IMPLICIT KNOWLEDGE, EXPLICIT KNOWLEDGE AND THEIR RELATION TO GENERAL LANGUAGE PROFICIENCY

Sándor Krisztina
PhD student
Debreceni Egyetem

The study investigates whether the battery of tests developed by R. Ellis loads on two factors (explicit and implicit) in a similar way as reported in Ellis and aims to reveal if there is a relationship between language proficiency and the separated explicit–implicit language knowledge[13]. The role of implicit and explicit knowledge in second language use at B2/C1 proficiency level is measured via two batteries of tests, one measuring explicit–implicit knowledge, the other measuring language proficiency. Results show that the test scores did load on a two-factor explicit– implicit model, although not in the same way as in Ellis' study. All test scores except those of the metalinguistic knowledge test loaded heavily on the implicit factor. It also turned out that there was a significant difference in the implicit knowledge use of those learners who performed well on a proficiency exam and those who performed poorly, but not in their use of explicit knowledge. The results show that in the case of highly proficient second language learners, (i) explicit knowledge can be tapped by tests of metalanguage, but not by tests of analysed knowledge, and that (ii) the level of proficiency has a significant effect on the use of implicit knowledge as well as on the corresponding automatic language processing, but has no statistically significant effect on the use of explicit knowledge.

Two of the main goals of second language (SL) research are to identify the L2 linguistic knowledge and to describe how it develops over time [13]. Symbolist and connectionist theories of language provide different accounts of language representation, but the two competing positions agree that linguistic competence draws primarily on L2 implicit knowledge. Representatives of both theories aim to explain how this knowledge is acquired. Positions of theorists are divided regarding the role of explicit knowledge in the acquisition process. Also, there is a lack of consensus on what L2 explicit knowledge consists of and how to measure it.

Current SLA research shares a strongly cognitive orientation by recognising that language learning means a change in the internal mental state of the learner [7]. This change can be traced in the changing role and rate of explicit–implicit grammatical knowledge in second language use. Although there are competing positions on whether the two types of knowledge interface or not, as well as on the role explicit knowledge plays in L2 acquisition at the level of representation, there is broad consensus that at the level of performance the linguistic competence on which spontaneous, effortless and fluent conversations are based draws primarily on implicit linguistic knowledge [23]. In the *case* of instructed second language learning where the input is mostly limited to the classroom, the linguistic

DOI: 10.26649/musci.2015.102

knowledge at the start is explicit: conscious, declarative and controlled. This knowledge, which R. Ellis further divides into ‘analyzed’(potentially aware) knowledge and ‘metalanguage’ (knowledge of rules), serves as a basis for implicit linguistic competence, for automatic language use [12]. As the level of proficiency grows, via extensive and intensive practice and input the role and the rate of these two knowledge types in language use change. In order to understand the process of SLA, it is important to be able to measure with valid and reliable instruments the role and rate of explicit and implicit knowledge in the language acquisition.

The paper starts with a review of the literature on cognitive constructs such as explicit–implicit learning and knowledge. Then we briefly introduce the different standpoints of the interface position, which is followed by the description of the current study and a discussion of the findings.

I IMPLICIT AND EXPLICIT LEARNING AND KNOWLEDGE

It was Krashen who introduced the distinction between explicit ‘learning’, a conscious process, and implicit ‘acquisition’, a subconscious process to second language acquisition (SLA) [32]. He claims that the explicit learning of rules has only a very minor role in the acquisition process. Hulstijn provides a similar definition to that of Krashen’s but he regards the outcome of explicit learning as a worthwhile – in certain cases indispensable – form of knowledge which serves as a good resource for the learner when implicit knowledge is not yet available [27,28]**.** DeKeyser differentiates between implicit and explicit learning using awareness as a defining feature: “implicit learning is learning without awareness of what is being learned”, but also concludes that there is very little evidence that any kind of learning without awareness takes place [6:314]. In contrast, N. Ellis states that “... the bulk of language acquisition is implicit learning from usage. Most knowledge is tacit knowledge; most learning is implicit; the vast majority of our cognitive processing is unconscious. “ [8: 306]. Paradis approaches the issue from the point of the procedural and declarative memory systems and defines the terms “acquire” and “learn” as implicit and explicit processes, respectively. He claims that explicit grammatical rules cannot be transformed into implicit computational procedures since by their very nature they reside on two different types of entities, on the declarative and procedural memory systems [36].

There is no unified definition among theorist of the implicit–explicit learning processes as introduced above. Nor is there agreement on the definition of explicit knowledge. Paradis proposes that it is a set of explicitly known grammatical rules, [36] whereas R. Ellis defines it as the amalgam of analyzed (potentially aware) knowledge and of metalanguage [12]. And again, many studies lack even a precise definition.

With regard to the relationship between explicit and implicit knowledge, three main theoretical positions are taken by the cognitive accounts in SLA. According to the **non-interface position**, the appropriation of explicit and implicit knowledge involves different processes: learned competence cannot turn into acquired competence [33]. Explicit knowledge shall not become implicit knowledge through practice, but rather a separate network is constructed of an implicit nature

[27]. The two knowledge types have different memory sources that do not interface; neither of them shall become the other. Implicit linguistic competence and metalinguistic knowledge are incapable of affecting each other's content and structure. Instead, as proposed by Paradis, a shift in the reliance on the processes from controlled to automatic takes place as language proficiency grows [36].

In contrast, **the strong interface position** states that not only explicit knowledge shall become implicit but also that implicit knowledge shall become explicit when the learners become aware of the underlying rules of their implicit knowledge. DeKeyser proposes that the knowledge gained from explicit knowledge is both functionally and by nature, equivalent to implicitly acquired knowledge. [6] The representatives of the **weak interface position** do not rule out the possibility that explicit knowledge may turn into implicit knowledge but posit certain criteria on it [10].

The interface issue has been the subject of numerous studies in SLA; however, as Hulstijn remarks, most contributions are characterized by the usage of vague terms and the lack of cognitive architectures or related brain areas which may question the empirical nature of the issue on the basis [27]. Although a considerable number of studies have sought in the last decades to tap the relationship between explicit and implicit knowledge [22, 25, 34], they were correlational in design, and did not focus on the operationalization of the implicit and explicit constructs separately, which is essential to test the interface position [13]. In order to decide whether the knowledge gained through instruction and exposure consists of explicit or implicit knowledge or a mixture of the two, and to be able to settle the question of the interface issue, R. Ellis developed a battery of tests by operationalizing the two constructs.

II REVIEW OF THE STUDY OF R. ELLIS (2005)

A battery of five tests was developed and tested by Rod Ellis: a timed grammaticality judgement test (TGJT), a metalinguistic knowledge test (MKT), an untimed grammaticality judgement test (UGJT), an elicited oral imitation test (EOIT), and an oral narrative test (ONT) [13]. The tests were designed and defined as measures of explicit and implicit knowledge based on the following criteria: degree of awareness, time available, focus of attention, and utility of knowledge of metalanguage. The original test-takers totalled 111, of whom 20 were native speakers and the rest were L2 learners of English, 70.5% of whom came from China, with mixed language proficiency ranging from B1 to C1 of the CEFR (1). On average, they had studied English for 10 years, mostly in a foreign language context, and spent 1.9 years living in an English speaking country. The results of the five tests were computed. A Principal Component Analysis and a Confirmatory Factor Analysis reinforced Ellis' prediction that the tests measured two different kinds of knowledge. The UGJT (ungrammatical) and the MKT loaded on one factor, the UGJT (grammatical), the TGJT, the EOIT and the ONT loaded on the other factor. Ellis interpreted the two factors as explicit and implicit knowledge, respectively.

III THE CURRENT STUDY

The study seeks to answer the following research questions.
1. Do the scores load on two factors, in the way they did in R. Ellis [13]?
2. Is there a significant difference in the implicit and explicit knowledge use of those L2 learners whose level of proficiency is found to be markedly different?
In order to answer the first research question the following hypotheses were formulated:

i. Learners will rely more on their conscious use of 'rules' when they apply their explicit knowledge.
ii. Without a time constraint learners will draw not only on their implicit but also on their explicit knowledge.
iii. Learners will draw on their explicit knowledge when the focus is on form and on their implicit knowledge when the focus is on meaning.
iv. A strong correlational coefficient is expected between UGJT and MKT, as well as between EOIT and TGJT.
v. Learners' responses will be less variable in the case of implicit than in the case of explicit knowledge use.
vi. Learners are expected to be more certain about their answers when relying on their implicit knowledge than when relying on their explicit knowledge.
vii. The starting age of language learning will relate more strongly to implicit knowledge, and the duration of classroom instruction to explicit knowledge.

Participants

The 54 Hungarian test-takers of the study, 36 females and 18 males, were 1st-year English major students of the University of Debrecen (UoDL2 learners), who had been studying English for 9.5 years on average in a formal, foreign language context. Only two of the test-takers had spent any time living in an English-speaking country, 12 and 3 months respectively. All participants of the study had formal descriptive grammar courses at the university, which form an integral part of their syllabus. Their level of proficiency varies between B2 and C1 of the CEFR.

Test Content and Procedure

Two batteries of tests were completed by the participants. One of them measured their explicit – implicit knowledge, and the other measured their language proficiency. The TGJT, UGJT, and MKT, as well as a background questionnaire, were completed in one session, in seminar rooms, lasting approximately 90 minutes. The elicited oral imitation test was completed individually in face-to-face meetings between each test-taker and the researcher. The oral narrative test was omitted from this study. The reason for this is that the loading of it was the lowest of the three implicit tests. It proved to be the weakest instrument of all five tests in Ellis' study and by omitting it, the implicit and explicit tests were equal in number.

Timed Grammaticality Judgment Test – The test consisted of 68 sentences (half of them were grammatically correct, half of them were incorrect) which were presented to the test-takers on a timed PowerPoint slide show. The timing of each slide was calculated on the basis of native speakers' performance, adding an extra 20% of time, considering the slower processing capacity of L2 learners. The sentences remained on the screen between 3 to 8 seconds, which included an additional 2 seconds, provided for the test-takers to write their responses on the answer sheet. (In the original study the answers were also computer based.) Three 10-second breaks were inserted into the test. A percentage accuracy score was calculated.

Untimed Grammaticality Judgment Test – This was a pen and paper test with the same test content and task requirements as the TGJT, but without a time constraint. Learners were required to decide on the grammaticality of the sentences, as well as to indicate the certainty with which they made their judgements by writing a number from 50 to 100%, and to state whether their judgements were based on 'rule' or 'feel'. A percentage accuracy score was calculated.

Metalinguistic Knowledge Test – The test was an adaptation of a test constructed by Alderson et al. (1997). The first part of it was a multiple choice task, where test-takers had to select the rule that best explained the error in the example sentence. The next section required participants to read a short text and find examples of a list of grammatical features such as 'noun', 'finite verb' etc,. The last section required them to underline a given grammatical feature in each sentence. A percentage accuracy score was calculated.

Elicited Oral Imitation Test - The test consisted of 34 belief statements (17 grammatically correct, and 17 incorrect). The sentences, which were conveyed and recorded a priori by a native speaker, were played to the test-takers. After each sentence, participants were required to indicate on an answer sheet whether they agreed with the truth-value of the statement or not. Only then were they asked to repeat the sentences orally, in correct English. This delay between the presentation and performance phases assured that the item was processed as part of the learner's internal grammar and not a mere repetition of the statement took place. The answers were audio recorded and analysed for correctness. A percentage accuracy score was calculated.

Results

The reliability of all tests was calculated using Cronbach's alpha. Table 1 shows the reliability coefficients of the measures, which vary between 0.82 and 0.75, lending internal consistency to the tests.

Table 1. Reliability measures for the four tests by L2 learners of the University of Debrecen

Test	Number of items	Number of test-takers	Reliability
UGJT	68	54	α= 0.75
TGJT	68	54	α= 0.81
EOIT	34	54	α= 0.81
MKT	40	54	α= 0.82

Table 2 presents the means and standard deviations of scores on the four measures of explicit–implicit knowledge performed by the participants of the current study *(UoDL2)* and by the original test-takers of Ellis' study (2005). The original test-takers consisted of a group of native speakers *(ENSs)* and a group of L2 learners *(EL2)*.

Table 2. Descriptive statistics for the four tests

	L2 learners **(UoDL2)** (current study)		L2 learners **(EL2)** (Ellis, 2005)		Native speakers **(ENSs)** (Ellis, 2005)	
	%	**SD**	**%**	**SD**	**%**	**SD**
UGJT	**88**	7.04	82	10.5	96	1.55
TGJT	**83**	9.57	54	11.8	80	10.2
EOIT	**64**	14.80	51	17.2	94	4.1
MKT	**63**	15.82	53	20.73	57	7.37

The UoDL2 learners, who scored well on the proficiency test, outperformed EL2 test-takers in all the tests. The most significant difference in scores occurs in the case of the two proposed implicit tests. UoDL2 learners performed 29% better on the TGJT and 13% better on the EOIT than EL2 learners. Also, there is a considerable difference (10%) between the scores reached on the metalinguistic knowledge tests. The UoDL2 learners also outperformed the native speakers in the timed grammaticality judgment and metalinguistic knowledge tests, although not as considerably as they did in the case of the EL2 learners. The higher MKT scores result from the explicit instruction of grammar that UoDL2 learners receive during their studies but that native speakers do not. However, UoDL2 students were not expected to perform better on any of the proposed implicit tests. In the case of the decision-based, timed grammaticality judgment test, which required test-takers to use their implicit knowledge only passively, UoDL2 learners scored 3% better than ENSs, whereas in the case of the elicited oral imitation test, which required real-time performance, UoDL2 students scored 30% worse than the native speakers. The nature of each test provides explanation for the TGJT scores. GJTs require test-takers primarily to focus on form instead of meaning, and the learner is given a task type (multiple-choice test), which often occurs in L2 classrooms, but which is less familiar to a native speaker. In contrast, elicited oral imitation tests require test-takers to focus primarily on meaning and require real time processing, which is typical of everyday language use.

Table 3 shows the correlation matrix for the four tests performed by UoDL2 learners. The metalinguistic knowledge test, as expected, did not correlate with the two proposed implicit tests (TGJT, EOIT) but showed only moderate correlation (r= 0.35) with the UGJT, too. However the scores of both the timed and the untimed grammaticality judgment tests as well as that of the elicited oral imitation test correlated strongly. This points to the fact that the MKT measures a different knowledge than the rest of the test.

Table 3. Correlation matrix for the four tests of UoDL2 learners

Test	UGJT	TGJT	EOIT	MKT
UGJT	-	0.75**	0.52**	0.35**
TGJT		-	0.46**	0.22
EOIT			-	0.26
MKT				-

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

In Ellis'study [13] the correlation between all pairs of tests reached statistical significance, although the MKT was not as strongly related to the other tests as were the others, but showed a definitely strong correlation (r=0.60) with the proposed explicit measure, the UGJT.

A Principal Component Analysis (PCA) was carried out (Table 4, Table 5) to investigate the loadings of the tests, with oblique rotation inasmuch as the two notions (implicit and explicit) are not completely separate but correlate. By default, only one component was extracted without component plots. Three of the four tests strongly correlated with the principal component, whereas the forth MKT test correlated only weakly with it. In the case of a two-component solution the MKT loaded on one factor (explicit) and the UGJT, TGJT and OEIT loaded on the other (implicit), confirming the results of the correlation matrix that MKT in fact measures a different type of knowledge than the rest of the tests.

Table 4. Principal Component Analysis (PCA)

Component	Eigenvalue	% of Variance	Cumulative %
1	2.369	59.229	59.229
2	0.851	21.287	80.517
3	0.561	14.029	94.545
4	0.218	5.455	100.000

Table 5. Loadings for EFA

	Component 1	Component 2
UGJT	0.889	0.091
TGJT	0.920	-0.133
EOIT	0.744	0.076
MKT	0.014	0.990

2 components extracted, Rotation Method: Oblimin with Kaiser Normalization, Pattern Matrix

A further Exploratory Factor Analysis (EFA) was carried out to see whether the grammatical and ungrammatical sentences of the UGJT function differently, like they did in earlier studies such as Ellis [13], Bowls [3] and Gutierrez [23] that is, whether the grammatical sentences of UGJT would function better as measures of implicit and the ungrammatical sentences of UGJT as measures of explicit knowledge. The analysis did not support this prediction, as both components loaded heavily on the implicit factor.

In addition, a Confirmatory Factor Analysis (CFA) was carried out, given that the agenda of the study was verificational, rather than exploratory, i.e. the loadings of the constructs were a priori hypothesized. The a priori expectation, based on the results of the EFA, was that MKT would load on the explicit and UGJT, TGJT and OEIT would load on the implicit factor. For the sake of data reduction on the explicit factor as well, the metalinguistic knowledge test was divided into three measures forming three separate indicators on that factor, leaving the other three tests (UGJT, TGJT and EOIT) on the implicit factor. The proposed model offered a good fit. The two factors correlated (r = 0.57), but were relatively separate (Figure 1). The indicators of the model in Table 6 show that the model was acceptable. The non-significant value of the chi-square (χ^2) indicates that the model was statistically likely to occur. Whereas a signifiant value would indicate an unacceptable model [30]. Both NFI (> 0. 95) and RMSEA (<0.05) values indicated a good fit for the model.

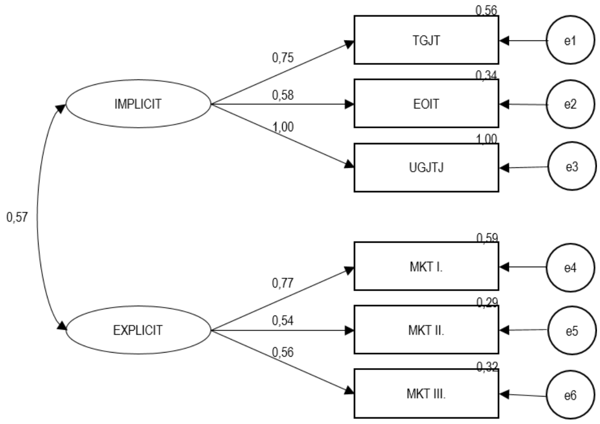

Figure 1. Explicit–Implicit Model

Table 6. Summary of the model fit for the solution in Figure 1

Model	**χ^2**	**NFI**	**RMSEA**	**df**	**p**
Explicit/Implicit	5.405	0.949	0.000	8	0.714

NFI: normed fit index; RMSEA: root mean square error of approximation; df: degree of freedom, **p <0,05

The second research question of the study asked if there was a significant difference in the implicit and explicit knowledge use of those UoDL2 learners who performed well on a proficiency exam and those who performed poorly. To answer this question the scores of a proficiency tests were computed and analysed in relation to the scores of the explicit–implicit tests using one-way ANOVA.

The proficiency level of participants was measured with the English Yardstick Exam (EYE), an end-of-year language proficiency exam for first-year students at IEAS (Institute of English-American Studies). The exam was designed to measure language competence at level C1 of the CEFR, covering all the four main language skills in five separate sections. The written part included a listening, a reading, an integrated reading-writing and a writing test. It took 180 minutes. The speaking test consisted of three parts. It started with a warmer, followed by an individual presentation and a conversation task between 2 candidates. Percentage accuracy scores were calculated.

Table 7 below shows the mean scores and the ANOVA results of UoDL2 test-takers in the five tests. 51 learners completed the explicit-implicit knowledge as well as the EYE tests. 27 of them reached the minimum score required to pass the EYE test, while 24 failed the exam. The mean scores of the five tests were computed. One-way ANOVA revealed a statistically significant difference between the scores of the two groups in the case of all five tests, which means that the two groups can be distinguished as markedly different in terms of level of proficiency.

In order to answer the second research question a further ANOVA analysis was carried out (Table 8). It revealed a statistically significant difference in the implicit knowledge use between those learners who failed and those who passed the proficiency exam, but no statistically significant difference occurred in their explicit knowledge use.

Table 7. Means and results of one-way ANOVA for the 5 proficiency tests of UoD L2 learners

Tests	**Group**	**Mean %**	**F**	**p**
Listening	failed (n=24)	46	62.033	0.000
	passed (n=27)	75		
Speaking	failed (n=24)	67	31.158	0.000
	passed (n=27)	84		
Reading	failed (n=24)	48	21.398	0.000
	passed (n=27)	73		
Integrated Reading- Writing	failed (n=24)	57	30.418	0.000
	passed (n=27)	77		
Writing	failed (n=24)	56	28.447	0.000
	passed (n=27)	77		
Total	failed (n=24)	54	14.898	0.000
	passed (n=27)	77		

Table 8. Results of one-way ANOVA for the explicit–implicit tests of the two groups of UoD L2 learners

Test	**F**	**p**
UGJT – measuring implicit kn. (failed/passed)	7.886	0.007
TGJT – measuring implicit kn. (failed/passed)	5.637	0.022
EOIT – measuring implicit kn. (failed/passed)	3.353	0.000
MKT – measuring explicit kn. (failed/passed)	15.763	0.073

IV DISCUSSION

The aim of this paper was twofold. On the one hand, it aimed to validate the battery of tests designed by R. Ellis [13] and to distinguish between test-takers' explicit-implicit knowledge use via forming and investigating seven hypotheses. On the other hand, the paper aimed to investigate the relationship between the level of proficiency and the explicit-implicit knowledge use of learners. Results of both the EFA and the CFA show that the test scores did load on a two-factor, explicit–implicit model. The two types of knowledge could be separated, although not in the same way. TGJT and EOIT proved to be valid measures of implicit knowledge and MKT of explicit knowledge. However, the untimed grammatically judgement test did not gain support as a valid measure of explicit knowledge.

The validity of the instruments were tested based on the seven below hypotheses.

(i) *Degree of awareness*: It was hypothesized that learners would rely on the conscious use of 'rules' when they apply their explicit knowledge, and would rely more on 'feel' when they use their implicit knowledge. Pearson Product Moment Correlation Coefficients were computed between learners' 'usage of rules', 'usage of feel' and the total scores of each test. In contrast with the findings of Ellis, in the current study it was only the MKT, which correlated with the 'usage of rule' (r=0.470) at a moderate strength. There were no positive correlations between the proposed implicit tests and the 'usage of feel' variable as expected. Only the MKT correlated negatively with the 'usage of feel' variable (r= -0.470).

(ii*) Time available*: It was predicted that without time-constraint, learners would draw not only on their implicit, but also on their explicit knowledge. Both the EFA (Tables 5 and 6) and the CFA (Figure 1) partially contradicted this prediction as UGJT loaded heavily in both analyses on the implicit factor. Test-takers relied on their explicit knowledge only in the case of the MKT, which required learners to understand linguistic constructs. However, a Paired Sample Test revealed, that there was a statistically significant difference between the scores (t= 5.82; df=53; p=0.000) of the UGJT and TGJT tests, even if in percentage the difference did not seem very high. They scored 88% and 83% respectively.

(iii) *Focus of attention:* It was predicted that learners would draw on their explicit knowledge when the focus was on form (UGJT, TGJT, MKT) and on their implicit knowledge when the focus was on meaning (EOIT). However, both the Exploratory and the Confirmatory Factor Analysis (Tables 3 and 4; Figure 1) contradicted this prediction, as not only the EOIT, which required real-time performance without formal task completion on the part of the learner, but also both GJTs – presented in the form of multiple-choice tests – loaded heavily on the implicit factor. This loading pattern can be explained by the test-taking strategies and the routine UoDL2 learners have developed during their 9.5 years of language instruction as well as by their high level of proficiency. The former explanation gains further support with the fact that UoDL2 learners outperformed even native speakers (ENSs) on the scores of the TGJT, and approximated native speakers' scores in the untimed grammaticality judgement test as well. One possible explanation of this is the lack of explicit grammatical instruction on the part of the native speakers.

(iv) *Utility of metalanguage*: It was predicted that UGJT and MKT – neither of which puts a time constraint on the learner and both of which require focus on form – would load on the explicit factor and would strongly correlate. In a similar vein, the time-constrained GJT and the meaning-focused EOIT were expected to load on the implicit factor and to strongly correlate. However, this was not the case. Only the MKT loaded on the explicit factor in both the confirmative and exploratory factor analyses and showed only weak correlation with the UGJT (r=0.35). The UGJT, together with the TGJT and the EOIT variables, loaded on the implicit factor and their scores were strongly correlated with each other: r= 0.75 for UGJT–TGJT, r= 0.52 for UGJT–EOIT and r= 0.46 for TGJT–EOIT, but neither the TGJT nor the EOIT correlated with the MKT scores.

(v.) *Systematicity*: It was predicted that learners' responses would be less variable in the case of implicit than in the case of explicit knowledge use. The MKT as a measure of explicit knowledge resulted in the highest standard deviation (15.82) of all four tests (Table 2). However, it is important to note that the EOIT as an implicit measure (at 14.80) scored just a little below the MKT scores. In contrast with the predicted results, the UGJT resulted in a lower standard deviation (7.04) than its implicit measure pair, the TGJT (9.57). Thus, the results do not fully support the predictions.

(vi) *Learnability*: It was predicted that the starting age of language learning would relate more strongly to implicit knowledge, whereas the duration of classroom instruction would relate to explicit knowledge. The results partly confirm the predictions, inasmuch as the starting age of language learning showed a significant negative correlation with the proposed implicit tests (TGJT: r= -0.314*; EOIT: r= -0.378**) and also correlated negatively even if not significantly with the proposed explicit measure (UGJT: r= -0.245), and, as expected, showed no correlation with the MKT: r= -0.025. This means that an earlier starting age of language learning would result in a better performance on the TGJT, EOIT and UGJT measures, but not on the clearly explicit metalinguistic knowledge test. However, for the duration of classroom instruction variable only two moderate correlations occurred. This variable correlated with two proposed implicit measures (TGJT: r= -0.431*; EOIT: r= -0.365**), but not with the metalinguistic knowledge test. In contrast with the expected results, the duration of language instruction does not affect explicit knowledge, only implicit knowledge.

(vii) *Certainty*: Learners were expected to be more certain about their answers when relying on their implicit knowledge ('feel') than on their explicit knowledge ('rule'). Certainty was expected to be higher in terms of level of percentage in the case of 'feel'-based judgements than in the case of 'rule'-based judgements. However, the one-way ANOVA result does not support this prediction. The percentage level of certainty in the case of 'rule'-based judgements proved to be significantly higher (p= 0.000), than in the case of 'feel'-based judgements, which indicates a strong relationship between the participants' level of certainty and their explicit knowledge use.

V CONCLUSION

The present study addressed two research questions (RQs). With respect to RQ1, it was found, that in the case of highly proficient, Hungarian second language learners, the battery of tests developed by Ellis [13] did separate explicit and implicit knowledge, but with a different distribution. UGJT did not prove to be a valid measure of explicit, but of implicit knowledge. Learners – in contrast with the predicted - drew on their implicit knowledge when completing the UGJT, although test conditions encouraged the use of explicit knowledge (no time pressure, focus on form). With respect to RQ2, it was found that the level of proficiency did not influence the explicit, metalinguistic knowledge use of the learners, but had a significant effect on their implicit knowledge use.

In this paper we did not intend to draw a conclusion on the 'interface debate' as it is far beyond the scope of the study. However, the interpretation of the findings calls for such a reflection. The answers to RQ1 and RQ2 seem to contradict both the strong and the weak interface positions, which emphasise the relation between practice/proficiency and explicit knowledge use. For example, DeKeyser proposes that via an intensive communicative use and the complete automatization of the rules, awareness of rules can be lost. The knowledge left behind is procedural, both functionally and by nature, equivalent to implicitly acquired knowledge [6]. Ellis also states that when the learner is developmentally ready, that is, when a certain level of proficiency is reached by the learner "explicit knowledge can convert directly into implicit knowledge under certain, fairly stringent conditions [10:99]. However this was not the case in the present study. Language proficiency had no statistically significant influence on explicit, metalinguistic knowledge, only on implicit knowledge. It supports the non-interface position, inasmuch as explicit knowledge cannot become implicit, by the very fact that the level of proficiency variable of the present study, as one-way ANOVA revealed, did not affect explicit knowledge. We propose then that an independent, separate network, implicit in nature, was developed [27] on which learners relied when completing the UGJT. This implicit knowledge was affected by the proficiency variable. The higher the level of proficiency, the more extensively learners rely on their newly acquired implicit knowledge. This, however, is not equal to a faster application of explicit rules [36]. The latter, as defined by Ellis [12] refers to automatized explicit knowledge, or 'analysed knowledge'. The results of the present study do not seem to support the validity of the measures the way it was reported in Ellis' study. Further research is called for with the same measures administered to subjects with different proficiency levels and educational background. As Ellis comments [18] SLA needs valid and reliable measures of explicit and implicit knowledge to settle the question of the interface issue. This paper intends to contribute to this objective.

NOTES

(1) The equation of proficiency levels with the CEFR (Common European Framework of Reference) levels was based on IELTS guidelines. http://www.ielts.org/researchers/common_european_framework.aspx

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