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Rule or feel? The application of implicit and explicit knowledge of Filipino and Korean college students in responding to English tests

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Abstract

The study explores the manifestation of explicit and implicit knowledge among English as a Foreign Language (EFL) and English as a Second Language (ESL) learners of a university in Manila. Using a theoretical framework pioneered by Rod Ellis (2005), the researcher administered to 60 college students a Grammaticality Judgment Test (GJT) designed to elicit their explicit knowledge, and a Free Writing Test (FWT) used to test their implicit knowledge. Using the statistical test of 2x2 factorial design for the GJT and the FWT, the research found that the students used explicit knowledge and implicit knowledge for English tests that require their knowledge of rules and their personal judgment. The study likewise yielded several useful implications for teaching the English grammar in the Philippine context, particularly in the participants' learning, such as both the EFL and the ESL learners' ability to access either type of knowledge in language tests and the EFL learners' ability to progress in their language development in a mixed-ability class.

Keywords: Language learning, second language

acquisition (SLA), implicit knowledge,

explicit knowledge

1. Introduction

Since Polanyi's (1966) introduction of the concept of tacit knowledge or implicit knowledge, a number of studies (Reber, 1976; Ellis, 1991; Ellis, 2005) relating to how it is used and measured have been conducted. In terms of linguistic knowledge, the issue with respect to how students use their implicit and explicit knowledge in language learning has been attracting more attention from the research circle as observed in previous studies like those of

Reber (1989) and Ellis (2002). However, these studies differed in their foci; some investigated the implicitness and the explicitness of language learning in general, and others explored the learners' use of implicit and explicit knowledge when prompted by different linguistic tasks. The current study gave attention to the second focal point.

Explicit knowledge is the knowledge that can be explained by the learner (Hulstijn & Hulstijn, 1984). Focusing on second language acquisition, Dummett (1991) defines explicit knowledge as the knowledge that the L2 learner can fully explain by means of a verbal statement. L2 learners are said to have explicit knowledge of a particular rule if they can elicit something from a statement through suitable inquiry or prompting. Additionally, it is the knowledge that can be quantified, written down, and clearly communicated to another person and is governed by a rule (Bogue, 2006). On the other hand, implicit knowledge is essentially personal in nature and seemingly difficult to extract from L2 learners (Polanyi, 1966). Specifically, it manifests when learners are unaware of the knowledge they possess or the rules that govern a particular domain (Dummett, 1991). Hence, as the innatist position of Chomsky would call it, implicit knowledge is closer to knowing that, a result of reflective thinking, than knowing how, which is emergent from experiences or practices (Dienes & Perner, 1999). Implicit learning takes place when a learner acquires knowledge without intending to learn them. In fact, connectionists in the field of SLA (e.g., Keenan, 1993) claim that implicit learning happens primarily before explicit learning. Despite its relatively effortless manner, one common misconception about implicit learning is that it hardly requires attention to the subject matter. Sun, Mathews, and Lane (2007) stress that learners utilizing implicit knowledge attend to a task; they are just unintentionally trying to acquire certain aspects of the task stimuli that are the foci of assessments. Furthermore, closely related to the issue of exploring implicit and explicit knowledge is Krashen's (1981) categorization of language development into two different processes-learning and acquisition. According to Krashen, acquisition is the unconscious construction of grammar rules by a language learner which occurs to understand the message conveyed by the language the learner hears, thus, demonstrating implicitness. Learning, on the other hand, is characterized by the conscious attention to structure and rules, which appears to be a manifestation of explicitness.

Several studies on SLA show how implicit and explicit knowledge are used by learners in answering grammar tests or grammar-related tests. For instance, Green and Hecht (1992) investigated the implicit and explicit knowledge on L2 grammar of 300 German learners of English. The participants were asked to correct and explain the ungrammaticality of a set of sentences. In many cases, the participants were able to correct the sentences but were unable to verbalize the rules the mistakes violated. The two researchers concluded that explicit rules were only a subset of the participants' implicit knowledge.

Dekeyser (1995) conducted a study where he attempted to determine the effects of explicit-deductive and implicit-inductive instruction on two kinds of rules in an artificial grammar that featured simple categorical rules. He used a computerized experiment with a miniature linguistic system, consisting of five morphological rules and a lexicon of 98 words. It was found that those who learned through explicit-deductive condition had the ability to produce the simple categorical rules in new contexts and performed better than those who

learned through the implicit-inductive condition. The study implies that in the case of simple grammatical forms, the teaching of explicit knowledge precedes practice, thus, facilitating the production of the target language.

Ellis, working with Han in 1998, explored ways of measuring implicit and explicit L2 knowledge. Four tests, which focused on learners' knowledge of English verb complementation, were administered using factor analysis. It was found that there was correlation among the scores in the secondary level English proficiency test. There was, however, only one test found to have significant correlation with the scores in TOEFL (Test of English as a Foreign Language).

A similar study by Dienes and Perner (1999) attempted to discover if learners have conscious and unconscious knowledge. The study used the higher-order thought theory and functional theories of representation. It was revealed that learners were conscious of mental states when explicit knowledge was purely based on implicit knowledge.

Macrory and Stone (2000) investigated the relationship between knowing and using the perfect tense among French students in a British secondary school. To determine the students' perception of French perfect tense, these cross-validating instruments were utilized: self-report, informal interview, gap-filling exercises, and free-writing. The results indicated that the students had a fairly good explicit understanding of the perfect tense. Overall, the study revealed that there were weak relationships among the participants' perceptions, their performance in the gap-filling exercises, and their use of the tense in free-production tasks.

To determine whether explicit knowledge is available for utilization in tasks which are believed to require the use of implicit knowledge, Hu (2002) investigated the factors that affected the use of metalinguistic knowledge in spontaneous writing. A total of 64 Chinese learners of English participated in the study and were asked to perform two spontaneous writing tasks, followed by error-correction tasks (both timed and untimed) and a rule-verbalization task. Hu found that when learners were alerted about the target linguistic aspects, they were able to access their metalinguistic knowledge to help raise their performances.

In 2004, Roehr conducted a small-scale empirical investigation to know the role of explicit knowledge in L2 learning. The participants' L2 proficiency, metalinguistic ability, and use of language learning strategies were assessed by means of a language test. Supplementary interview data were collected from five volunteers. The researchers found moderate correlation between metalinguistic ability and L2 proficiency, which contrasted with generally positive learner perceptions of pedagogical grammar.

Ellis (2005), observing the low number of reliable valid experiments in the field of SLA, devised a battery of five tests for assessing implicit and explicit knowledge. The instruments included an oral imitation test on grammatical and ungrammatical sentences, an oral narration test, a timed grammaticality judgment test, an untimed grammaticality judgment test, and a metalinguistic test. The first three tests were designed to measure implicit knowledge, and the rest were used to measure explicit knowledge. A total of 111 ESL learners participated in the study, which revealed that the tests of explicit and implicit knowledge were valid and reliable.

Using elicited imitation tests, Erlam (2005) conducted a study to measure L2 learners' implicit knowledge. The design of such tests was different from other elicited imitation instruments because it required test takers to focus on the meaning of the utterance before repeating it and that the sentences presented to the test takers were a mixture of grammatical and ungrammatical utterances. The participants were asked to repeat sentences in correct English. This kind of testing is claimed to reduce the likelihood that the participants will explicitly focus on the form, and spontaneous correction of erroneous sentences indicate constraints on the learners' ability to approximate the utterance being imitated. Test results indicated that the elicited imitation-test design could be a valid measure of implicit and explicit knowledge. On a slightly different view of measuring proficiency in production, Macaro and Masterman (2006) investigated the effect of explicit grammar instruction on grammatical knowledge and writing proficiency. A group of 12 French first-year students was given a short but intensive course of explicit instruction. Within five months of explicit approach, the students gained evident improvement in some aspects of grammar tests, but not in accuracy in free writing.

Several tests utilized Ellis's (2005) instruments in measuring implicit and explicit knowledge. In 2007, for instance, Fatahi Milasi and Pishghadam conducted a study to verify if explicit knowledge plays an important role in general language proficiency and to discover the interplay of explicit and implicit knowledge in grammaticality judgments. A general proficiency test was used to measure the general language ability of 30 native speakers and 30 nonnative speakers. The use of Ellis' (2005) grammaticality judgment measured the participants' ability to verbalize their knowledge of rules. The results indicated that there was significant relationship between the use of rule of both native speakers and ESL learners and their mean scores in grammaticality judgment tests. Moreover, the findings revealed that there was a vague interaction between implicit and explicit knowledge among the test takers.

Still on SLA, a study conducted by Ellis, Loewen, and Erlam (2006) focused on the effects of implicit and explicit corrective feedback on the acquisition of past tense forms. Three groups (two experimental groups and one control group) participated in two communicative tasks of recasting sentences (implicit knowledge) and metalinguistic explanation (explicit knowledge) as forms of response to ungrammatical utterances. After three testing sessions, statistical comparisons showed that explicit feedback was proven to be more effective over implicit feedback. The result was an indication that explicit feedback benefited implicit and explicit knowledge.

Bowles (in press, in Bowles 2011) validated the instruments formulated by Ellis by way of tests given to L2 and heritage learners of Spanish. The results showed that the test scores loaded on a two-factor model, as in Ellis, proved the construct validity for the tests for a population of heritage learners who have little explicit knowledge by virtue of the environment where they acquired Spanish.

In a similar vein, Rebuschat and Williams's (2012) study investigated whether SLA could result in implicit knowledge. In the study, adult learners were trained on an artificial language under incidental learning conditions and were tested by means of grammaticality judgments and subjective measures of awareness. The test results revealed that incidental

exposure to second language structure could result in implicit knowledge. Additionally, it was found that explicit (but unverbalizable) knowledge was linked to improved performance in the grammaticality judgment test.

In summary, the review of previous studies on implicitness and explicitness of learners' knowledge show different methods, strategies, and results. However, despite the persistence of these scholars to explain how learners acquire their L2, it appears that the findings concerning the role of explicit and implicit knowledge in answering English tests are inconclusive.

Whether students make use of implicit knowledge or explicit knowledge in language learning is still an issue that needs to be clarified. The current study specifically attempted to confirm if the two types of knowledge are utilized in instances in which they are supposed to be accessed. Second language teachers can use this study as a reference to address the seemingly deteriorating performance in English language use of students. In addition, since there is an influx of foreign students who enroll in Philippine universities, it will be interesting to ascertain if EFL students successfully learn in an ESL classroom. More importantly, English language learners can benefit from the current study since the tests can measure their grammatical proficiency, thus, allowing them to know what to improve in their knowledge of the English language. The study also confirms the students' ability to use the type of knowledge needed in different situations concerning grammar proficiency.

With the different views about implicit and explicit knowledge and their perceived role in language learning, the present study attempts to establish a clear distinction between the aforementioned two types of knowledge. Furthermore, the study intends to utilize reliable and valid tools in determining which of the two types of knowledge students use in answering grammar tests, i.e., Ellis's (2005) untimed grammatical judgment test (GJT) and free-writing test. The GJT was administered to measure the participants' explicit knowledge of grammatical correctness and incorrectness of 30 sentences. The free-writing test, on the other hand, was employed to measure the participants' implicit knowledge of grammar as manifested in their written outputs. Additionally, the study forwards pedagogical implications, particularly in the Philippine context, in which the issue of implicit learning and teaching has recently received criticisms for its low effectiveness. This paper also aims to identify the type of knowledge Korean and Filipino college students access in answering grammar tests and in composing essays. Specifically, the study explores if there is a significant difference between Koreans and Filipinos and between males and females on the following variables: confidence, nonconfidence, rules, feelings, implicit, and explicit knowledge.

2. Method

2.1 Participants

Sixty English majors from the College of Education of a university in Manila participated in the study. The students, half of which are Koreans while the rest are Filipinos, were, at

the time of the study, enrolled in a research writing course. They previously took the course Basic Communication Skills in Reading and Writing; hence, they were presumed to have basic knowledge of English. The study used the purposive sampling technique because the other colleges in the university did not have as many Korean enrollees compared with the College of Education. The participants already took the English Communication Course for first-year college students.

Additionally, the selection of the participants was based on two considerations: (1) the availability of the subjects of the current study and (2) the participants' overall academic achievement levels, general English test performances, and teachers' assessment. Based on these data, the participants were assessed as proficient in English grammar. It is worth noting that these students passed the university admission test, a test written in English. The group of participants appeared to match the nature of the study instruments, which required participants to have high proficiency of the English language to judge grammaticality of sentences. This was based on the teacher's assessment as Ellis (2002) recommends only learners with known proficiency in the L2 are likely to take the grammar tests.

2.2 Instruments

The study adapted the untimed Grammatical Judgment Test (GJT), the spontaneous narrative test, and the definitions set by Ellis (2005). The GJT contained 30 sentences (both grammatically correct and incorrect) arranged in no particular order. It involved three tasks: (1) the participants had to judge 30 sentences according to whether they are grammatically correct or incorrect; (2) they needed to indicate whether or not they are confident of their answers; and (3) they were tasked to report whether their responses were based on feelings (intuition) or on rules they learned. This test primarily aimed to measure the participants' explicit knowledge of grammatical correctness and incorrectness of the 30 sentences. The judgment was objective, but the participants' self-report on their confidence and the use of rule or feelings were subjective enough for the present study to consider. The criteria in modifying the GJT are described in Table 1.

The first criterion is the conscious awareness to which learners do not have to prove the existence of the knowledge they possess. This is measured by the learners' indication of their usage of feel or rule when answering a grammatical test. Secondly, the focus of attention refers to either fluency for meaning or accuracy for form. The next principle is systematicity that focuses on whether learners display consistency or variability in answering tasks for implicit knowledge and explicit knowledge, respectively. The fourth criterion is the certainty of learners in producing outputs that are widely accepted in the target linguistic rule. The last is the use of metalinguistic knowledge versus explicit knowledge. The learners' metalinguistic knowledge is linked with their explicit knowledge and not with their implicit knowledge. Learnability, on the other hand, was found applicable considering the Filipino participants' background in learning their L2 and the foreigners' exposure to the English language. It is worth mentioning that one criterion, i.e., time allotment, is excluded in operationalizing this study. Such a criterion is not applicable since the participants manually

answered the questions, and they were not given sufficient time to carefully plan their answers, contrary to what Ellis's framework suggests.

 Table 1

 Operationalizing the constructs of L2 implicit and explicit knowledge

Criterion	Implicit knowledge	Explicit knowledge		
Degree of awareness	Responses according to feelings	Responses using rules		
Focus of attention	Primary focus on meaning	Primary focus on form		
Systematicity	Consistent responses	Variable responses		
Certainty	High degree of certainty in responses	Low degree of certainty in responses		
Metalinguistic knowledge	Metalinguistic knowledge not required	Metalinguistic knowledge responses		
Learnability	Early learning favored	Late, form-focused instruction favored		

(Adopted from Ellis, 2005, p. 152)

The second test, the Free Writing Test (FWT), adapted from Ellis (2005), was employed to measure the participants' implicit knowledge of grammar as manifested in their written outputs. The present study modified the said instrument by using a free-writing task instead of the oral narrative test in order to maximize the students' outputs, particularly in terms of the statistical data, for analysis. Given the time limit of ten minutes, the participants were asked to write freely and nonstop about whatever their minds came up with. Meaning was the focus over structure in this test.

The criteria postulated by Ellis (2005) were the bases of measurement for distinguishing implicit and explicit knowledge. These include the degree of awareness, focus of attention, and metalinguistic knowledge. Table 2 displays how these criteria were applied in the two tests. In the GJT, the participants were required to use their metalinguistic knowledge, have a high degree of awareness, and give attention to forms. The case was different with the FWT.

Table 2
Design features of the tests

Criterion	Grammatical Judgment Test	Free Writing Test
Degree of awareness	Rule	Feel
Focus of attention	Form	Meaning
Metalinguistic knowledge	Yes	No (or very little)

(Adapted from Ellis, 2005)

Noticeably, whereas the first test was grammar-based and structural in nature, the second test was of spontaneous production type in which the participants needed to employ their implicit knowledge to perform the given tasks. Meaning is the focus of the FWT, and ideally, no metalinguistic knowledge is required. However, as Ellis (2002, p. 234) explained, free-production tasks "make it difficult but not impossible for learners to perform on the basis of explicit knowledge." In other words, the participants can make use of their explicit knowledge of grammar while doing those spontaneous tasks, especially the writing one. This observation was specifically considered in the study.

Importantly, although the two tests were similar in design with those used in the previous studies – Ellis (2005) and Hu (2002) – the grammatical aspects to be measured in the current study necessarily had to be different. To suit the Filipino learning context, the selection of the target grammatical aspects was based on Bautista's (2000a, 2000b, 2000c) works which empirically investigated Philippine English across disciplines. Five grammatical aspects, which Bautista found to be prevalent mistakes made by Filipino speakers of English in their speeches or writings, were covered in the study. Table 3 lists these five features and their corresponding examples.

Table 3
Grammatical aspects measured in the study

Structure	Example of a learner's mistake
Article	I am interested in seeing the many animals in the zoo.
Preposition	He's a friend that you can depend *.
Subject-verb agreement	She think that the class is getting worse.
Tense	Where did he went?
Transitive-intransitive verb	I hope you will visit again here.

2.3 Procedure

The data gathering was undertaken during the second term of the academic year 2011-2012. A week before the testing proper, a pilot test was conducted among a group five ESL and five EFL learners of a comprehensive university, all of whom were first-year college students and qualified as participants for such a test because of their accessibility and same age level. The pilot test enabled the researcher to have an overview of how the tests would materialize, thus, allowing him to prepare for any situation that may likely occur in the actual test.

The pilot test went on smoothly; the students cooperated well and stayed focused while answering the test. Also, it is important to note that the pilot test was conducted to a separate group of EFL students with similar proficiency level to avoid giving the study participants a preconceived idea of what they need to do when they repeat the task. Additionally, the participants of the pilot test were chosen based on their availability.

The GJT was the first test given to the participants followed by the FWT. The schedules of the target participants were first determined. Then, the researcher coordinated with the respective English teachers with regard to a possible testing period.

A total of 60 Koreans and Filipinos of the same proficiency level were gathered. The first test was conducted on October 14, 2011, and the second was on October 17, 2011. As mentioned, the test was divided into two sets. The GJT lasted for 20 minutes while the FWT was administered for 10 minutes on both testing dates. There was a five-minute gap between the two tests to give the respondents ample time to rest.

The researcher marked the GJT outputs as soon as the second test was conducted. The FWT outputs were marked the next day. Two professors of English Communication from the same university were tapped as inter-raters of the participants' essays. The said teachers were also enrolled in the Ph.D. in English program of another university. The interraters validated the analysis of errors initially done by the researcher. A conference among the researcher and the inter-raters was conducted to arrive at an agreement regarding the categorization of errors identified in the participants' essays.

2.4 Data Analysis

The statistical test of 2x2 factorial design was used for the GJT. The said method was used to arrive a comprehensive data interpretation on the differences of the dependent and independent variables. The dependent variables were the GJT results, the FWT results, the confidence of the students, and the use of rule, while the independent variables were the participants' nationality and their gender. The mean and standard deviation of the test scores were also computed.

In scoring the FWT, it is important to note that within the ten minutes given, the said test generated considerably different written outputs. It was predicated that there would be an apparent variation in writing fluency and length. Since it was a free-writing task, there was no control, in any form, imposed, and the participants enjoyed total freedom in choosing what to write and how much to write within the time set. The marking of the

written outputs was done both analytically and holistically. In an analytical way, mistakes were counted and marked against the total number of the target grammatical features found in each participant's writing. This gunning for specific mistakes would focus the marking on the target grammatical aspects. On the other hand, holistic scoring was used since the score for the accurate use of the target grammatical features had to be balanced with the overall clarity and communicability in each of the sentences in the compositions. This combination is justified by the fact that the free-writing task focuses on meaning, and the participants would write instantly, supposedly without consciously attending to correct their mistakes. It would be problematic to grade their outputs by basing solely on the number of target grammatical aspects accurately used since this kind of marking would prove to be unfair, especially when it comes to the extreme cases of short writings with many correct formulaic expressions and page-long compositions with many mistakes. Accuracy, however, remained as one of the primary criteria. Relatively, as the participants were expected to produce their outputs of different lengths, it was necessary to rate the outputs holistically. It was also more logically plausible to follow criterion-reference rather than norm-reference marking methods.

3. Results and Discussion

Measuring confidence in answering a grammar test is deemed to be a significant aspect of the study since it is said to be one of the factors in a learner's willingness to engage himself or herself in a foreign language (MacIntyre, DÖrnyei, Clément, & Noels, 1998), such as English in the case of Koreans. As seen in Table 4, the students (N=60) claimed that they were confident in answering majority of the questions in the GJT. Specifically, the students claimed that they were confident in at least 23 of the 30 sentences presented (M=24.28; SD=5.08). Although with small discrepancy, male and female Filipinos (M=25.09; SD=4.95) appeared to be more confident than the Korean students (M=23.36; SD=5.17). In terms of gender, the males (M=25.16; SD=5.1) seemed to be more confident than females in answering the GJT (M=23.66; SD=5.05).

The claim of the students' general use of confidence in answering the GJT could mean that they have certainty in judging whether sentences are grammatically correct or otherwise. The Filipinos appeared to be more confident than the Koreans in answering the said test, which could be attributed to the fact that English is still a foreign language among Koreans but has a second language or even first language among Filipinos. However, the use of confidence in the test in the current study, deemed important to the proficiency of the students, contrary to the findings of the studies like that of Lockley and Farrell (2011), in which students' confidence was found to be insignificant. Further, between similarity ratings and confidence, learners choose similarity ratings to make grammaticality decisions (Tunney, 2010).

Table 4

Mean scores and standard deviation of the confidence of Filipinos and Koreans in answering the GJT

			N	Confident	Confident	Not confident	Not confident
				M	SD	M	SD
Total			60	24.28	5.08	5.72	5.08
Nationality	Korean		28	23.36	5.17	6.64	5.17
Nationality	Filipino		32	25.09	4.95	4.91	4.95
Gender	M		25	25.16	5.1	4.84	5.1
Gender	F		35	23.66	5.05	6.34	5.05
Nationality*Gender	Korean	M	11	24	4.77	6	4.77
Nationality*Gender	Korean	F	17	22.94	5.51	7.06	5.51
Nationality*Gender	Filipino	M	14	26.07	5.33	3.93	5.33
Nationality*Gender	Filipino	F	18	24.33	4.64	5.67	4.64

Table 5 shows the descriptive data on the use of rule and feeling of the subjects in answering the GJT. The data indicate that both the Filipinos and the Koreans claimed their use of rules more than their intuition in identifying the grammaticality of sentences. The students reported that they used their knowledge of grammar rules in at least 20 of the 30-item test (M=21.3; SD=6.34). Meanwhile, the male Filipinos did not use their knowledge of rules in answering the GJT as much as the other groups did (M=19.43). There, however, cannot be a huge implication on this aspect of the data since the figures are not too far from the mean of other groups. As a result, the male Filipinos claimed to make use of feelings (M=10.57) in answering grammar test. In general, the males, both Koreans and Filipinos, though still relying on rules in most of the test items, made use of feelings (M=9.4; SD=7.07) more than the number of times that the female population used their intuition (M=8.2; SD=5.82). It is also worth mentioning that the students had almost the same claim in their use of rules since they just finished their course in English Communication, which was partly a review of the English grammar rules.

Table 5
Mean scores and standard deviation of the use of feeling and rule in answering the GJT

			N	Feel	Feel	Rule	Rule
				M	SD	M	SD
Total			60	8.7	6.34	21.3	6.34
Nationality	Korean		28	9.18	6.53	20.82	6.53
Nationality	Filipino		32	8.28	6.25	21.72	6.25
Gender	M		25	9.4	7.07	20.6	7.07
Gender	F		35	8.2	5.82	21.8	5.82
Nationality*Gender	Korean	M	11	7.91	6.2	22.09	6.2
Nationality*Gender	Korean	F	17	10	6.78	20	6.78
Nationality*Gender	Filipino	M	14	10.57	7.7	19.43	7.7
Nationality*Gender	Filipino	F	18	6.5	4.27	23.5	4.27

It was found in Ellis's (2005) study that tests of explicit knowledge, like the GJT, were strongly related to the use of rule. The current study demonstrates the use of explicit knowledge in tests like GJT that elicits grammatical judgment of the students, thus, supporting Ellis's study in terms of test validity. Additionally, Ellis's study indicated that the students were not very confident when they had access to their explicit knowledge. On the contrary, the participants of the present study, in general, seemed to be confident as they relied on their use of rules in the GJT because most of them have been speaking English for more than ten years now, including some Koreans who started their education in the Philippines. Fatahi Milasi and Pishghadam (2007), Green and Hecht (1992), and Bowles (in press, in Bowles, 2011) maintain that learners are prompted by explicit knowledge to make use of and access rules. Similarly, the study also matches Macrory and Stone's (2000) findings in terms of the weak relationship between perception and proficiency. There, however, seems to be an issue on the verbalization of the said rules (Rebuschat & Williams, 2011) since in the current study, metalinguistic knowledge was not tested.

It could be observed from the data presented in Table 6 that the participants scored higher in FWT (M=7.27; 72.7%.) and displayed lower performance in the GJT (M=17.33%; 57.76%). The GJT, which was designed to measure explicit knowledge, appeared to be difficult for the participants who were reported to have relatively much exposure to explicit learning of English grammar prior to the tests as they averaged slightly above 50% in the 30-item test. Worth mentioning at this point is that the marking scheme employed in rating the written outputs in the FWT also considered meaning and communicability. It was most likely that the participants' fluency in writing helped compensate their grammatical errors and elevated their scores. The standard deviation for the participants' FWT scores (SD=2.31)

was found to be significantly much lower than the standard deviations for GJT (SD= 3.68). The results revealed the almost homogenous scores the students obtained in the FWT.

Table 6
Mean scores and standard deviation of the GJT and FWT scores

				Grammar Score	Grammar Score	Writing Score	Writing Score
				M	SD	M	SD
Total			60	17.33	3.68	7.27	2.31
Nationality	Korean		28	15.43	3.62	6.54	2.4
Nationality	Filipino		32	19	2.86	7.91	2.05
Gender	M		25	17.76	3.37	7.64	2.29
Gender	F		35	17.03	3.9	7	2.31
Nationality*Gender	Korean	M	11	16.36	2.69	6.18	2.71
Nationality*Gender	Korean	F	17	14.82	4.07	6.76	2.22
Nationality*Gender	Filipino	M	14	18.86	3.53	8.79	0.89
Nationality*Gender	Filipino	F	18	19.11	2.32	7.22	2.44

Ellis's (2005) study found timed and untimed grammaticality judgment tests valid because of the better performance of native English speakers as compared with the L2 learners. In the current study, the L2 learners performed better than the EFL learners both in the GJT and the FWT which, in turn, supports Ellis's study. Gender was found to be of no significant difference in terms of scores since the mean values for both male and female participants did not have a wide discrepancy. Additionally, the frequency counts of the participants' reported cases of being confident of their correct responses indicate that they were more confident when they accessed explicit knowledge (rules) to judge the grammaticality of sentences.

This result negates the idea that implicit knowledge increases learners' confidence in the grammaticality of language use, especially in the case of L2 learners. A possibility is that the participants might not have been able to identify what errors some of the sentences in the GJT have. This possibility supports Bautista's (2000c) findings that highlight the Filipinos' difficulty in using the English language specifically in those which are concerned with prepositions, subject-verb agreement, verb tense, article, and transitive/intransitive verbs. More studies, however, need to be done before arriving at definite conclusions.

Adapting Hu's (2002) untimed spontaneous writing test paved the way for determining learners' manifestation of implicit knowledge. Modifying the oral narrative test in Hu's study, the current research maintained the use of implicit knowledge in tests like spontaneous writing. It was also predicted in the original study that the test of implicit

knowledge would elicit more systematic responses compared with the test of explicit knowledge. In reference to Table 6, the results support Ellis's (2005) findings, for the GJT has, in fact, a higher SD, which could mean that the learners are more consistent in tasks that tap their explicit knowledge.

The data confirm the use of the rules when the students answer grammar tests such as the GJT. However, the definite increase in their proficiency level cannot be presumed. The students are said to use explicit knowledge, but the proficiency based on the scores reflect otherwise. The FWT, which was originally intended to check if the students use their implicit knowledge, confirms their use of the explicit knowledge based on the scores.

In fulfilling the second objective, ESL and EFL learners answered a battery of tests to determine their use of explicit and implicit knowledge. The succeeding section, composed of three tables, discusses the differences with respect to the variables in the study by means of 2x2 factorial design.

As indicated in Table 7, Koreans and Filipinos have almost the same scores in relation to confidence; thus, there is no significant difference in terms of their confidence. Furthermore, there appears no significant difference between Koreans and Filipinos with regard to being "not confident." They have almost the same scores in relation to their not being confident in answering the GJT. Lastly, with respect to nonconfidence, there is no interaction effect among confidence and nonconfidence of the students in answering the GJT in terms of nationality. This shows that there is no relationship among the three variables.

Table 7
Differences between Filipinos and Koreans; Males and females on confidence in answering the GJT

	Degree of	Confident	Confident	Confident	Confident	Not confident	Not confident	Not confident	Not confident
	freedom	SS	MS	F	P	SS	MS	F	P
Intercept	1	34245.24	34245.24	1324.521	0	1854.628	1854.628	71.73238	1.31E-11
Nationality	1	43.35272	43.35272	1.676775	0.200667	43.35272	43.35272	1.676775	0.200667
Gender	1	28.2699	28.2699	1.093409	0.30021	28.2699	28.2699	1.093409	0.30021
Nationality* Gender	1	1.667445	1.667445	0.064493	0.800461	1.667445	1.667445	0.064493	0.800461
Error	56	1447.87	25.85482			1447.87	25.85482		
Total	59	1524.183				1524.183			

Ellis (2005) gave students' certainty in answering a grammar test a considerable amount of attention since learners are likely to use their implicit knowledge and are confident about their answers when their explicit knowledge is "anomalous" (p. 152). The statistics on differences regarding confidence imply that the nationality of students does not affect

their confidence in answering grammar tests. The result of the test is not in total congruence with that of Brown's (1977) and Krashen's (1981) suggestion that personality factors, such as confidence, help in understanding the input, hence, better acquisition. Hence, there is no significant difference between EFL and ESL learners and their level of confidence while answering the GJT. The level of confidence of the students may indicate that Koreans, a number of whom claimed that they have had less than ten years of exposure to English, did not display the presumed apparent uncertainty in answering grammar tests.

Table 8 shows the difference in the use of rule and feeling in terms of the participants' nationality. The scores reveal that firstly, there is no significant difference between the Koreans and the Filipinos in terms of feeling since both groups have almost the same scores in using intuition in answering the grammar test. Secondly, the data suggest that there is no significant difference in relation to the use of knowledge of grammar rules. Overall, figures indicate that there is no relationship between the respondents' nationality and the use of feeling and grammar rules in the GJT.

Table 8
Differences between Filipinos and Koreans; Males and females on the use of rule and feeling in the GJT

	Degree	Feel	Feel	Feel	Feel	Rule	Rule	Rule	Rule
	of freedom	SS	MS	F	P	SS	MS	F	P
Intercept	1	4421.983	4421.983	112.4146	5.22E-15	26121.7	26121.7	664.0595	0
Nationality	1	2.535727	2.535727	0.064463	0.800507	2.535727	2.535727	0.064463	0.800507
Gender	1	14.17499	14.17499	0.360353	0.550732	14.17499	14.17499	0.360353	0.550732
Nationality* Gender	1	137.232	137.232	3.48868	0.067026	137.232	137.232	3.48868	0.067026
Error	56	2202.838	39.33639			2202.838	39.33639		
Total	59	2374.6				2374.6			

The study of Ellis (2005) devised the untimed GJT as a measure of the subjects' awareness of grammatical rules. The GJT of the current study supports Bowles' (in press, in Bowles, 2011) findings which suggest the validity of the test in terms of being a test of explicit knowledge and a test of grammar rules. This also implies that being an EFL or ESL learner does not affect the use of feeling or rule in answering a grammar test. In general, there is no interaction effect on nationality in terms of feeling and grammar-rule use. This could mean that in answering the grammar test, both groups of learners depend on their knowledge of the English grammar rules, which were part of the English course they took prior to the conduct of the study. However, as mentioned earlier, Rebuschat and Williams (2011) suggest that a metalinguistic test be conducted in similar studies to validate students' knowledge of grammar rules.

Ellis (2005) forwards the hypothesis that tests of explicit knowledge (GJT, in the present study) encourage the use of rules, and tests of implicit knowledge (FWT, in the present study) favor feelings. Table 9 shows the differences in the use of explicit and implicit knowledge. Firstly, there is a significant difference between Koreans and Filipinos with respect to the use of explicit knowledge. Filipino learners had significantly higher scores in grammar tests as compared with the Koreans. This is also true for the scores in FWT in which the data indicate that there is a significant difference between Korean and Filipino learners in relation to the use of implicit knowledge since the latter obtained significantly higher scores in spontaneous writing.

Table 9
Differences between Filipinos and Koreans; males and females on explicit and implicit knowledge

	Degree of	GJT Score	GJT Score	GJT Score	GJT Score	FWT Score	FWT Score	FWT Score	FWT Score
	freedom	SS	MS	F	P	SS	MS	F	P
Intercept	1	17282.9	17282.92	1639.001	0	3029.671	3029.671	642.2599	0
Nationality	1	166.1741**	166.1741	15.75889	0.000207	33.86946**	33.86946	7.179985	0.009662
Gender	1	5.97778	5.977783	0.566895	0.454649	3.474979	3.474979	0.736661	0.394391
Nationality* Gender	1	11.6318	11.63177	1.103083	0.298102	16.6486	16.6486	3.529336	0.065501
Error	56	590.508	10.54479			264.1634	4.717204		
Total	59	797.333				313.7333			

In summary, the findings support Ellis's (2005) and Fatahi Milasi and Pishghadam's (2007) studies. The ESL learners (Filipinos) in this study, however, outperformed the EFL learners (Koreans) because Filipinos use English as their second language while the Koreans use it as a foreign language. The results imply that the ESL learners tend to effectively use their explicit and implicit knowledge when needed. Further, the confidence of the participants does not have any significant difference in terms of gender. The same is true for the nonconfidence of the participants. Stated in another way, there is no relationship between the confidence and nonconfidence variables and gender.

In addition, the participants, in terms of gender, did not have any significant difference with respect to their use of rules and feelings in answering the GJT. The figures show that the insignificant difference of the variables results in the noninteraction effect between the use of feeling and rule in terms of gender.

The figures also show that overall, there is no relationship between gender and use of implicit and explicit knowledge. This result does not seem to support the findings of other similar studies indicating that females have a higher level of motivation than males in

language use. Likewise, the study does not run parallel with other studies confirming gender as a factor in achieving a certain task. With these in mind, more similar studies can be conducted to confirm the current study's findings.

4. Conclusion

The study attempted to fulfill three objectives. With respect to the first goal, it was found that students respectively use their explicit and implicit knowledge in answering specific types of test. It is noteworthy that both Filipino and Korean learners access their implicit knowledge in the FWT as evident in their written outputs. The test was designed to measure their implicit knowledge, and the markings done by the researcher and the inter-raters unanimously indicate the learners' focus on meaning in writing their essays. Ellis (2005) concluded that learners use their implicit knowledge in activities like oral production and written tasks. In the same way, it was found that learners access their explicit knowledge when they are prompted to verbalize their knowledge of linguistic structures. This is seen in their claim that they use the learned rules in answering the GJT.

The second research objective examined the significant difference among the nationality of learners and the dependent variables (i.e., confidence, use of rule and feeling, and test scores). It was found, unsurprisingly, that there is a significant difference between nationality and the scores of the subjects in the grammar (GJT) and free writing tests (FWT). As for the third objective, nonsignificant differences were found among gender and the dependent variables.

The study also serves as an empirical work to confirm findings of previous research by Bautista (2000c) regarding certain grammatical mistakes that are prevalently committed by Filipino speakers of English. The GJT results support Bautista's claim that the errors on subject-verb agreement, tense, prepositions, articles, and transitive verbs are problematic for Filipinos. The study also supports the test designs of Ellis (2005); that is, GJT could be employed to measure explicit knowledge whereas FWT, most likely but not purely, requires participants to depend their performance on implicit knowledge.

Out of the findings analyzed both quantitatively and qualitatively, several implications could be drawn. First, there were a few occasions when the FWT would seem to defy its validity as an instrument to purely test implicit knowledge. To a certain degree, a few number of students successfully made use of their explicit knowledge to monitor accuracy. Deletions and corrections observed in the participants' written outputs could serve as support for this occurrence. This shortcoming in the spontaneous-production test design was pointed out earlier by Ellis (2005), i.e., there is a possibility that participants use their explicit knowledge to help raise their performance no matter how spontaneous the task could reasonably be. As a recommendation, this negative aspect of the instrument could be minimized by training participants to conduct free writing on a regular basis to raise their fluency and automaticity in focusing on meaning while doing the tasks. Another merit of such training is that participants would be able to write fast within a shorter period of time and that there is a higher degree of likelihood that they do not access their explicit knowledge to

check their accuracy. Ideally, training should be provided not only for the FWT but also for the other three types of test so that participants would be familiarized with the test formats and, thus, be able to execute appropriate strategies to achieve their best performance. Only then can the measurements of the implicit and explicit knowledge be conducted with a more satisfactory level of validity and reliability.

In addition, there may be a need to distinguish the implicitness and explicitness of grammatical knowledge from the other types of knowledge, such as morphological and lexical, since the distinction would predictably result in different instrument designs employed to approach the target research focus, thus, obtaining new research findings.

As far as the case of the participants in the current study is concerned, it would be justifiable to recommend a higher degree of explicitness in teaching and learning approaches. In light of the study findings that there were mistakes repeatedly and prevalently made by the participants, it may be of great value for the English lessons to explicitly direct students' special attention to mistakes that should be avoided so that these mistakes will not eventually become fossilized errors. Classroom activities, desirably, need not be structural in nature as in a traditional classroom but should be implicitly communicative in nature while incorporating and accommodating explicit grammar lessons when necessary. It should also be considered that teaching and learning need not to be based on the extreme ends of either implicitness or explicitness. On a continuum, classroom practices could vary according to students' needs. Although the tests were designed based on the participants' prior knowledge of the English language, the form-focused GJT turned out to be difficult for the target participants and brought their performance down considerably. This may have affected the result of the study since the Koreans, despite their being schooled in the Philippines for a considerable length of time, may not have had enough exposure to the English language in the country. As a result, there seemed an apparent deviation in the proficiency in the English language in terms of nationality. Lastly, because of time constraints, there were a limited number of participants in the study; thus, it might not be plausible to generalize.

Desirably, future research could divert the study parameter in a way that the investigation will involve direct pedagogical treatment of explicit and implicit knowledge. Specifically, two different groups of participants could be exposed to two different approaches of teaching and learning – deductive and inductive. It could be an extensive experiment that teaches students certain grammatical aspects explicitly or implicitly together with ample communicative practice. After a certain period, the participants could undergo certain tests to measure their two types of knowledge. However, such an experiment would demand more time and work contributed by both the researcher and the participants. Other variables, such as learners' background as well as teaching inputs and techniques, should be carefully controlled not to let these variables moderate the treatment. This framework was observed in several recent studies (Salaberry, 1997; Mackey & Philip, 1998; Long et al., 1998; Williams & Evans, 1998; Murunoi, 2000 as cited in Ellis, 2002). However, the results of these studies were conflicting and inconclusive. It would, therefore, be significant for the next study to further investigate the L2 learning issues of implicitness and explicitness, especially in the Philippine context.

References

- Bautista, M.L.S. (2000a). *Defining standard Philippine English: Its status and grammatical features*. De La Salle University Press.
- Bautista, M.L.S. (2000b). The grammatical features of educated Philippine English. In M.L.S. Bautista, T. Llamzon, & B. Sibayan (Eds.), *Parangal Brother Andrew:* Festschrift for Andrew Gonzalez on His Sixtieth Birthday (pp. 146-158). Linguistic Society of the Philippines.
- Bautista, M.L.S. (2000c). Studies of Philippine English in the Philippines. *Philippine Journal of Linguistics*, 31(1), 39-65.
- Bogue, R. (2006). Convert tacit knowledge into explicit knowledge to ensure better application development. Retrieved from http://articles.techrepublic.com.
- Bowles, M. (2011). Exploring the role of modality: L2-heritage Llearner interactions in the Spanish language classroom. *Heritage Language Journal*, 8(1), 30-65. Retrieved from http://www.international.ucla.edu/media/files/bowles-hlj-eightone-zz-eml.pdf
- Brown, H.D. (1977). Cognitive and affective characteristics of good language learners. Paper Presented at the Los Angeles Second Language Acquisition Research Forum, UCLA.
- DeKeyser, R. M. (1995). Learning second language grammar rules: An experiment with a miniature linguistic system. *Studies in Second Language Acquisition*, 17, 379–410.
- Dienes, Z., & Perner, J. (1999). A theory of implicit and explicit knowledge. *Behavioral and Brain Sciences*, 22, 735-755.
- Dummett, M. (1991). The relative priority of thought and language. Oxford University Press.
- Ellis, R. (1991). Grammaticality judgments and second language acquisition. *Studies in Second Language Acquisition*, 13, 161–86.
- Ellis, R. (2002). Does form-focused instruction affect the acquisition of implicit knowledge?: A review of the research. *Studies in Second Language Acquisition*, *24*, 223-236.
- Ellis, R. (2005). Measuring implicit and explicit knowledge of a second language. *Studies in Second Language Acquisition*, 27, 141-172.
- Ellis, R., Loewen, S., & Erlam, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in Second Language Acquisition*, 28, 339-368.
- Erlam, R.M. (2005). Language aptitude and its relationship to instructional effectiveness in second language acquisition. *Language Teaching Research*, *9*(2), pp 147-173.

- Fatahi Milasi, A.A., & Pishghadam, R. (2007). The interplay between explicit and implicit knowledge of English native speakers and ESL learners. *Iranian Journal of Applied Linguistics*, 10(1), 15-43.
- Green, P., & Hecht, K. (1992). Implicit and explicit grammar: An empirical study. *Applied Linguistics*, 13(2), 168–84.
- Hu, G. (2002). Psychological constraints on the utility of metalinguistic knowledge in second language production. Studies in Second Language Acquisition, 24, 347-386.
- Hulstijn, J. H., & Hulstijn, W. (1984). Grammatical errors as a function of processing constraints and explicit knowledge. *Language Learning*, 34, 23-43.
- Keenan, T. (1993). A connectionist model of second language acquisition. (Doctoral dissertation, University of Pennsylvania). Retrieved from http://repository.upenn. edu.dissertations/AI9931797
- Krashen, S. (1981). *Second language acquisition and second language learning*. Pergamon Press.
- Lockley, T., & Farrell, S. (2011). Is grammar anxiety hindering English speaking in Japanese students? *JALT Journal*, *33*(1), 175-189.
- Long, M.H., Inagaki, S., & Ortega, L. (1998). The role of implicit negative feedback in SLA: Models and recasts in Japanese and Spanish. *The Modern Language Journal*, 82, 357-371.
- Macaro, E., & Masterman, E. (2006). Does intensive explicit grammar instruction make all the difference? *Language Teaching Research*, 10(3), 297-327.
- MacIntyre, P.D., Clément, R., Dörnyei, Z., & Noels, K.A. (1998). Conceptualizing willingness to communicate in an L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, 82(4), 545-562.
- Mackey, A., & Philip, J. (1998). Conversational interaction and second language development: Recasts, responses, and red herrings? *The Modern Language Journal*, 82, 338-356.
- Macrory, G., & Stone, V. (2000). Pupil progress in the acquisition of the perfect tense in French: The relationship between knowledge and use. *Language Teaching Research*, 4, 55-82.
- Polanyi, M. (1966). The tacit dimension. Routledge & Kegan Paul.
- Reber, A. (1976). Implicit learning of synthetic languages: The role of instructional set. Journal of Experimental Psychology: Human Learning and Memory, 2, 88-94.
- Reber, A.S. (1989). Implicit learning and tacit knowledge. *Journal of Experimental Psychology: General, 118*(3), 219-235.

- Rebuschat, P., & Williams, J. (2012). Implicit and explicit knowledge in second language acquisition. *Applied Psycholinguistics* 33, 829-856. doi:10.1017/S0142716411000580
- Roehr, K. (2004). Exploring the role of explicit knowledge in adult second language learning:

 Language proficiency, pedagogical grammar and language learning strategies.

 Centre for Research in Language Education. Lancaster University.
- Salaberry, R. (1997). The role of input and output practice in second language acquisition. *Canadian Modern Language Review, 53*, 422-451.
- Sun, P., Mathews, R., & Lane, S. (2007). Implicit and explicit processes in the development of cognitive skills: A theoretical interpretation with some practical implications for science education. In E. Vargios (Ed.), *Educational psychology research focus* (pp. 1-26). Nova Science Publishers.
- Tunney, R. (2010). Similarity and confidence in artificial grammar learning. *Experimental Psychology*, *57*(2), 160-168.
- Williams, J., & Evans, J. (1998). What kind of focus and on which forms? In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 139-155). Cambridge University Press.

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Grammaticality Judgment Test	
Name	Nationality

Test I. Grammaticality Judgment Test

Directions:

Annendix A

Read the following short selections and do the following tasks.

Age Course/Major

- (a) Decide whether the selections are right or wrong. (Write R for right and W for wrong.)
- (b) Indicate how confident you are about your answers. (Write C for confident and N for not confident.)
- (c) Indicate whether you use the rule or your intuition (feeling) to judge the correctness of each sentence. (Write Ru for rule and F for feeling.). Write your answers on the answer sheet.

Example: May I get shirt I lent you in Puerto Galera?

I am confident (C) about my answer that the sentence is wrong (W). I base my judgment on the rule (Ru) that "shirt" is already identified clearly between the speaker and listener and thus needs to be preceded by the article "the."

- 1. During the lecture, she ask many questions.
- 2. An old lady knocked at Fred's apartment. Eventually, old lady introduced herself as John's mother.
- 3. One of these orchids bloom at night.
- 4. I had a hard time keeping my poise in the bus.
- 5. Even doctors find it hard to differentiate among dengue fever from high fever.
- 6. My classmates whom you saw a couple of days ago is leaving for Cebu.
- 7. We heard that George loves to stay long on the bed every morning.
- 8. Do they believe Michael molested the children in his mansion?
- Audience is mesmerized every time Streisand performs on stage.
 I reminded Jenny of your reminder that if she happens to pass by the bookstore, she'll buy you hall nen.
- 11. Rachelle lived in Riyadh since the Marcos regime.
- 12. Too much drinking is said to have bad effects to liver of those addicted to alcohol.
- 13. A delectable sushi must consist from fresh ingredients.
- 14. In Singapore, going to loading sections are like going for a brisk walk.
- 15. The reason why Ateneo accepts fewer freshman students are that they intend to keep the cream of the crop.
- 16. I hope you will visit again here.
- 17. Susan is called Ms. Congeniality because of her good relationship with people, even strangers.
- 18. Peter's lasagna was so delicious. Did you taste?
- 19. I am happy the Queen had left the Palace when the war started.
- 20. The subscription for the website is too expensive and not too many people can afford.
- 21. Why are you still studying here when everybody else in the class studying?
- 22. Who are the town folks' chosen muse going to be?
- 23. The last three people to stay in the contest will gain.
- 24. There seems to be too many people in the movie house.
- 25. NGO is organization which is in charge of helping poor communities.

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- 26. Sheryl has moved in last week.
- 27. He bought me two things from Palawan: shirt and necklace.
- 28. In this event, I would like to thank Mr. Pangilinan on having patronized the products.
- 29. People need the food to eat and use it for everyday life activities
- 30. Robert was nice enough to offer to do the laundry for Suzie.

-End of Test-Please wait for further instructions.

Appendix B Differences between Filipinos and Koreans; males and females on explicit and implicit knowledge

