

Figure 6

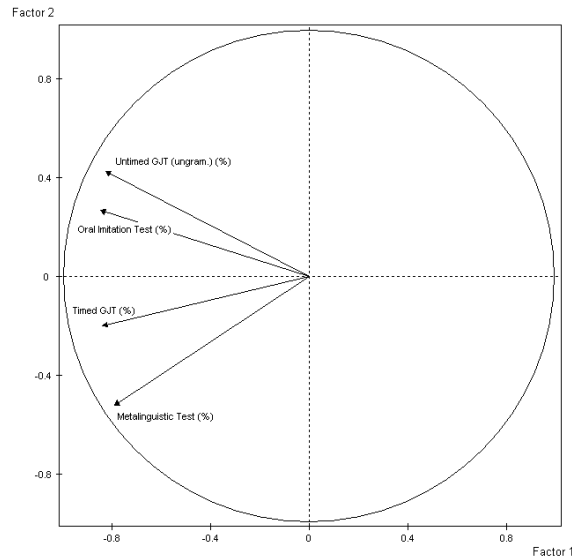
*Principal Component Analysis*

Figure 6 shows that all the variables point to the same direction, indicating a positive correlation, that is, the scores for the four tests go together. The small angle among them indicates a good level of agreement among the scores of the four tests. As expected, the Oral Imitation Test and the Timed Grammaticality Test loaded on factor 1, that is, implicit knowledge. The Untimed Grammaticality Judgement Test and the Metalinguistic Knowledge Test loaded on factor 2, that is, explicit knowledge.

The first factor is represented in the graphic in the horizontal axis, and the second is represented in the vertical axis. The horizontal axis is the axis that reflects the most variability for the scores of the four tests for all participants. The arrow angles represent the observed correlations with factor 1 and it can be noticed that it presented a high correlation, resulting in a very adequate synthesis of the results. As shown in Table 9 these results are in line with Ellis' (2006).

Table 9

*Principal Component Analysis in Ellis' (2006)*

Component	Total	% of variance	Cumulative %
1	2.113	53.256	53.256
2	0.894	22.338	75.594
	Component 1	Component 2	
Metalinguistic Test (%)		0.846	
Untimed GJT (ungram.) (%)		0.819	
Oral Imitation Test (%)	0.856		
Timed GJT (%)	0.894		

#### 4.5 Comparison of the explicit and implicit scores for the individual structures

Two of the tests, the Oral Imitation Test and the Timed Grammaticality Judgement Test were designed to measure implicit knowledge whereas the other two, the Untimed Grammaticality Judgement Test and the Metalinguistic Test were designed to measure explicit knowledge of the seventeen grammatical structures presented in the Method (Chapter III).

Following Ellis (2006), for implicit knowledge, a combined mean score was calculated for the Oral Imitation Test and the Timed Grammaticality Judgement Test (total) for each of the seventeen grammatical structures<sup>9</sup>. The same was done for explicit knowledge, but in this case, the mean score was calculated using only ungrammatical

<sup>9</sup> An Example for the structure Adverb Placement: the number of correct responses from the Timed Grammaticality Judgement Test and from the Oral Imitation test, which tested adverb placement, is divided by the number of items.

sentences<sup>10</sup> of the Untimed Grammaticality Judgement Test plus the scores of the Metalinguistic Knowledge Test for each of the seventeen structures<sup>11</sup>.

Difference scores for explicit and implicit knowledge for each grammatical structure were calculated by subtracting the mean score for the Oral Imitation Test and the Timed Grammaticality Judgement Test from the combined mean score for the Untimed Grammaticality Judgement Test and the Metalinguistic Knowledge Test<sup>12</sup>.

Table 10 shows the mean explicit and implicit scores together with the differences between the two sets of scores for each of the seventeen grammatical structures for the whole sample (total of 45 participants).

Table 10

*Difference between implicit and explicit scores for 17 grammatical structures*

Structures	N	Explicit Knowledge		Implicit Knowledge		Difference between means (Explicit-Implicit)	
		Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Yes/No questions	45	0.62	0.28	0.44	0.19	0.18	0.29
Verb complement	45	0.80	0.25	0.59	0.16	0.20	0.26
Unreal conditionals	45	0.65	0.20	0.43	0.21	0.21	0.25
Since/For	45	0.78	0.28	0.44	0.25	0.34	0.33
Relative clauses	45	0.80	0.22	0.40	0.19	0.40	0.22

<sup>10</sup> According to Ellis (2005) the factor analysis showed that a measure based on these loaded more heavily on the explicit factor than a measure derived from either the grammatical sentences of the same test or a total test score

<sup>11</sup> An Example for the structure Adverb Placement: the number of correct responses from the Untimed Grammaticality Judgement Test and from the Metalinguistic Knowledge Test, which tested adverb placement, is divided by the number of items of that structure.

<sup>12</sup> An example for the structure Adverb Placement: the difference score of the structure is equal to the explicit score of the structure Adverb Placement minus the implicit score of the structure.

Regular Past –ed	45	0.60	0.34	0.54	0.17	0.05	0.36
Question tags	45	0.76	0.26	0.38	0.20	0.37	0.26
Possessive –s	45	0.67	0.29	0.26	0.17	0.41	0.30
Plural –s	45	0.72	0.26	0.35	0.16	0.37	0.28
Modals	45	0.74	0.27	0.53	0.19	0.20	0.33
Indefinite article	45	0.80	0.26	0.41	0.18	0.39	0.30
Ergative Verb	45	0.64	0.19	0.58	0.19	0.05	0.25
Embedded questions	45	0.74	0.21	0.61	0.21	0.13	0.23
Dative alternation	45	0.76	0.23	0.54	0.16	0.21	0.25
Comparative	45	0.85	0.20	0.51	0.20	0.34	0.31
Adverb placement	45	0.65	0.25	0.54	0.16	0.10	0.28
3rd person –s	45	0.80	0.26	0.35	0.21	0.44	0.29

The results presented in Table 10 show that, for all of the 17 grammatical structures, the explicit scores are higher than the implicit scores. These results might be an indication of the fact that for the participants of the present study, all Brazilian Portuguese speakers of English in a non-English speaking country, both easy and difficult grammatical structures tend to be learned and processed as explicit knowledge. Ellis (2006) showed different findings regarding implicit knowledge, in his study, four structures presented higher scores for implicit knowledge, they were: modals, ergative verbs, adverb placement, and dative alternation.

Still, in Table 10, the difference column shows that the structures that varied little in ease/difficulty for explicit and implicit knowledge were: *regular past –ed*, *ergative verb*, *adverb placement*, and *embedded questions*. In Ellis (2006) the structures



that varied little in ease/difficulty were: verb complement, yes/no questions, modals and ergative verb.

In the present study the structures that manifested a marked difference between explicit and implicit scores were: 3<sup>rd</sup> person -s, possessive -s, relative clauses, indefinite article, question tags, plural -s, since/for, comparative, dative alternation, unreal conditionals and modals. Ellis (2006) reported as structures that manifested a marked difference between explicit and implicit scores, *indefinite article, question tags, plural -s, 3<sup>rd</sup> person -s, indefinite article, regular past -ed, since/for, and relative clauses.*

These differences are revealed in Figure 7 which shows the difference in the scores for the seventeen structures for explicit and implicit knowledge based on the scores for the whole sample.

Figure 7

*Explicit and implicit scores of the seventeen grammatical structures*

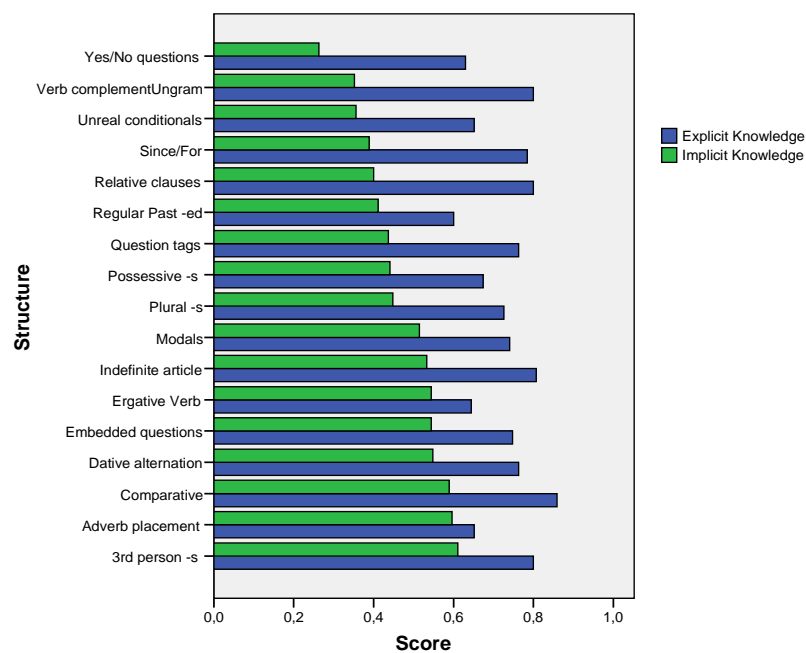


Figure 7 shows the results of the differences in the difficulty of grammatical structures as implicit and explicit knowledge. Again, here, one can notice that, for all structures, the scores are higher for explicit knowledge. In summary, as it could be expected taking into consideration the difficulty of the tests, and the type of instruction benefited in a non-English speaking country, the results were all in favor explicit knowledge. All in all, results corroborated with Ellis' (2006): the significant difference was only on the amount of grammar structures elected as easy or difficult for both kinds of knowledge and not on the overall means.

Following Ellis (2006), the great interest in the study of the difficulty of grammatical structures as this relates to implicit and explicit knowledge is a comparison between the implicit and explicit scores for the individual structures. Ellis (2006) arbitrarily determines that structures with a mean scores higher than 0.60 will be considered easy structures for implicit knowledge (p. 449).

Thus, following Ellis, in the present study, for implicit knowledge scores, the only easy structure was *embedded questions* ( $M=0.61$ ). The structure *verb complement* approaches this mean score (0.59) and all the other structures fall below 0.60. These results differ from Ellis (2006), who found *verb complement*<sup>13</sup>, *possessive -s*, *modals*, *adverb placement*, and *relative clauses* to have been easier for his subjects.

The difference between the results found here and in Ellis (2006), in terms of easy and difficult structures for implicit knowledge, may reflect the type of instruction the samples of both studies have been exposed to. In the case of the participants of the present study, most of their learning of English results from exposure to the language in instructional settings with little opportunity for use of the language in other contexts.

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<sup>13</sup> It is worth of notice, however, that the scores of the participants of the present study for verb complement, were quite similar ( $M=0.59$ ) to those for embedded clauses.

To determine which structures would be considered difficult for implicit knowledge, Ellis (2006) establishes 0.45 as the cut-off point. Thus, in Ellis, the structures with a mean score lower than 0.45 were: *indefinite article*, *unreal conditionals* and *question tags*. In the present study, following the same criterion, the difficult structures for implicit knowledge were *yes/no questions* ( $M=0.44$ ), *unreal conditionals* ( $M=0.43$ ), *since/for* ( $M=0.44$ ), *relative clauses* ( $M=0.40$ ), *question tags* ( $M=0.38$ ), *possessive -s* ( $M=0.26$ ), *plural -s* ( $M=0.35$ ), *indefinite article* ( $M=0.41$ ), and *3<sup>rd</sup> person -s* ( $M=0.35$ ). Thus, comparing the results of the present study to those of Ellis's (2006), in terms of implicit knowledge, one notices a difference not only in the number of easy and difficult structures but also in the type of structure. Table 11 presents the easy and difficult structures for implicit knowledge in Ellis (2006) and the present study.

Table 11

*A comparison of easy and difficult structures for implicit knowledge between Ellis (2006) and the present study*

	Ellis (2006)	Present study
Easy	Verb complement possessive -s, modals, adverb placement, relative clauses	Embedded questions
	Indefinite article Unreal conditionals Question tags Embedded questions	Indefinite article Unreal conditionals Question tags Yes/no questions Since/for Relative clauses Possessive -s
Difficult		

Plural –s  
3rd person

---

In the case of explicit knowledge, Ellis determines that the easy structures will be those structures with mean scores higher than 0.75. His findings show that these structures were: *plural –s*, *indefinite article*, *possessive –s*, *regular past tense* and *relative clauses*. Adopting the same criterion, in the present study these structures were *verb complement* ( $M=0.80$ ), *since/for* ( $M=0.78$ ), *relative clauses* ( $M=0.80$ ), *question tags* ( $M=0.76$ ), *indefinite article* ( $M=0.80$ ), *dative alternation* ( $M=0.76$ ), *comparative* ( $M=0.85$ ), and, *3<sup>rd</sup> person –s* ( $M=0.80$ ). Interestingly, difficult structures for explicit knowledge, with scores of 0.50 or lower, were not found in the present study (the lowest mean was 0.60), whereas in Ellis (2006), those structures were *adverb placement*, *ergative verbs* and *unreal conditionals*<sup>14</sup>. That this study did not find difficult structures for explicit knowledge may be due to the fact that participants have been learning English as a foreign language, so most of the input they receive is in class, in a more controlled way, without many chances for implicit learning. This might be in contrast with the learning conditions that Ellis' (2006) participants have been exposed to, since they have been learning English in an English speaking country, thus being in contact with greater quantities of input in English most of the time. Table 12 presents the structures that were found easy and difficult for explicit knowledge in Ellis (2006) and in the present study.

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<sup>14</sup> Still, despite the fact that the participants of the present study did not present means below .50, I find it relevant to point out that in these three structures, my participants also did not do too well (Adverb placement<sub>M</sub>= 0.65; ergative verbs<sub>M</sub>= 0.64; unreal conditionals<sub>M</sub>= 0.65). Nonetheless, the lowest means were not those, but regular past –ed<sub>M</sub>= 0.60 and Yes/No questions<sub>M</sub>= 0.62.

Table 12

*A comparison of easy and difficult structures for explicit knowledge between Ellis (2006) and the present study*

	Ellis (2006)	Present study
		Indefinite article
	Indefinite article	Relative clauses
	Relative clauses	Verb complement
Easy	Plural –s	Question tags
	Possessive –s	Dative alternation
	Regular past –ed	Comparative
		3rd person –s
	Adverb placement	
Difficult	Ergative verbs	
	Unreal conditionals	

In Ellis (2006), an interesting finding was that *indefinite article* manifested as difficult for implicit knowledge and easy for explicit knowledge, whereas *adverb placement* manifested as difficult for explicit knowledge and easy for implicit knowledge. In the present study the findings revealed different results regarding ease and difficulty of structures. The structures which manifested as difficult for implicit knowledge and easy for explicit knowledge were *indefinite article*, *question tags*, *relative clauses*, and *3rd person*. Since the present study did not reveal any structure that was difficult for explicit knowledge, one might speculate about the type of knowledge and language learning background of the participants of the present study. Philp (in Ellis, 2009) mentions that type of knowledge and language learning experiences interact in a number of ways. For instance, this interaction can be affected by learners' starting age of instruction: as Philp stated, learners will have a better performance of implicit knowledge the earlier the age of instruction. This is not the case

in the present study. Here, the age participants started learning English, between 7 and 38 years, allow me to argue that their learning experience is in favor of explicit learning and knowledge. Finally, as already pointed out, the indefinite article manifested as difficult for implicit knowledge and easy for explicit knowledge in both studies.

According to Ellis (2009) and as discussed in Chapter 2 (Section 2.3), the degree of difficulty of a grammatical feature can be determined in terms of frequency, saliency, functional value, regularity, and processability. Although, to the best of my knowledge, there are no studies determining the degree of difficulty of all the 17 structures used by Ellis (2006), following him (p. 457), I will attempt to determine how the structures found difficult for implicit knowledge in the present study fit into these criteria (Table 13):

Table 13

*The grammatical complexity of nine implicit features*

Grammatical structure	Frequency	Saliency (low/high)	Functional complexity (complex/simple)	Regularity (regular/Irregular)	Easy/difficult to process
Indefinite article	High	Low	Complex	Irregular	Difficult
Unreal conditionals	Low	Low	Complex	Regular	Difficult
Question tags	Low	High	Complex	Regular	Difficult
Yes/no questions	High	High	Simple	Regular	Easy
Since/for	Low	Low	Complex	Regular	Difficult
Relative clauses	High	Low	Complex	Regular	Difficult
Possessive –s	High	High	Complex	Irregular	Difficult

Plural –s	High	High	Complex	Irregular	Difficult
3rd person	High	Low	Complex	Irregular	Difficult

---

In the case of the indefinite article, it is easy in terms of frequency, but it has low saliency and it also presents high irregularity, since it applies only to countable nouns (Ellis, 2006, p.456). Unreal conditionals are low in frequency, since they do not occur frequently in the input, one may speculate that the low frequency is because of the complex functional value of the feature. In spite of being regular, unreal conditionals are difficult to process because of the changes not only of the auxiliaries but also with the verbs for each kind of conditional. Question tags are more salient, since they appear at the end of a sentence as a confirmation; however, they are not easy to process, and sometimes might be avoided by the interlocutor, justifying their low frequency. They are regular in the sense that they always use the same auxiliary used in the first part of the sentence, however, they are functionally complex, especially when the auxiliary does not appear in the first part of the sentence.

With regards to yes/no questions, I speculate that this feature occur frequently in the input, as one of the first learned grammatical feature. Yes/no questions are easy to notice, that is, they present a high level of saliency. Moreover, they can be considered easy to learn and process, because of their regularity. In what concerns the feature since/for, I speculate that they are not frequent in the input, and also they are not inherently salient. Another characteristic of the since/for feature is that, in spite of being regular, it is highly complex and difficult to process, due to the fact that it is directly attached to the present perfect a inherent difficult grammatical feature for Brazilian learners of English. As for relative clauses, a feature that has received attention (Izumi, 2002 in Ellis, 2006) due to its “unique syntactic properties” (p.286), and also because of

its high frequency in learners' speech, I will speculate that it has complex functional value. Possessive –s, is high in frequency, it also presents high saliency and complex functionality and irregular aspect, since it can be confused with other forms (3<sup>rd</sup> person or plural –s) (Ellis, 2006, p.436).

As for plural –s, a high frequent feature in learners' output, this feature also presents high saliency and a complex functionality. As far as regularity is concerned, I will speculate that this feature is irregular and difficult for learners to process. Following the same classification, 3<sup>rd</sup> person is easy to learn in terms of frequency, it has a high frequency in input, but one may assume that it presents low processability in output.

#### **4.6 Correlational Analysis**

The Pearson correlational analysis measured the level of linear relationship and consistency in performance between participants within the targeted variables. Tables 14 and 15 give the correlations between the implicit and explicit knowledge scores for the seventeen grammatical structures and the PET scores (total, listening, reading, speaking and writing).



Table 14

*Correlations between implicit knowledge of the seventeen grammatical structures and the five PET scores (N = 31)*

Structures	Total (PET)	Listening (PET)	Reading (PET)	Writing (PET)	Speaking (PET)
3rd person –s	0.46**	0.46**	0.46**	0.25	0.46**
Adverb placement	0.40**	0.41*	0.21	0.43*	0.31
Comparative	0.37**	0.33	0.35	0.31	0.32
Dative alternation	0.72**	0.64**	0.67**	0.51**	0.74**
Embedded questions	0.60**	0.61**	0.46**	0.50**	0.54**
Ergative Verb	0.57**	0.58**	0.58**	0.31	0.55**
Indefinite article	0.55**	0.61**	0.50**	0.31	0.52**
Modals	0.47**	0.46**	0.40*	0.44*	0.33
Plural –s	0.21	0.18	0.21	0.08	0.34
Possessive –s	0.28	0.36*	0.29	0.03	0.31
Question tags	0.60**	0.62**	0.56**	0.43*	0.44*
Regular Past –Ed	0.68**	0.67**	0.64**	0.58**	0.45*
Relative clauses	0.68**	0.55**	0.74**	0.50**	0.60**
Since/For	0.47**	0.52**	0.49**	0.25	0.36*
Unreal conditionals	0.48**	0.55*	0.30	0.43*	0.36*
Verb complement	0.56**	0.39	0.57**	0.58**	0.40*
Ungram					
Yes/No questions	0.64**	0.59**	0.60**	0.54**	0.51**

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

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

Table 15

*Correlations between explicit knowledge of the seventeen grammatical structures and the five PET scores (N=31)*

Structures	Total (PET)	Listening (PET)	Reading (PET)	Writing (PET)	Speaking (PET)
3rd person –s	0.41*	0.43*	0.30	0.34	0.37*
Adverb placement	0.55**	0.51**	0.41*	0.54**	0.44*
Comparative	-0.15	0.03	-0.26	-0.25	-0.03
Dative alternation	0.07	0.06	0.09	0.02	0.08
Embedded questions	0.34	0.37*	0.28	0.26	0.29
Ergative Verb	0.14	0.07	0.14	0.20	0.06
Indefinite article	0.05	-0.09	0.30	-0.01	-0.01
Modals	0.17	0.06	0.19	0.22	0.13
Plural –s	0.45*	0.27	0.41*	0.55**	0.32
Possessive –s	0.46**	0.47**	0.44*	0.32	0.36*
Question tags	0.33	0.34	0.27	0.30	0.22
Regular Past –Ed	0.34	0.24	0.34	0.36*	0.24
Relative clauses	0.51**	0.45	0.49**	0.46**	0.38*
Since/For	0.63**	0.41**	0.70**	0.56**	0.59**
Unreal conditionals	0.08	0.18	0.16	-0.15	0.08
Verb complement	0.29	0.16	0.36*	0.27	0.25
Ungram					
Yes/No questions	0.26	0.18	0.34	0.18	0.23

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

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

Most measures of implicit and explicit scores correlated significantly with PET scores. The grammatical features which strongly correlated with PET scores in terms of implicit knowledge were: *dative alternation, embedded questions, question tags, regular past –ed, relative clauses, yes/no questions*. The grammatical features which weakly correlated with PET scores in terms of implicit knowledge were: *3<sup>rd</sup> person –s, adverb placement, ergative verb, indefinite article, modals, since/for, unreal conditionals, and verb complement*. Only three grammatical features did not show correlation with the PET scores, they were: *comparative, plural –s, and possessive-s*.

Even though these results in the correlation do not indicate causality, they indicate that for those participants the higher the score in the 3rd person –s, the higher the score in the PET, for instance.

The grammatical features which strongly correlated with the PET scores in terms of explicit knowledge were: *adverb placement, relative clauses and since/for*. The grammatical features which weakly correlated with the PET scores in terms of explicit knowledge were: *3rd person –s, plural –s, and possessive –s*. Although, in Ellis (2006) the proficiency exam adopted was IELTS, a comparison of the results found in the present study and in Ellis (2006) shows that the grammatical features which strongly correlated with IELTS in terms of implicit knowledge were *comparative, unreal conditionals and since/for*, and at the same time these structures were weakly related to explicit scores. Explicit scores for *indefinite article, regular past –ed, relative clauses* were strongly related to the IELTS scores. On the other hand, the implicit scores for these structures were weakly related to the IELTS scores (Ellis, 2006, p. 452). Another finding in Ellis (2006) was that, two grammatical features, *embedded questions and adverb placement*, presented scores which correlated both with implicit and explicit

knowledge and the IELTS scores (Ellis, 2006, p. 453). Also, there was one grammatical feature, modals, that did not present a relationship to neither kind of knowledge and the IELTS scores.

In summary, the results of correlation between the grammatical structures and the proficiency test did not show congruence with Ellis' (2006). The same findings were reported for one of the structures weakly related to implicit knowledge and the proficiency test, that is, indefinite article. Another grammatical structure found for both studies, Ellis (2006) and the present study, was relative clauses. Relative clauses related strongly to explicit knowledge and the proficiency test.

#### **4.7 Regression analysis**

Multiple linear regression analysis - a statistical technique that allows us to predict someone's score on one variable on the basis of their scores on several other variables (Toledo, 1985) was used to develop models for predicting PET scores from the seventeen grammatical structures scores. What we do in a multiple regression is to seek to account for the variance in the scores we observe. Some of this variance will be accounted for by the variables we have identified. In multiple regressions we simply measure the naturally occurring scores on a number of predictor variables and try to establish which set of the observed variables gives rise to the best prediction of the criterion variable (Barbetta, 2001).

Following Ellis (2006), in order to reach the results for the present study that will be presented in the Tables 16 and 17, first, five models were created for predicting the PET scores from implicit predictors. Then, five models were created for predicting

PET scores from explicit predictors. In these models the dependent variables were: Total PET score, Listening PET score, Reading PET score, Writing PET score, Speaking PET score; and the independent variables were the seventeen grammatical structures (implicit and explicit scores respectively).

Table 16

*Regression Models for the PET scores with the implicit predictors*

	Model I	Model II	Model III	Model IV	Model V
Dependent variable	Total PET	PET-Listening	PET-Reading	PET-Writing	PET-Speaking
Implicit Predictors	3rd person -s	3rd person -s	3rd person -s	3rd person -s	3rd person -s
	Adverb placement	Adverb placement	Adverb placement	Adverb placement	Adverb placement
	Comparative	Comparative	Comparative	Comparative	Comparative
	Dative alternation	Dative alternation	Dative alternation	Dative alternation	Dative alternation
	Embedded questions	Embedded questions	Embedded questions	Embedded questions	Embedded questions
	Ergative Verb	Ergative Verb	Ergative Verb	Ergative Verb	Ergative Verb
	Indefinite article	Indefinite article	Indefinite article	Indefinite article	Indefinite article
	Modals	Modals	Modals	Modals	Modals
	Plural -s	Plural -s	Plural -s	Plural -s	Plural -s
	Possessive -s	Possessive -s	Possessive -s	Possessive -s	Possessive -s
	Question tags	Question tags	Question tags	Question tags	Question tags
	Regular Past -ed	Regular Past -ed	Regular Past -ed	Regular Past -ed	Regular Past -ed
	Relative clauses	Relative clauses	Relative clauses	Relative clauses	Relative clauses

Since/For	Since/For	Since/For	Since/For	Since/For
Unreal conditionals	Unreal conditionals	Unreal conditionals	Unreal conditionals	Unreal conditionals
Verb complement Ungram	Verb complement Ungram	Verb complement Ungram	Verb complement Ungram	Verb complement Ungram
Yes/No questions	Yes/No questions	Yes/No questions	Yes/No questions	Yes/No questions

Table 17

*Regression Models for the PET scores with the explicit predictors*

	Model VI	Model VII	Model VIII	Model IX	Model X
Dependent variable	Total PET	PET-Listening	PET-Reading	PET-Writing	PET-Speaking
Explicit Predictors	3rd person -s	3rd person -s	3rd person -s	3rd person -s	3rd person -s
	Adverb placement	Adverb placement	Adverb placement	Adverb placement	Adverb placement
	Comparative	Comparative	Comparative	Comparative	Comparative
	Dative alternation	Dative alternation	Dative alternation	Dative alternation	Dative alternation
	Embedded questions	Embedded questions	Embedded questions	Embedded questions	Embedded questions
	Ergative Verb	Ergative Verb	Ergative Verb	Ergative Verb	Ergative Verb
	Indefinite article	Indefinite article	Indefinite article	Indefinite article	Indefinite article
	Modals	Modals	Modals	Modals	Modals
	Plural -s	Plural -s	Plural -s	Plural -s	Plural -s
	Possessive -s	Possessive -s	Possessive -s	Possessive -s	Possessive -s
	Question tags	Question tags	Question tags	Question tags	Question tags
	Regular Past -ed	Regular Past -ed	Regular Past -ed	Regular Past -ed	Regular Past -ed

Relative clauses	Relative clauses	Relative clauses	Relative clauses	Relative clauses
Since/For	Since/For	Since/For	Since/For	Since/For
Unreal conditionals	Unreal conditionals	Unreal conditionals	Unreal conditionals	Unreal conditionals
Verb complement Ungram	Verb complement Ungram	Verb complement Ungram	Verb complement Ungram	Verb complement Ungram
Yes/No questions	Yes/No questions	Yes/No questions	Yes/No questions	Yes/No questions

The independent variables were entered into the regression models using a stepwise selection. The variables entered into the model one by one, and are based on the significance level of the score statistic.

Table 18 and 19 summarize the results of the regression analysis for the implicit and explicit grammatical features.

Table 18

*Regression coefficients for the implicit measures of the significant grammatical structures*

	Model I	Model II	Model III	Model IV	Model V
Dependent variable	Total PET	PET-Listening	PET-Reading	PET-Writing	PET-Speaking
Implicite Predictors					
3rd person –s					
Adverb placement					
Comparative					
Dative alternation	30.45	37.31			38.72
Embedded questions					
Ergative Verb					

Indefinite article					
Modals					
Plural –s					
Possessive –s					
Question tags		25.83			
Regular Past –Ed	16.91	31.33			
Relative clauses			48.02		
Since/For					
Unreal conditionals	13.50			29.14	
Verb complementUngram	29.20		32.00	62.13	
Yes/No questions					
Constant	27.75	25.99	39.09	21.46	66.25
R	0.88	0.80	0.79	0.71	0.73
R square	0.778	0.648	0.626	0.517	0.544

Table 19

*Regression coefficients for the explicit measures of the significant grammatical structures*

	Model VI	Model VII	Model VIII	Model IX	Model X
Dependent variable	Total PET	PET- Listening	PET- Reading	PET- Writing	PET- Speaking
Explicit Predictors					
3rd person –s	12.05	20.07			9.98
Adverb placement	18.89	32.00		26.06	
Comparative					16.53
Dative alternation					
Embedded questions					
Ergative Verb					



Indefinite article					
Modals					
Plural –s				20.68	
Possessive –s					
Question tags					
Regular Past –Ed					
Relative clauses	15.00	22.94		19.24	
Since/For	10.74		33.90		22.36
Unreal conditionals					
Verb complement					
Yes/No questions					
Constant	36.16	19.82	51.16	25.38	48.26
R	0.79	0.72	0.69	0.74	0.72
R square	0.63	0.52	0.48	0.55	0.52

Table 18 and 19 report the stepwise regression analyses for a selection of the implicit and explicit grammatical features. Following Ellis (2006), the grammar features selected for implicit knowledge were dative alternation, question tags, regular past –ed, relative clauses, unreal conditional, and verb complement. For explicit knowledge, they were *3rd person –s*, *adverb placement*, *comparative*, *plural –s*, *relative clauses*, and *since/for*. For the choice of these structures, I followed Ellis (2006), who selected his structures according to two criteria: (1) strong correlations across the range of PET scores and (2) significant correlations with PET were found for one type of knowledge but not the other (p. 453). The structures Ellis (2006) selected for implicit knowledge were comparative, conditional and since/for and for explicit knowledge were indefinite article, regular past –ed, and relative clause.

In the present study, the best overall implicit measures for the present study were *dative alternation and verb complement*. *Dative alternation* figured in the regression analyses for total PET (30.45), PET listening (37.31) and PET speaking (38.72). *Verb complement* figured in the regression analyses for Total PET (29.20), PET reading (32.00) and PET writing (62.13). The best overall explicit measures were *3rd person -s*, which figured in the regression analyses for Total PET (12.05) , PET listening (20.07) and PET speaking (9.98); *adverb placement*, which figured for Total PET (18.89), PET listening (32.00) and PET writing (26.06); *relative clauses*, which figured for Total PET (15.00), PET listening (22.94) and PET writing (19.24); and *since/for*, which figured for Total PET (10.74), PET reading (33.90) and PET speaking (22.36). In Ellis (2006), the grammatical structures that figured for implicit measures presented a more distinct result: *comparative* figured for Total IELTS (46.60), IELTS listening (35.20), and IELTS writing (43.20). *Conditional* figured for Total IELTS (35.00), and IELTS listening (46.20). *Since/for* figured for IELTS reading (40.80), and IELTS speaking (39.60). The grammatical structures that figured for explicit knowledge were *indefinite article*, which figured for Total IELTS (36.00), IELTS listening (32.70), and IELTS speaking (46.40). *Relative clauses* figured for Total IELTS (51.70), IELTS listening (43.50), and IELTS reading (48.80).

These results confirm that both implicit and explicit knowledge are implicated in language proficiency. Taken together, these results indicate that dative alternation and verb complement predict proficiency for the participants of this study.

#### 4.8 Readdressing the research questions

The present study was designed to answer the four research questions addressed in Ellis (2006). These questions were presented in the Method (section 3.1) and will be now restated and answered in the light of the results obtained.

Research question 1 was: Are there some grammatical structures that are easy in terms of implicit knowledge but difficult in terms of explicit knowledge?

Research question 2 was: Conversely, are there some grammatical structures that are difficult in terms of implicit knowledge but easy in terms of explicit knowledge?

The answer to research question 1 is **NO**. The present study did not find difficult structures for explicit knowledge however, when analyzed individually, we found easy grammatical structures for implicit knowledge.

The answer to question 2 is **YES**. The grammatical structures that are difficult in terms of implicit knowledge but easy in terms of explicit knowledge are: **indefinite article, question tags, relative clauses, since/for, and 3<sup>rd</sup> person – s.**

Overall, the results found in the present study are comparable to those of Ellis (2006), in that

A comparison of the mean scores for implicit knowledge (based on a combined score for the Oral Imitation Test and the Timed Grammaticality Judgement Test) and for explicit knowledge (based on a combined score for the Untimed Grammaticality Judgement Test and the Metalinguistic Knowledge Test) indicates that learning difficulty is different depending on which type of knowledge is involved.

(Ellis, 2006, p. 456)

This assertion is clear from the inspection of the scores for each individual grammatical feature. For instance, in the present study, *verb complement* showed a high score for explicit knowledge and low score for implicit knowledge. On the other hand, *embedded questions* showed a high score for both implicit and explicit knowledge.

Ellis (2006) considered some factors that might explain the difficulty and ease of structural features for implicit knowledge. According to him, indefinite article is easy to learn in terms of frequency since it is one of the most frequently used grammatical features in English (page 456). However, it has low saliency, it realizes different discourse functions, it is irregular in the sense that it only applies to countable nouns, and it is difficult to process in that selection depends on exchanging information across constituents (p. 456). In the case of question tags, the point tested by Ellis (2006) was the choice of auxiliary verb, which is considered low in frequency, however, considering the fact that question tags occur at the end of the sentences, they are quite salient. They also meet the regularity criterion because the grammatical rule is highly reliable. Concerning functional complexity, questions tags are considered complex and difficult to process. As Ellis (2006, p.457) pointed out embedded questions have low saliency, complex functionality, and do not frequently emerge in the learners' metalanguage. Although the feature is regular, that is, it presents an identifiable pattern, it is difficult to process in the output. Embedded questions did not emerge as a striking feature for any of the two types of knowledge, implicit and explicit.

Ellis (2006) explains the fact that, overall, explicit structures presented high scores by referring to the multiple-choice format of the tests used to measure this type of knowledge. The cut-off point taken for determining easiness or difficulty for explicit knowledge in the seventeen grammatical structures was 50 per cent. In Ellis' (2006)

study 3 structures presented scores at or below 50 per cent: unreal conditionals, ergative verbs, and dative alternation.

Following Ellis criterion, in the present study all structures presented a score above 50 per cent for explicit knowledge, which means that none of the grammatical structures were difficult in terms of explicit knowledge.

The grammatical features where the difference between the implicit and explicit scores was clearly large in Ellis' (2006) study were: plural –s, indefinite article, regular past –ed, and question tags. Ellis (2006) states that these features are ready rules-of-thumb, and that the learners of his study had probably been formally taught (p. 458). His study also showed some features which learners performed better as implicit knowledge - for instance, dative alternation and adverb placement. According to him, these are structures difficult to render as rules of thumb and were probably not taught explicitly.

In the present study, the grammatical features where the difference between the implicit and explicit scores was the largest were: 3<sup>rd</sup> person –s, possessive –s, relative clauses, indefinite article, question tags, plural –s, since/for, comparative, dative alternation, unreal conditionals and modals, however, regular past –ed revealed a very low difference for implicit and explicit knowledge. One may hypothesize that this feature is considered difficult by the teachers, thus, exposure to this feature may occur more intensely than for the others.

Research question 3 was: To what extent is implicit and explicit knowledge of specific grammatical features related to general L2 proficiency?

Research question 4 was: To what extent does implicit and explicit knowledge of specific grammatical structures predict general L2 proficiency?

The results for these questions showed a number of statistically significant correlations, thus in line with Ellis (2006) in that he demonstrates a relationship between grammar scores and general proficiency scores. In Ellis (2006) the structures *comparative*, *unreal conditionals*, and *since/for* showed a strong correlation with the IELTS scores. In the present study, the findings interestingly revealed more correlations for explicit knowledge and the PET scores. These included *3<sup>rd</sup> person –s*, *adverb placement*, *dative alternation*, *embedded questions*, *ergative verb*, *indefinite article*, *modals*, *question tags*, *regular past –ed*, *relative clauses*, *since/for*, *verb complement (ungrammatical)*, and *yes/no questions*.

The correlation results from the explicit knowledge and PET scores were significant for adverb placement, plural –s, possessive –s, relative clauses, and since/for. Ellis (2006) found significant correlation for verb complement, indefinite article, regular past –ed, ergative verbs, embedded questions, adverb placement, and relative clauses.

The regression results support Ellis' (2006) assumption that implicit and explicit knowledge predict L2 proficiency. Results demonstrated that structures vary in the type of knowledge that predicts general L2 proficiency, for instance, for the implicit knowledge measures, *dative alternation* predicts total PET, listening, and speaking; *question tags* only predict listening. On the other hand *regular past –ed* predicts total PET and listening; *relative clauses* only predict reading. In turn, *unreal conditionals* predict total PET and writing. *Verb complement (ungrammatical)* predicts total PET, reading, and writing. Ellis' (2006) findings for the implicit measures were: *comparative* predicted total IELTS, listening and writing; *unreal conditionals* predicted total IELTS and listening; *since/for* predicted reading and speaking.

As regards the explicit measures, results showed that 3<sup>rd</sup> person –s predicts total PET, listening, and speaking. Adverb placement, on the other hand, predicts total PET, listening and writing. Comparative only predicts speaking; plural –s only predicts writing; in the case of relative clauses, they predict total PET, listening, and writing; since/for, on their turn, predicts total PET, reading and speaking. Ellis' (2006) findings for explicit measures were: indefinite article predicted total IELTS, listening and speaking; and relative clause predicted total IELTS, listening, reading and writing.

Taken together these results indicate that implicit and explicit knowledge of grammatical features serve as a predictor of general L2 proficiency. However, in Ellis (2006), where regards the regression analysis, he made the distinction of the results based on the receptive/production analysis. According to him, implicit and explicit knowledge have differences in importance regarding input and output processing. Learners can avoid using certain structures in written or oral output, however avoidance in oral and written input is practically impossible (p. 459).

The next chapter will present the concluding remarks, limitations, suggestions for further research and methodological and pedagogical implications of the results obtained in the present study.

## **CHAPTER V**

### **Final Remarks**

The objectives of this study were (1) to examine some grammatical structures in the light of students' learning difficulty towards an implicit and explicit scope, and (2) to examine the relationship between implicit and explicit knowledge of the grammatical structures investigated here and general L2 proficiency. The main purpose of this chapter is to summarize the findings for the present investigation. For that, section 5.1 presents the conclusions drawn from the major findings obtained with the data analysis, section 5.2 brings the limitations of the study and suggestions for further research, and, section 5.3 highlights the pedagogical implications of the present findings.

#### **5.1 Conclusions**

The most important findings obtained from the data analyses were:

1. This study did not find grammatical structures that are easy in terms of implicit knowledge but difficult in terms of explicit knowledge. The sample studied was all in favor of explicit knowledge.
2. The relationship between implicit and explicit knowledge of the seventeen grammatical structures investigated, and the proficiency test PET was



statistically significant for 3<sup>rd</sup> person –s, adverb placement, relative clauses, and since/for.

3. Participants' performance differed on the tests where the focus was on meaning (Oral Imitation Test) and where the focus was on form (Timed Grammaticality Judgement Test, Untimed Grammaticality Judgement Test, Metalinguistic Knowledge Test).
4. Regarding the comparison of the studies, Ellis (2006) and the present study, presented some similarities. For instance, despite the difference in age, length of instruction and type of instruction, participants from both studies did not present significant differences in the standard deviation for the tests of implicit and explicit knowledge.
5. A more significant difference was found, though, in the mean scores of explicit and implicit knowledge tests for individual structures. While Ellis' (2006) reported verb complement, yes/no questions, modals and ergative verb as the structures that varied little in ease/difficulty for implicit and explicit knowledge, the present study found regular past –ed, ergative verb, adverb placement, and embedded questions as the structures that varied little in ease/difficulty for implicit and explicit knowledge.
6. Regarding structures that presented a marked difference between implicit and explicit knowledge, the following were the structures for which this difference was prominent: 3<sup>rd</sup> person –s, possessive –s, relative clauses, indefinite article, question tags, plural –s, since/for, comparative, dative alternation, unreal conditionals and modals. Ellis (2006), on the other hand, reported the following structures that manifested a marked difference between explicit and implicit scores, *indefinite article, question tags, plural*

–s, 3<sup>rd</sup> person –s, indefinite article, regular past –ed, since/for, and relative clauses.

7. With respect to difficulty in relation to implicit knowledge and explicit knowledge, Ellis' (2006) and the present study also presented some incongruities. In the present study, the results for implicit knowledge scores showed only one easy structure, which was *embedded questions*. These results differ from Ellis (2006), who found *verb complement, possessive –s, modals, adverb placement, and relative clauses* as the easier structures for his subjects regarding implicit knowledge.
8. As regards the difficult structures for implicit knowledge, Ellis (2006) findings were *indefinite article, unreal conditionals and question tags*. However, in the present study, the difficult structures for implicit knowledge were *yes/no questions, unreal conditionals, since/for, relative clauses, question tags, possessive –s, plural –s, indefinite article, and 3<sup>rd</sup> person –s*.
9. In the case of explicit knowledge, the easy structures in Ellis (2006) were *plural –s, indefinite article, possessive –s, regular past tense and relative clauses*. In the present study, however, the easy structures for explicit knowledge were *verb complement, since/for, relative clauses, question tags, indefinite article, dative alternation, comparative, and, 3<sup>rd</sup> person –s*.
10. Interestingly, difficult structures for explicit knowledge were not found in the present study, whereas in Ellis (2006), those structures were *adverb placement, ergative verbs and unreal conditionals*.
11. As far as the correlational analysis is concerned, the grammatical features which strongly correlated with PET scores in the present study in terms of implicit knowledge were: *dative alternation, embedded questions, question*

*tags, regular past –ed, relative clauses, yes/no questions.* The grammatical features which weakly correlated with PET scores in the present study in terms of implicit knowledge were: *3<sup>rd</sup> person –s, adverb placement, ergative verb, indefinite article, modals, since/for, unreal conditionals, and verb complement.* Only three grammatical features did not show correlation with the PET scores, they were: *comparative, plural –s, and possessive-s.* As for Ellis' (2006) the grammatical structures which strongly correlated with IELTS scores in terms of implicit score were comparative, unreal conditionals and since/for, and at the same time these structures were weakly related to explicit scores. On the other hand, the grammatical structures which weakly correlated with IELTS scores in Ellis (2006) were: indefinite article, possessive –s, regular past –ed, yes/no questions, modals, ergative verbs, question tags, dative alternation and relative clauses.

12. The grammatical features in the present study which strongly correlated with the PET scores in terms of explicit knowledge were: adverb placement, relative clauses and since/for. The grammatical features which weakly correlated with the PET scores in terms of explicit knowledge were: 3<sup>rd</sup> person –s, plural –s, and possessive –s. In Ellis (2006), explicit scores for indefinite article, regular past –ed, relative clauses were strongly related to the IELTS scores, while weakly related grammatical features for explicit knowledge were 3<sup>rd</sup> person –s, plural –s, yes/no questions, comparative, unreal conditionals, modals, since/for, and dative alternation.
13. Regarding the regression analyses for the implicit measures, in the present study the best results were dative alternation and verb complement. In Ellis' (2006) they were comparative, conditional and since/for. For the explicit

measures, the present study selected 3<sup>rd</sup> person, adverb placement, relative clauses, and since/for. Ellis' (2006) results for explicit measures were indefinite article, regular past –ed, and relative clause.

## **5.2 Limitations and Suggestions for Further Research**

Despite the fact that the present study was anchored in the theoretical and methodological foundations of Ellis (2006), the results presented should be treated with caution. In this section besides presenting the limitations of the present study, I also present suggestions for further research.

1. Sample size: the limited number of participants does not allow for generalizations, therefore, results are to be seen as limited to the group of participants of this study. The control for the level of proficiency and long lasting tests made the task of recruiting participants more difficult. Further research should attempt to investigate a more representative sample.
2. Level of proficiency: the participants of this research were intermediate level and above. Differences in the L2 knowledge of the participants of the present study and those of Ellis's may have had an effect on the findings of the replication. Further research should attempt to approximate the level of proficiency of the participants to avoid discrepancies in the profile of the population.
3. The OIT: the Oral Imitation Test content was the same used in Ellis' (2006), thus, the vocabulary used in the sentences vocabulary were mostly related to the New Zealand reality, which, in my own observation hindered

participants' comprehension of the sentence. For further research I would suggest an Oral Imitation Test within a Brazilian context of life.

4. The TGJT: Isemonger (2007) questioned whether the Timed Grammaticality Judgement Test really measures implicit knowledge. The objective of the test is to judge whether the sentences are correct or not. Ellis (2009) sustains that learners are totally capable of judging a sentence as grammatical or ungrammatical without involving explicit knowledge. The principal factor here is speed. According to Ellis (2009), when learners judge a sentence under time pressure they are prevented from using explicit knowledge. However, time-pressure might stress participants to a point that they do not pay attention to the sentences presented to them anymore. This problem can be overcome by decreasing the number of stimuli in the TGJT, which can be attempted in further research.
5. Grammar: the study only considered the distinction between implicit and explicit knowledge in relation to grammar. However, further research could also address this distinction other areas of knowledge such as phonology, lexis and pragmatics.
6. PET: Ellis' (2006) study used the scores of the English proficiency test IELTS. The reason for me to choose PET as a proficiency test for the present study was the fact that the test would only arrive in Brazil within forty days, which would interfere in the schedule of data collection.

As a final remark, I would like to point out some situations researchers may consider when replicating a study. First of all, quantitative studies might use complex statistical tools to unveil results, which in turn demand a full understanding of what was used and the reason it was used for. Another factor to be taken into consideration

when replicating a study is the design of the tests. The tests used in a replication study most times have some indication of reliability. However, in some situations these tests are designed for a specific population in a specific context. Replication studies need to take differences in context into consideration when discussing the results of the replication. Despite those considerations, replication studies should continue to be encouraged in SLA, aiming at giving consistency to previous results and contributing to the growth of the area.

### **5.3 Pedagogical Implications**

Ultimately, this study is about the differences between implicit and explicit knowledge and the importance of these constructs for language learning. After two years studying the matter of implicit and explicit knowledge, I have realized how important it is for teachers to know these differences and their implications for language teaching. Moreover, teachers must be aware of the importance of distinguishing implicit and explicit knowledge and of how learning difficulty is related to the seventeen grammatical features investigated in the present study.

A possible pedagogical contribution made by the present study is that a better understanding of which grammatical features are easy and which ones are difficult to become implicit knowledge, and which grammatical features are easy and which ones are difficult to become explicit knowledge, might provide us with a greater understanding of our practice in the classroom. While Reber (1976) defended that the implicit learning of complex structures presents more advantages than the explicit one, I

believe that learning difficulty might also be related to individual differences, or, in this case, to the subjective difficulty of each grammatical feature rather than to their objective difficulty. Apparently, the difficulty level varies according to the perception of the teacher and the student. As DeKeyser (2003) states, “rule difficulty is an individual issue that can be described as the ratio of the rule’s inherent linguistic complexity to the student’s ability to handle a rule” (p.331).

Revealing easy structures for implicit knowledge and difficult ones for explicit knowledge, and, conversely, difficult structures for explicit knowledge and easy ones for implicit knowledge, might enlighten teachers’ practice in the classroom. For instance, *embedded questions* showed to be an easy structure for implicit knowledge. When teachers face this structure in the syllabus, they may design their class favoring an implicit approach. In the case of performance, students will probably perform better in tasks that require the use of implicit knowledge, when the issue is the use of embedded questions.

In general, explicit knowledge was favored by the sample of the present study. Thus, another implication for teachers is that they should be aware of the importance of developing students’ metalinguistic knowledge, something that can be done through effective grammar explanations. As it happened in Llorca’s (2005) study, it is my belief that explicit knowledge plays a crucial role in language teaching. In addition to these more explicit aspects of learning, teachers should provide learners with communicative activities, in order to contribute to the consolidation of explicit knowledge in the learner’s interlanguage, that is, transforming conscious knowledge into automatized knowledge.

All in all, data should be read hand in hand with our knowledge of the scholarship on second language learning, a consideration for variables of individual differences, and class reality. Teachers' awareness of the implicit and explicit knowledge dichotomy will probably inform their methodological decisions, which, in turn, might lead to an optimal English learning context as regards the balance between the development of implicit and explicit knowledge in learners. This, to me, sounds possible in the teaching and learning of English as a foreign language in Brazil.



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## **APPENDIXES**

APPENDIX A  
CONSENT FORM



UNIVERSIDADE FEDERAL DE SANTA CATARINA  
DEPARTAMENTO DE LÍNGUA E LITERATURA ESTRANGEIRAS  
PROGRAMA DE PÓS-GRADUAÇÃO EM LETRAS/INGLÊS E LITERATURA CORRESPONDENTE



**Formulário do Consentimento Livre e Esclarecido**

Título do Projeto: Measuring implicit and explicit knowledge in language proficiency: a replication study.

Olá, sou aluna do Programa de Pós-graduação em Letras/Inglês e gostaria de lhe convidar a participar do meu projeto de pesquisa de mestrado. A minha pesquisa investiga a aprendizagem de várias estruturas gramaticais do inglês e o conhecimento implícito e explícito que temos sobre elas. Conhecimento implícito e explícito são áreas investigadas desde os anos 1980 e são de extrema importância para o ensino-aprendizagem de língua estrangeira. Você está sendo convidado(a) a participar deste estudo por já possuir certo conhecimento da língua inglesa. Se você aceitar participar, por favor leia este consentimento e, se concordar com a informação aqui apresentada, assine onde indicado. Uma cópia ficará comigo, pesquisadora responsável pelo projeto, e outra com você.

**Objetivo do Estudo:**

O objetivo deste estudo é investigar o conhecimento explícito e implícito de 17 estruturas gramaticais da língua inglesa. Também investigaremos a relação entre conhecimento implícito/explícito e a proficiência em L2.

**Procedimentos:**

Se você aceitar participar deste estudo, você será solicitado a realizar 5 tarefas, são elas: (1) *Imitation Test*, o qual consiste em determinar se algumas orações são gramaticalmente corretas ou incorretas e repeti-las em voz alta para serem gravadas pela pesquisadora. (2) *Timed GJT*, que consiste em julgar se as orações são gramaticalmente corretas ou incorretas dentro de um tempo previamente fixado, (3) *Untimed GJT*, que consiste em julgar se as orações são gramaticalmente corretas ou incorretas, mas sem um tempo fixo. (4) *Metalinguistic Knowledge Test*, o qual consiste em selecionar, entre quatro alternativas, a regra que melhor explica o erro de cada oração, (5) *Proficiency Test (PET)*, o qual consiste de

um teste de proficiência de Cambridge, a nível intermediário, onde são avaliadas quatro habilidades da língua inglesa. O teste é simulado, para fins de pesquisa.

**Riscos e benefícios do estudo:**

Não há riscos em participar deste estudo. Antes de realizar as tarefas, você terá tempo de se familiarizar com elas e fazer todas as perguntas que quiser, até se sentir totalmente confortável com elas. Em contrapartida, em termos de benefício, você poderá aprender mais sobre seu aprendizado e avaliar seu conhecimento atual da língua inglesa. Ao final da pesquisa, os resultados do estudo serão tornados públicos, mas sua identidade será totalmente preservada e não será incluída nenhuma informação que possa identifica-lo (a). Somente a pesquisadora principal deste projeto e sua orientadora terão acesso aos dados coletados. A realização das tarefas será agendada de acordo com a disponibilidade de cada participante.

**Natureza voluntária do estudo:**

Sua decisão de participar ou não deste estudo não irá afetar você ou sua relação com a Universidade de nenhuma forma. Se você decidir participar e depois decidir desistir, não tem problema. Você poderá desistir a qualquer momento. Peço apenas que você me notifique, por meio do e-mail: [basso.josiane@gmail.com](mailto:basso.josiane@gmail.com). Para contato telefônico: (3233-3254/8402-4778). Você não precisa se justificar.

A pesquisadora responsável por esse estudo é Josiane Basso Hining e a professora orientadora é a Dra. Mailce Borges Mota ([mailce@cce.ufsc.br](mailto:mailce@cce.ufsc.br)).

Declaração de consentimento:

Declaro que li a informação acima. Quando necessário, fiz perguntas e recebi esclarecimentos. Eu concordo em participar deste estudo.

Nome:

Assinatura do participante

Assinatura da pesquisadora responsável

Data:



APPENDIX B  
PROFILE QUESTIONNAIRE

**Questionário biográfico**

Prezado(a) participante,

Este questionário tem como objetivo coletar dados sobre o perfil dos participantes deste estudo. Toda e qualquer informação pessoal sua será mantida em sigilo.

1. Nome: \_\_\_\_\_
2. Data: \_\_\_\_\_
3. Idade: \_\_\_\_\_
4. Sexo: Masculino/Feminino
5. Telefone: \_\_\_\_\_
6. Língua materna: \_\_\_\_\_
7. Idade que você começou aprender Inglês: \_\_\_\_\_
8. Há quanto tempo você estuda Inglês: \_\_\_\_\_
9. Tempo que você passou em um país em que a língua materna é o Inglês: \_\_\_\_\_  
País: \_\_\_\_\_
10. Você estudou ou estuda outras línguas? \_\_\_\_\_ Qual/Quais? \_\_\_\_\_
11. Que tipo de instrução você recebeu nas suas aulas de Inglês na escola? A instrução tinha como foco principal as estruturas gramaticais ou vocês faziam, primeiro, várias atividades de comunicação e somente depois a professora explicava a estrutura gramatical daquela unidade?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Na UFSC, você faz graduação ou curso Extra Curricular de inglês?  
\_\_\_\_\_
12. No caso da graduação, em que período você está? \_\_\_\_\_
13. No caso do curso Extracurricular, em que nível e turma você está? \_\_\_\_\_

**MUITO OBRIGADA!**

APPENDIX C  
ORAL IMITATION TEST

Training

This is a beliefs questionnaire. We are going to ask you your opinion about a range of topics.

You will hear a statement. Decide whether the statement is true/not true for you or whether you are not sure. On the sheet of paper indicate whether you think the statement is true, not true or whether you are not sure. Then repeat the statement in correct English.

Here is statement A.

*Life is very difficult for many old people.*

Now indicate on the sheet whether you think the statement is true, not true or whether you are not sure.

**PAUSE**

Now repeat the statement.

**PAUSE**

What you should have said is *Life is very difficult for many old people.*

Now here is statement B.

*English spoken in many different countries.*

Now indicate on the sheet whether you think the statement is true, not true or whether you are not sure.

**PAUSE**

Now repeat the statement.

**PAUSE**

What you should have said is *English is spoken in many different countries.*

Now here are some more statements for you to practise with. Remember you are to decide whether each statement is true/not true for you or whether you are not sure. Then you are to repeat the statement in correct English.

Now try statement C on your own. This time I am not going to repeat the instructions for you.

Here is Statement C.

*Young people watch television and don't read books.*

**PAUSE**

What you should have said is *Young people watch television and don't read books.*

Here is Statement D.

*A good doctor always listens what patients say.*

**PAUSE**

What you should have said is *A good doctor always listens to what patients say.*

Here is Statement E.

If you likes good food you should eat at McDonalds.

**PAUSE**

What you should have said is *If you like good food you should eat at McDonalds.*

Here is Statement F.

*The invention of the aeroplane has changed the world.*

**PAUSE**

What you should have said is *The invention of the aeroplane has changed the world.*

Here is Statement G.

*Everybody enjoys to swim.*

**PAUSE**

What you should have said is *Everybody enjoys swimming.*

Here is Statement H.

*Paris is an exciting city to visit.*

**PAUSE**

What you should have said is *Paris is an exciting city to visit.*

The training is now finished. Please turn over your page and start the questionnaire.

Name: \_\_\_\_\_

## READ OUT

*Remember you are to decide whether each statement is true, not true for you or whether you are not sure and then you are to repeat the statement in correct English.*

1	( ) True	( ) Not true	( ) Not sure
2	( ) True	( ) Not true	( ) Not sure
3	( ) True	( ) Not true	( ) Not sure
4	( ) True	( ) Not true	( ) Not sure
5	( ) True	( ) Not true	( ) Not sure
6	( ) True	( ) Not true	( ) Not sure
7	( ) True	( ) Not true	( ) Not sure
8	( ) True	( ) Not true	( ) Not sure
9	( ) True	( ) Not true	( ) Not sure
10	( ) True	( ) Not true	( ) Not sure
11	( ) True	( ) Not true	( ) Not sure
12	( ) True	( ) Not true	( ) Not sure
13	( ) True	( ) Not true	( ) Not sure
14	( ) True	( ) Not true	( ) Not sure
15	( ) True	( ) Not true	( ) Not sure
16	( ) True	( ) Not true	( ) Not sure
17	( ) True	( ) Not true	( ) Not sure
18	( ) True	( ) Not true	( ) Not sure
19	( ) True	( ) Not true	( ) Not sure
20	( ) True	( ) Not true	( ) Not sure
21	( ) True	( ) Not true	( ) Not sure
22	( ) True	( ) Not true	( ) Not sure
23	( ) True	( ) Not true	( ) Not sure

24	<input type="checkbox"/> True	<input type="checkbox"/> Not true	<input type="checkbox"/> Not sure
25	<input type="checkbox"/> True	<input type="checkbox"/> Not true	<input type="checkbox"/> Not sure
26	<input type="checkbox"/> True	<input type="checkbox"/> Not true	<input type="checkbox"/> Not sure
27	<input type="checkbox"/> True	<input type="checkbox"/> Not true	<input type="checkbox"/> Not sure
28	<input type="checkbox"/> True	<input type="checkbox"/> Not true	<input type="checkbox"/> Not sure
29	<input type="checkbox"/> True	<input type="checkbox"/> Not true	<input type="checkbox"/> Not sure
30	<input type="checkbox"/> True	<input type="checkbox"/> Not true	<input type="checkbox"/> Not sure
31	<input type="checkbox"/> True	<input type="checkbox"/> Not true	<input type="checkbox"/> Not sure
32	<input type="checkbox"/> True	<input type="checkbox"/> Not true	<input type="checkbox"/> Not sure
33	<input type="checkbox"/> True	<input type="checkbox"/> Not true	<input type="checkbox"/> Not sure
34	<input type="checkbox"/> True	<input type="checkbox"/> Not true	<input type="checkbox"/> Not sure

*Test Content*

1. New Zealand is **greener** and **more beautiful** than other countries.
2. New Zealanders **want to keep** their country clean and green.
3. Children play rugby **well** and soccer **badly** in New Zealand.
4. People should **report the police stolen money**.
5. Everyone **loves** comic books and **read** them.
6. The film that **everyone likes** is Star Wars.
7. People **can win** a lot of money in a casino.
8. Spending 10 hours in an aeroplane isn't much fun, **is it?**
9. People should **report a car accident to the police**.
10. People have been using computers **since** many years.
11. The software **that Bill Gates invented it** changed the world.
12. A good teacher **makes** lessons interesting and **cares** about students.
13. It is not a good idea for **teachers** to punish **students**.
14. Not everyone **can to** learn a second language.
15. To speak English well you must study **for** many months.
16. It is **more harder** to learn Japanese than to learn English.
17. Princess Diana **loved** Prince Charles but **divorced** him.
18. If Prince Charles had loved Princess Diana **she will be** happier.
19. Princess **Diana's death** shocked the whole world.
20. The number of Africans with Aids **was increased** last year.
21. The Americans were first to land on the moon, **isn't it?**
22. If Russia had got to the moon first, America **would have been worried**.
23. Everyone wants to know **what is President Bush like**.
24. When man **invented** the motor car, life **change** for everyone.
25. Last year the population of the world **increased** a lot.
26. Young people visit **often** clubs and drink **a lot**.
27. Young women like **cigarettes** and fast **car**.

28. Parents have **a responsibility** to care for their children.
29. People worry about their **parent health** and their **children's future**.
30. Every child needs **good father**.
31. It is a silly question to ask **'Do a woman need to marry?'**
32. People in love usually **want getting** married as soon as possible.
33. A wife always wants to know **what her husband is doing**.
34. It is difficult to ask **'Do you really love me?'**

## APPENDIX D

### TIMED GRAMMATICALITY JUDGEMENT TEST

1. Since (G) I haven't seen him for a long time.
2. Relative (G) The book that Mary wrote won the prize.
3. Comparative (G) I think that he is nicer and more intelligent than all the other students.
4. Dative (G) The teacher explained the problem to the students.
5. V comp (UG) Liao says he wants buying a car next week.
6. past ed (UG) Martin completed his assignment and print it out.
7. Tag (UG) We will leave tomorrow, isn't it?
8. Adverb (G) He plays soccer very well.
9. Aux do (UG) Did Keiko completed her homework?
10. Modal (UG) I must to brush my teeth now.
11. Conditional (UG) If he had been richer, she will marry him.
12. Since (UG) He has been living in New Zealand since three years.
13. Reported (G) Pam wanted to know what I had told John.
14. Article (UG) They had the very good time at the party.
15. Passive (UG) Between 1990 and 2000 the population of New Zealand was increased.
16. Possessive (UG) Liao is still living in his rich uncle house.
17. Plural (UG) Martin sold a few old coins and stamp to a shop.
18. Relative (UG) The boat that my father bought it has sunk.
19. Since (UG) I have been studying English since a long time.
20. Modal (UG) I can to speak French very well.
21. Past ed (UG) Joseph miss an interesting party last weekend.
22. 3rd person s (G) Keiko eats a lot of sushi.
23. Reported (G) Bill wanted to know where I had been.
24. Aux do (G) Did Cathy cook dinner last night?
25. Dative (G) Rosemary reported the crime to the police.
26. Comparative (G) Mary is taller than her sisters
27. 3rd person s (UG) Hiroshi live with his friend Koji.



28. V comp (G) Keum wants to buy a computer this weekend.
29. Adverb (UG) She writes very well English.
30. Conditional (G) If she had worked hard, she would have passed the exam.
31. Reported (UG) Tom wanted to know whether was I going.
32. Article (UG) I saw very funny movie last night.
33. Dative (UG) The teacher explained John the answer.
34. Modal (G) I must finish my homework tonight.
35. Possessive (UG) Keum went to the school to speak to her children teacher.
36. Since (G) Keiko has been studying in Auckland for three years.
37. Comparative (UG) This building is more bigger than your house.
38. Tag (G) That book isn't very interesting, is it?
39. Passive (G) Her English vocabulary increased a lot last year.
40. Relative (UG) The bird that my brother caught it has died.
41. Past ed (G) Hiroshi received a letter from his father yesterday.
42. Aux do (G) Does Keum live in Auckland?
43. Plural (G) Liao left some pens and pencils at school.
44. Conditional (UG) If he hadn't come to New Zealand, he will stay in Japan.
45. Comparative (UG) My car is more faster and more powerful than your car.
46. Possessive (G) Joseph flew to Washington to meet the President's advisor.
47. V comp (UG) Joseph wants finding a new job next month.
48. 3rd person s (G) Liao works very hard but earns very little.
49. Article (G) Japan is a very interesting country.
50. Modal (G) I can cook Chinese food very well.
51. Adverb (G) They enjoyed the party very much.
52. Tag (UG) The boys went to bed late last night, is it?
53. Reported (UG) She wanted to know why had he studied German.
54. Dative (UG) He reported his father the bad news.
55. Possessive (G) Keiko spoke to the professor's secretary.
56. Past ed (G) Liao stayed at home all day and finished the book.
57. Plural (G) Hiroshi found some keys on the ground.
58. Article (G) They did not come at the right time.

59. Relative (G) The car that Bill has rented is a Toyota.
60. Conditional (G) If he had bought a ticket, he might have won the prize.
61. V comp (G) Martin says he wants to get married next year.
62. Passive (UG) An accident was happened on the motorway.
63. 3rd person s (UG) Keum lives in Hamilton but work in Auckland.
64. Adverb (UG) She likes always watching television.
65. Aux do (UG) Did Martin visited his father yesterday?
66. Passive (G) Something bad happened last weekend.
67. Plural (UG) Keum bought two present for her children.
68. Tag (G) She is working very hard, isn't she?

## APPENDIX E

### UNTIMED GRAMMATICALITY JUDGEMENT TEST

1. Since (G) I haven't seen him for a long time.
2. Relative (G) The book that Mary wrote won the prize.
3. Comparative (G) I think that he is nicer and more intelligent than all the other students.
4. Dative (G) The teacher explained the problem to the students.
5. V comp (UG) Liao says he wants buying a car next week.
6. past ed (UG) Martin completed his assignment and print it out.
7. Tag (UG) We will leave tomorrow, isn't it?
8. Adverb (G) He plays soccer very well.
9. Aux do (UG) Did Keiko completed her homework?
10. Modal (UG) I must to brush my teeth now.
11. Conditional (UG) If he had been richer, she will marry him.
12. Since (UG) He has been living in New Zealand since three years.
13. Reported (G) Pam wanted to know what I had told John.
14. Article (UG) They had the very good time at the party.
15. Passive (UG) Between 1990 and 2000 the population of New Zealand was increased.
16. Possessive (UG) Liao is still living in his rich uncle house.
17. Plural (UG) Martin sold a few old coins and stamp to a shop.
18. Relative (UG) The boat that my father bought it has sunk.
19. Since (UG) I have been studying English since a long time.
20. Modal (UG) I can to speak French very well.
21. Past ed (UG) Joseph miss an interesting party last weekend.
22. 3rd person s (G) Keiko eats a lot of sushi.
23. Reported (G) Bill wanted to know where I had been.
24. Aux do (G) Did Cathy cook dinner last night?
25. Dative (G) Rosemary reported the crime to the police.
26. Comparative (G) Mary is taller than her sisters

27. 3rd person s (UG) Hiroshi live with his friend Koji.
28. V comp (G) Keum wants to buy a computer this weekend.
29. Adverb (UG) She writes very well English.
30. Conditional (G) If she had worked hard, she would have passed the exam.
31. Reported (UG) Tom wanted to know whether was I going.
32. Article (UG) I saw very funny movie last night.
33. Dative (UG) The teacher explained John the answer.
34. Modal (G) I must finish my homework tonight.
35. Possessive (UG) Keum went to the school to speak to her children teacher.
36. Since (G) Keiko has been studying in Auckland for three years.
37. Comparative (UG) This building is more bigger than your house.
38. Tag (G) That book isn't very interesting, is it?
39. Passive (G) Her English vocabulary increased a lot last year.
40. Relative (UG) The bird that my brother caught it has died.
41. Past ed (G) Hiroshi received a letter from his father yesterday.
42. Aux do (G) Does Keum live in Auckland?
43. Plural (G) Liao left some pens and pencils at school.
44. Conditional (UG) If he hadn't come to New Zealand, he will stay in Japan.
45. Comparative (UG) My car is more faster and more powerful than your car.
46. Possessive (G) Joseph flew to Washington to meet the President's advisor.
47. V comp (UG) Joseph wants finding a new job next month.
48. 3rd person s (G) Liao works very hard but earns very little.
49. Article (G) Japan is a very interesting country.
50. Modal (G) I can cook Chinese food very well.
51. Adverb (G) They enjoyed the party very much.
52. Tag (UG) The boys went to bed late last night, is it?
53. Reported (UG) She wanted to know why had he studied German.
54. Dative (UG) He reported his father the bad news.
55. Possessive (G) Keiko spoke to the professor's secretary.
56. Past ed (G) Liao stayed at home all day and finished the book.
57. Plural (G) Hiroshi found some keys on the ground.

58. Article (G) They did not come at the right time.
59. Relative (G) The car that Bill has rented is a Toyota.
60. Conditional (G) If he had bought a ticket, he might have won the prize.
61. V comp (G) Martin says he wants to get married next year.
62. Passive (UG) An accident was happened on the motorway.
63. 3rd person s (UG) Keum lives in Hamilton but work in Auckland.
64. Adverb (UG) She likes always watching television.
65. Aux do (UG) Did Martin visited his father yesterday?
66. Passive (G) Something bad happened last weekend.
67. Plural (UG) Keum bought two present for her children.
68. Tag (G) She is working very hard, isn't she?

## APPENDIX F

### METALINGUISTIC KNOWLEDGE TEST

Name: \_\_\_\_\_

In this part of the test there are 17 sentences. All of them are ungrammatical. The part of the sentence containing the error is underlined. For each sentence choose which statement best explains the error. Circle a, b, c or d to indicate your choice.

#### Example Sentence One

Keiko said, 'I have lost mine ring'.

- a. Replace the word 'mine' with 'my'.
- b. Mine cannot be used as a possessive word.
- c. Should be 'her ring' because Keiko is the subject.
- d. Before a noun use the possessive adjective, not the pronoun.

#### Example Sentence Two

He saw a elephant.

- a. The word 'elephant' refers to the normal verb.
- b. We must use 'elephant' instead of 'a elephant'.
- c. You should use 'an' not 'a' because elephant starts with a vowel sound.
- d. The wrong form of the indefinite article has been used.

*Now start.*

#### 1. You must to wash your hands before eating.

- a. 'Must to' is the wrong form of the imperative.
- b. Change to 'must have to wash' to express obligation.
- c. Modal verbs should never be followed by a preposition.
- d. After 'must' use the base form of the verb not the infinitive.

#### 2. Hiroshi wants visiting the United States this year.

- a. 'Visiting' should be written in the base form.
- b. The verb following 'want' must be an infinitive.
- c. We cannot have two verbs together in a sentence.
- d. It should be 'visit' because the event is in the future.

#### 3. Martin work in a car factory.

- a. Work is a noun so it cannot have the subject 'Martin'.
- b. We must use the present simple tense after a pronoun.
- c. We need 's' after the verb to indicate third person plural.
- d. In the third person singular the present tense verb takes 's'.

**4. If Jane had asked me, I would give her some money.**

- a. 'would' is conditional so it should appear in the 'if' clause not the main clause.
- b. The first clause tells us that this is an impossible condition, so use the subjunctive.
- c. We must use 'would have given' to indicate that the event has already happened.
- d. When 'if' clause is in the past perfect tense, main clause verb is in the past conditional.

**5. Learning a language is more easier when you are young.**

- a. 'More' is an adjective so we must use 'easily' not 'easier'.
- b. The comparative ending of a two-syllable adjective is 'er'.
- c. The 'er' ending indicates comparison, so 'more' is not needed.
- d. You cannot have two adjectives together in the same sentence.

**6. Keiko grew some rose in her garden.**

- a. The noun is countable, so after 'some' use the plural form.
- b. The wrong adjective has been used before 'rose'.
- c. A noun must always have 'a' or 'the' before it.
- d. Use 'a few' not 'some' with countable nouns.

**7. His school grades were improved last year.**

- a. The verb 'improve' can never be used in the passive form.
- b. We should insert 'by him' after the verb to indicate the agent.
- c. Use 'improved' as the sentence refers to a specific event last year.
- d. 'Improve' should take the active form even though the subject is not the agent

**8. Martin lost his friend book.**

- a. We need possessive 's' to show that the friend owns the book.
- b. You cannot have two nouns next to one another in a sentence.
- c. The verb refers to a personal object, so must have an apostrophe.
- d. Insert 'of' before book to show that it belongs to the friend.

**9. Keum happen to meet an old friend yesterday.**

- a. It took place yesterday, so use a past tense verb ending.
- b. Third person singular verbs always have an 's' ending.
- c. We don't use a preposition after the verb 'happen'.
- d. 'Happen' never follows the subject of a sentence.

**10. Because he was late, he called taxi.**

- a. Insert 'a' before taxi because it is not a specific one.
- b. Use 'some taxis' because taxi cannot be singular.
- c. We must always use 'the' before countable nouns.
- d. Use the indefinite article because the taxi is unique.

**11. They were interested in what was I doing.**

- a. In embedded questions the word order is the same as that in statements.
- b. Change the word order, because 'what' is always followed by a pronoun.
- c. The subject should always come in front of the verb after question words.
- d. The clause 'What was I doing' should be followed by a question mark.

**12. Does Liao has a Chinese wife?**

- a. With questions, always use the auxiliary 'have'.
- b. We must use the base form after 'do/does'.
- c. Use 'have' not 'has' because 'does' is in the past tense.
- d. The word order changes when we use the question form.

**13. Jenny likes very much her new job.**

- a. Adverbial phrases should occur after nouns not verbs.
- b. An adverb should not come between a verb and its object.
- c. The phrase 'very much' always occurs at the end of a sentence.
- d. The adverbial phrase must always precede the verb.

**14. They have already finished, isn't it?**

- a. We cannot use 'it' because the main verb 'finish' does not have an object.
- b. 'have' should be used instead of 'is' in all question tags referring to past time.
- c. The tag question should be positive because the main verb is in the affirmative.
- d. The form of the question tag must relate to the subject and verb in the main clause.

**15. He has been saving money since 10 years.**

- a. The wrong conjunction has been used in the time clause.
- b. We cannot use 'since' because the exact date is specified.
- c. Use 'for' following any verb in the past perfect continuous tense.
- d. Use 'for' not 'since' for a noun phrase referring to a period of time.

**16. I explained my friend the rules of the game.**

- a. The indirect object must never precede the direct object of a verb.
- b. 'Explain' (unlike the verbs 'tell' and 'give') can only have one object.
- c. After 'explain' we must insert a preposition before the indirect object.
- d. The preposition 'to' is always used for the dative form of a noun or pronoun.

**17. The cake that you baked it tastes very nice.**

- a. Omit 'that' when the relative pronoun is subject of the clause.
- b. We should use 'which' instead of 'that' when referring to things.
- c. Omit 'it' in the relative clause because it refers to same thing as 'that'.
- d. Omit 'that' when using 'it' in the relative clause to avoid having two pronouns.

*Thank you for your participation.*



APPENDIX - G

PET - PRELIMINARY ENGLISH TEST

Test 1

PAPER 1 READING AND WRITING TEST (1 hour 30 minutes)

READING

PART 1

Questions 1–5

- Look at the text in each question.
- What does it say?
- Mark the letter next to the correct explanation – **A, B or C** – on your answer sheet.

Example:

0

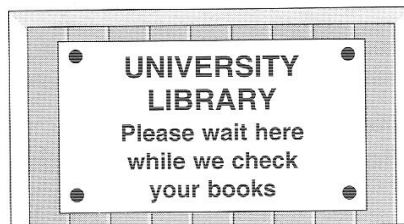


- A** Do not leave your bicycle touching the window.
- B** Broken glass may damage your bicycle tyres.
- C** Your bicycle may not be safe here.

Example answer:

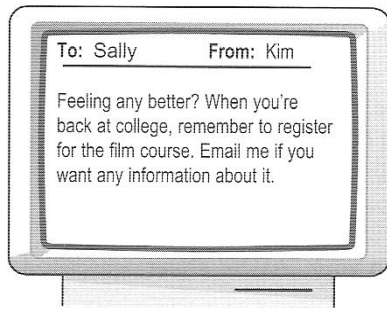
Part 1			
0	<input checked="" type="checkbox"/> <b>A</b>	<input type="checkbox"/> <b>B</b>	<input type="checkbox"/> <b>C</b>

1



- A** Do not go away until we have checked your books.
- B** Check you have all your books before you leave the library.
- C** Do not leave books here for checking without telling us.

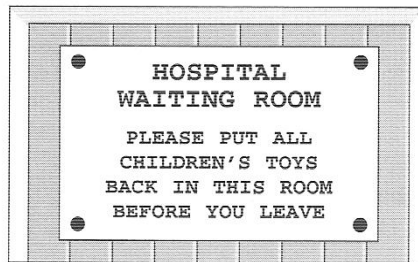
2



**Why has Kim emailed Sally?**

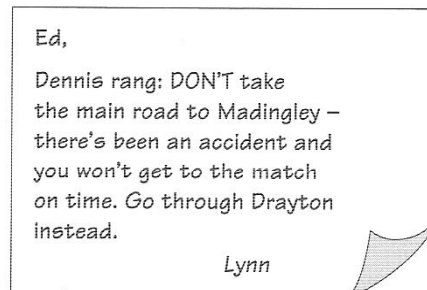
- A to give her some details
- B to let her know that he's ill
- C to remind her to do something

3



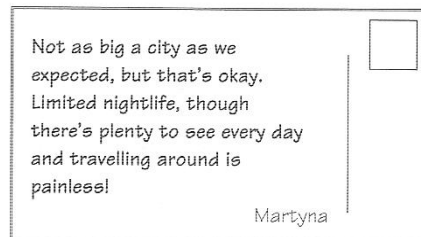
- A We leave some toys at the back of this room for children.
- B Please don't leave any toys outside this room when you go.
- C Remember to take your children's toys with you when you leave.

4



- A To arrive punctually, Ed should use a different route.
- B Dennis suggests that it's quicker to go on the main road.
- C If there's enough time, Lynn would like to see the match.

5



**According to Martyna, the city's disadvantage is**

- A its actual size.
- B its transport system.
- C its evening entertainment.

**PART 5**

**Questions 26–35**

- Read the text below and choose the correct word for each space.
- For each question, mark the letter next to the correct word – **A, B, C** or **D** – on your answer sheet.

Example answer:

Part 5				
0	A	B	C	D
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**CAMPING**

Although **(0)** ..... groups of people have always lived outdoors in tents, camping as we know it today only began to be **(26)** ..... about 50 years ago. The increase in the use of cars and improvements in camping **(27)** ..... have allowed more people to travel longer **(28)** ..... into the countryside and to stay there in greater comfort.

Many campers like to be **(29)** ..... themselves in quiet areas, so they **(30)** ..... their tent and food and walk or cycle into the forests or the mountains. Others, preferring to be near people, drive to a public or privately-owned campsite **(31)** ..... has up-to-date facilities, **(32)** ..... hot showers and swimming pools.






Whether campers are **(33)** ..... in the mountains or on a busy site, they should remember to **(34)** ..... the area clean and tidy. In the forests, they must put out any fires and keep food hidden to avoid attracting **(35)** ..... animals.

- |    |          |              |             |             |
|----|----------|--------------|-------------|-------------|
| 0  | A some   | B every      | C both      | D each      |
| 26 | A famous | B popular    | C favourite | D current   |
| 27 | A tools  | B baggage    | C equipment | D property  |
| 28 | A ways   | B directions | C voyages   | D distances |
| 29 | A on     | B by         | C at        | D of        |
| 30 | A take   | B make       | C pick      | D do        |
| 31 | A where  | B who        | C which     | D when      |
| 32 | A such   | B like       | C as        | D just      |
| 33 | A lonely | B single     | C separate  | D alone     |
| 34 | A remain | B stay       | C leave     | D let       |
| 35 | A wild   | B natural    | C loose     | D free      |

**PART 2**

**Questions 6–10**

- The people below are all looking for a college course.
- On the opposite page there are descriptions of eight colleges and the courses they offer.
- Decide which college (**letters A–H**) would be the most suitable for each person (**numbers 6–10**).
- For each of these numbers mark the correct letter **on your answer sheet**.

- 6  Anna is 18 and she wants to do computer studies so that she can work in an office. She would like to study in London but is worried about finding accommodation.
- 7  Peter is 19 and wants to be a sports teacher. He is very good at sport, especially running. He wants to go to a college outside London.
- 8  Maria used to teach in a secondary school but now wants to teach at primary level. She wants to do a part-time course in London.
- 9  Stephen works in the computer industry and wants to go back to college for a year to do a diploma in advanced computer studies. He lives in London and wants to study there.
- 10  Ali wants to do computer studies in London. He would like to do a full-time course which includes some time working in industry. In his spare time he plays football.

## COURSES TO CHOOSE FROM

- A Hillman College** is a London college with up-to-date facilities. We offer both primary and secondary full-time teacher training courses. This year there will be special two-year courses available on maths and computers in the primary classroom. All students are expected to spend two terms working in local schools.
- B Kirby College** has over fifty years' experience of teacher training. We offer both full-time and part-time courses for all levels of teaching. Large college in lovely countryside, with excellent sports facilities, especially for football and athletics. There is a new course this year called 'Computers in the Classroom'.
- C Kemp College** offers a wide range of both full-time and part-time diploma courses in arts and science subjects, lasting from one to three years. The college is about two hours away from London by train. It has a new library and good student accommodation. Grants are available for students wanting to return to studying.
- D MacKintosh College** offers a range of courses from modern languages to computer studies, in a quiet and pleasant part of London. All students are offered accommodation in college flats and we have excellent sports facilities. Full-time and part-time courses of either three or four years are available.
- E Pemberley College** in central London offers full-time courses in science and computer studies. Our four-year courses allow you to spend a term every year getting work experience in different firms. There are good social and sports facilities. No college accommodation is available at present.
- F Treeholme College.** If you want to be a teacher, join one of our courses. Places are available on our full-time courses in science and maths this October. Ours is a small teacher training department in a large London college, so we can offer good facilities such as a new computer centre.
- G Dene College** was built in 1990 in an attractive part of north London. Spaces are still available on our popular part-time course in primary teaching for teachers who want to retrain. Beginning in October we will also have new four-year courses in law, economics, mathematics and sports science.
- H Westgate College** in south London has a range of courses, from maths and physics to computer studies and sports science. We offer both lower and advanced diplomas. All our courses are from one to three years in length and are particularly suitable for people with some work experience.

**PART 3****Questions 11–20**

- Look at the sentences below about European travel.
- Read the text on the opposite page to decide if each sentence is correct or incorrect.
- If it is correct, mark **A on your answer sheet**.
- If it is not correct, mark **B on your answer sheet**.

- 11 The *Daily News* is offering free flights to a number of European cities.
- 12 These tickets allow passengers to fly directly from Heathrow to Nice.
- 13 To go to Copenhagen you must leave early in the morning.
- 14 Travelling on Saturday costs extra.
- 15 The Crown Inn Hotel is convenient for shopping.
- 16 You must write to the newspaper for a special application form.
- 17 You should ring the newspaper about your reservation seven days before you are due to leave.
- 18 Passengers must buy insurance for the trip.
- 19 You must pay extra for airport tax.
- 20 The airline company has the right to change a flight without telling passengers in advance.

## TAKE THIS GREAT OPPORTUNITY TO DISCOVER SOME WONDERFUL EUROPEAN CITIES

**Here is a wonderful flight offer from the *Daily News*, giving our readers the chance to get a return ticket to Europe for next to nothing.**

### **European destinations**

Our basic offer price of £10 allows you to take an Express Airlines flight to Brussels in Belgium from Heathrow Airport in London. At Brussels Airport there are connections to Nice, Milan, Madrid or Copenhagen for only an extra £25 return.

This offer is available from November to February, apart from the period December 18 – January 6. There are up to five flights during the day between Heathrow and Brussels. If you plan to travel further than Brussels, you will need to get the early morning flight from Heathrow. A charge of £10 is added to the ticket price for travel between Friday and Sunday.

### **So much to see and do**

Why not treat yourself and your partner or friend to a few days in Belgium? Discover wonderful Brussels, which is much more than the centre of the European Union. The Belgian capital is a mix of old and new, with a historic central square, a number of galleries and museums to explore, and more restaurants per person than any other city in Europe. The *Daily News* is also organising tours of the beautiful Belgian towns of Bruges and Antwerp. There is also the opportunity for our readers to stay at the Crown Inn Hotel in Brussels and enjoy luxury accommodation and friendly service for an amazing price starting from £15 per person per night. The Crown Inn Hotel is in a perfect position for you to see the sights and look round the city shops. Or you can simply relax in this friendly hotel, which offers leisure facilities and family rooms, making it a great place for people with children.

### **How to get your tickets**

We will only consider bookings made on the special application form printed in our newspaper, and sent to us with a cheque for the fare. One week before departure, please contact our office by phone to check your booking.

We recommend that you get travel insurance for your trip. Please note that the prices do not include airport tax. Once bookings are made, no changes are allowed, and your money cannot be returned if you cancel. Any flight may be changed or cancelled by the airline company without notice.

**PART 4****Questions 21–25**

- Read the text and questions below.
- For each question, mark the letter next to the correct answer – **A, B, C or D** – on your answer sheet.

John Fisher, a builder, and his wife Elizabeth wanted more living space, so they left their small flat for an old 40-metre-high castle tower. They have spent five years turning it into a beautiful home with six floors, winning three architectural prizes.

‘I love the space, and being private,’ Elizabeth says. ‘You feel separated from the world. If I’m in the kitchen, which is 25 metres above the ground floor, and the doorbell rings, I don’t have to answer it because visitors can’t see I’m in!’

‘There are 142 steps to the top, so if I go up and down five or six times a day, it’s very good exercise! But having to carry heavy things to the top is terrible, so I never buy more than two bags of shopping from the supermarket at a time. Apart from that, it’s a brilliant place to live.’

‘When we first saw the place, I asked my father’s advice about buying it, because we couldn’t decide. After paying for it, we were a bit worried because it looked awful. But we really loved it, and knew how we wanted it to look.’

‘Living here can be difficult – yesterday I climbed a four-metre ladder to clean the windows. But when you stand on the roof you can see all the way out to sea on a clear day, and that’s a wonderful experience. I’m really glad we moved.’

- 21 What is the writer trying to do in the text?
- A describe how to turn an old tower into a house
  - B recommend a particular builder
  - C describe what it is like to live in a tower
  - D explain how to win prizes for building work
- 22 From this text, a reader can find out
- A why visitors are not welcome at John and Elizabeth’s house.
  - B why Elizabeth exercises every day.
  - C why Elizabeth asked her father to buy the tower.
  - D why John and Elizabeth left their flat.



23 Which of the following best describes Elizabeth's feelings about the tower?

- A She wanted it as soon as she saw it.
- B She likes most things about it.
- C She has been worried since they paid for it.
- D She finds it unsuitable to live in.

24 What problem does Elizabeth have with living in such a tall building?

- A Her visitors find it difficult to see if she is at home.
- B She feels separated from other people.
- C She cannot bring home lots of shopping at once.
- D It is impossible to clean any of the windows.

25 How will John and Elizabeth advertise their tower if they sell it?

A

**FOR SALE**  
**Tall building, formerly a castle. High windows give a good view. Needs some improvement.**

B

FOR SALE  
 A house with a difference – a castle tower, turned into a lovely home.  
 Wonderful view.

C

FOR SALE  
 Prize-winning home, five years old. Six rooms, all with sea views.

D

FOR SALE  
 Castle tower, turned into six small flats, close to supermarket.

**PART 5**

**Questions 26–35**

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Example answer:

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| 29 | A on     | B by         | C at        | D of        |
| 30 | A take   | B make       | C pick      | D do        |
| 31 | A where  | B who        | C which     | D when      |
| 32 | A such   | B like       | C as        | D just      |
| 33 | A lonely | B single     | C separate  | D alone     |
| 34 | A remain | B stay       | C leave     | D let       |
| 35 | A wild   | B natural    | C loose     | D free      |

**WRITING**

**PART 1**

**Questions 1–5**

- Here are some sentences about a student who is living in a flat.
- For each question, complete the second sentence so that it means the same as the first, **using no more than three words.**
- **Write only the missing words on your answer sheet.**

**Example:** The flat is near my college.

The flat is not *far from* my college.

1 My friend told me that I could stay in his flat.

**My friend said:** 'You ..... my flat.'

2 I started living here two months ago.

**I have lived here** ..... two months ago.

3 This is the first time I've lived in a city.

**I've** ..... in a city before.

4 The flat has two bedrooms.

**There** ..... in the flat.

5 My bedroom is too small for all my books.

**My bedroom is not** ..... for all my books.

**PART 2****Question 6**

You have just joined a club in your area and you think your English friend Max would enjoy going there with you.

**Write an email to Max. In your email, you should**

- explain which club you have joined
- suggest Max should visit the club
- say what you could do there together.

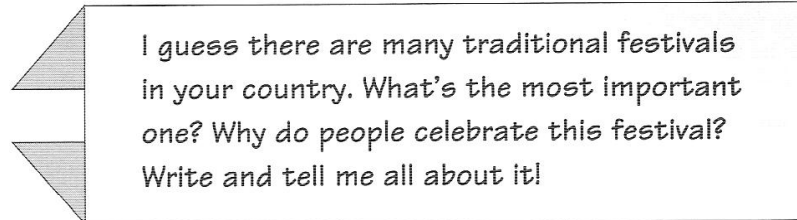
**Write 35–45 words on your answer sheet.**

**PART 3**

Answer **one** of the following questions (7 or 8).

**Question 7**

- This is part of a letter you receive from a friend in the U.S.A.



- Now write a letter, answering your friend's questions.
- Write your **letter** in about 100 words **on your answer sheet**.

**Question 8**

- Your English teacher has asked you to write a story.
- Your story must begin with this sentence:

*Nobody knew what Adam had in his suitcase.*

- Write your **story** in about 100 words **on your answer sheet**.

ORAL PET

Name: \_\_\_\_\_

- 1- Spell your name please.
- 2- Where are you from?
- 3- What is your favorite kind of sport?
- 4- Do you work? Where?
- 5- Why did you choose Florianópolis to live?
- 6- When was the last time you went to the movies?
- 7- What is your favorite season? Why?
- 8- Something you hate doing.
- 9- Something you love doing.
- 10- Drawing.
- 11- Picture.

Listening	Reading	Writing	Speaking

