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Do rules really rule? Implicit and explicit grammatical knowledge of Swedish learners of L2 English

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Do rules really rule? Implicit and explicit grammatical knowledge of Swedish learners of L2 English

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The development of implicit and explicit morphosyntactic knowledge is a key issue in the field of second language acquisition. Extensive laboratory-based research shows that explicit learning conditions seem to be more conducive to the acquisition of abstract rules than an implicit learning setting. However, the relationship between extramural English (EE), i.e. the use of English outside the classroom (Sundqvist 2009), and implicit and explicit morphosyntactic knowledge has so far been largely neglected. For the present study, the context of Sweden was chosen, as Swedish learners have extensive media exposure to English. 39 Swedish high school students performed an oral narrative test as a measure of implicit knowledge, and an untimed grammaticality judgment test and a metalinguistic knowledge test as measures of explicit knowledge. The amount of exposure and the type of instruction as experienced by the participants were determined by means of a questionnaire. Students performed significantly better on the test tapping into implicit knowledge than on its explicit counterparts ($p < .05$), and reported that their English instruction had been primarily fluency-based rather than accuracy-based. Scores for implicit knowledge correlated significantly with the total amount of EE ($p = .015$), and the weekly amount of watching TV ($p = .019$) and speaking English ($p = .045$). These findings indicate that high levels of EE, combined with a predominantly fluency-based instruction, favor the development of implicit rather than explicit knowledge.

1. Introduction

The field of second language acquisition (SLA) has shown a long-standing interest in implicit and explicit knowledge (Rebuschat, Révész & Rogers 2016: 783), i.e. the unconscious and conscious grasp of underlying linguistic features. First language acquisition clearly happens unintentionally and without awareness. One only has to consider infants, who, through

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substantial input, acquire a complex system of grammatical structures together with an extensive vocabulary. The question to what extent unconscious processes are involved in L2 learning has recently been the subject of much debate (Rebuschat, Révész & Rogers 2016: 781).

Despite a plethora of laboratory-based studies in the field of implicit and explicit learning and knowledge, there is still a lack of research exploring naturalistic L2 learning conditions and their effects on the two types of knowledge. To date, such studies have indicated a relationship between form-based instruction and the development of high levels of explicit knowledge, with implicit knowledge lagging behind (e.g. Macrory & Stone 2000; Philp 2009; Elder and Ellis 2009; Zhang 2015). However, in light of what Sundqvist refers to as extramural English (2009), i.e. out-of-class use of English, having become so pervasive across the globe, future research on its impact is urgently needed. While multiple studies have analyzed its impact on general language proficiency and vocabulary learning (e.g., Gold, Gooch & Rankin 2006; Kuppens 2010; Sylvén & Sundqvist 2012; Ina 2014), only a fraction of these focused on grammar (e.g. Lee 2002; D'Ydewalle, Laenen & Van Lommel 2006), and even fewer integrated differential measures of implicit and explicit knowledge (Philp 2009; Gotseva 2015).

The context of Sweden – where L2 learners are provided with high levels of out-of-class exposure to English (Bolton & Meierkord 2013: 96), and where teachers tend to favor fluency-based instruction (Ronnå 2013; Petersson 2016) – lends itself to filling these gaps in research. The current study thus not only seeks to (1) identify the prevailing type of knowledge among a group of Swedish learners of English, but also to (2) explore the potential impact of extramural English and the type of instruction on the development of implicit and explicit knowledge. The overarching research question was formulated as follows: To what extent do Swedish learners of L2 English possess implicit and explicit morphosyntactic knowledge and what are the main contributing factors? If it is true that Swedish teenagers frequently use English in their spare time and attend English classes that are largely fluency-based, these learning environments, which resemble natural learning conditions in first language acquisition, are likely to foster high levels of implicit knowledge.

The article is structured in the following way. Section 2 delimits the main concepts related to implicit and explicit knowledge, followed by a review of previous literature in section 3. Section 4 discusses the research questions and the hypotheses. Section 5 addresses the study's methodology, including an outline of the selection of participants, grammatical target features, and test instruments. In section 6, the results will be presented and discussed according to the four main areas of investigation, (1) the dominant type of knowledge, (2) the factor of extramural English, (3) the factor of instruction, and (4) the implicit-explicit interplay. Finally,

the study's limitations and an outlook are presented in section 7, and a brief conclusion is provided in section 8.

2. Key Constructs

The renewed interest in how far different types of exposure foster the development of implicit and/or explicit knowledge in a second language is commonly said to have been sparked by Stephen Krashen's proposals on L2 learning and acquisition (Andringa & Rebuschat 2015: 185-6; Rebuschat & Williams 2012: 829). Krashen's distinction between learning and acquisition conflates the concepts of implicit/explicit learning and implicit/explicit knowledge (Krashen 1982: 10). Schmidt, on the other hand, argues that learning is a process that can but does not have to lead to knowledge (Schmidt 1994: 20). The present study will therefore adhere to the definitions that follow.

Whereas **implicit learning** refers to a process of learning during which the learner lacks awareness of underlying abstract rules (Ellis 2009: 7), **explicit learning** is "where the individual makes and tests hypotheses in a search for structure" (Ellis 1994: 1) and "typically involves memorizing a series of successive facts and thus makes heavy demands on working memory" (Ellis 2009: 3). **Implicit knowledge**, then, "is procedural, is held unconsciously, and can only be verbalized if it is made explicit. It is accessed rapidly and easily and thus is available for use in rapid, fluent communication" (Ellis 2006a: 95). **Explicit knowledge**, in contrast, "is held consciously, is learnable and verbalisable, and is typically accessed through controlled processing when learners experience some kind of linguistic difficulty in using the L2" (Ellis 2006a: 95). Ellis (2006a: 95) further distinguishes between **analysed** and **metalinguistic knowledge**, which are terms that will be used in the empirical part of this study. While the former refers to conscious knowledge of how a certain structure functions, the latter involves knowledge of the technical language used to describe grammatical rules (Ellis 2006a: 95). As Ellis and Han (1998: 5-6) state, learners do not have to know metalanguage in order to possess analyzed knowledge, "although it [explicit knowledge] may be preciser, clearer and better-structured if the learner has access to metalingual terms".

Unfortunately, it remains widely unknown how implicit knowledge is attained and how far explicit knowledge influences the process of acquisition (Ellis 2005: 143). The crucial debate in this regard centers on the so-called interface hypothesis and can be divided into three opposing views (Ellis 2005: 144). **The noninterface position** draws on Krashen's theory of language learning and acquisition (Krashen 1983) and describes implicit and explicit

knowledge as distinct systems. This view of SLA suggests that neither can explicit knowledge become implicit, nor can implicit knowledge develop into explicit knowledge (Ellis 2009: 21). **The strong interface position**, in contrast, suggests that an interface between implicit and explicit knowledge is possible in both directions. Thus, it claims that explicit knowledge can develop into implicit knowledge through a significant amount of practice, and, vice versa, that this rule-based knowledge can also be abstracted from implicit knowledge (Ellis 2009: 21). According to the **weak interface position**, explicit knowledge can convert into implicit knowledge, albeit only under specific circumstances, such as when explicit knowledge of certain structures allows the learner to formulate planned utterances, which in turn serve as input for the development of both types of knowledge (Sharwood Smith 1981: 166). In the present study, the interplay of implicit and explicit knowledge is thought of as very likely. It follows that the levels of implicit and explicit knowledge to be determined cannot be perceived as an immediate consequence of the learning environment. Rather, the levels to be identified might be the result of one type of knowledge developing into or enhancing the other.

In order to discuss the impact of the type of instruction on the construction of knowledge, it is also relevant for the present study to provide a categorization of teaching practices in terms of the focus of attention directed at accuracy and/or fluency. As originally proposed by Long (1997; 1988), one can distinguish between focus-on-meaning, focus-on-form, and focus-on-formS. While **focus-on-meaning** refers to fluency-based language teaching that excludes any attention directed at form, in **focus-on-formS**, teaching builds on the systematic introduction of one linguistic feature after another. In **focus-on-form**, attention to form is integrated in an otherwise meaning-based setting (Gaus & Coppen 2016). The Swedish curriculum for primary and secondary school is based on the communicative approach and indicates that instruction is intended to promote the students' communicative competence (Skolverket 2015, 2017). While the primary goal of communicative language teaching (CLT) is often stated to be the development of fluency, i.e. the ability to use language naturally in meaningful interaction despite limitations in the speaker's language competence, CLT does not preclude accuracy-based sequences directed at correct language use (Richards 2006: 14-16). Thus, the term focus-on-form, integrating grammar teaching in a communicative setting, arguably is what best describes CLT. However, since the term focus-on-form is misleading in that instruction is not merely directed at isolated forms but at form-meaning mappings, the present study will make use of the terms **fluency-based** and **accuracy-based instruction**.

3. Previous research

Research on implicit and explicit learning in SLA is strongly influenced by work in the field of cognitive psychology, where it began with artificial grammar learning experiments. In order to tap into implicit learning, Reber and colleagues conducted tests that involved the memorization of regular and randomly constructed artificial language patterns to be subsequently either reproduced or judged according to their correctness (e.g. Reber 1967; Reber, Walkenfeld & Hernstadt 1991, cf. Rebuschat 2015: XIV). While a large number of studies (Reber 1967; Cleary & Langley 2007; Williams 2005; Ellis & Reinders 2009, Grey, Rebuschat & Williams 2014, etc.) demonstrated that learning can take place under implicit conditions, comparative studies have found explicit learning conditions to be more effective (e.g. Rosa & O'Neill 1999; Norris & Ortega 2000; Gass, Svetics & Lemelin 2003; Ellis, Erlam & Loewen 2009; Hama & Leow 2010; Brooks & Kempe 2013; Rebuschat, Révész & Rogers 2016).

A major issue with the studies referred to above is the "extrapolat[ion of] laboratory studies to naturalistic language acquisition" (Rebuschat, Révész & Rogers 2016: 804), an approach which has been challenged for a long time. Only few studies so far have investigated naturalistic learning settings. Macrory & Stone (2000), for instance, examined the difference between knowledge and use of the French perfect tense by L2 learners at two different stages throughout instruction. It appeared that pupils performed well on tests of explicit knowledge, where they had to explain the formation of the perfect tense and its use and supply the correct form in a gap text. However, they were less successful in spontaneous production (Macrory & Stone 2000: 67), considered to be a measure of implicit knowledge due to time pressure. A year later, results did not show any significant changes. This finding of explicit knowledge being more dominant might be the consequence of a lack of exposure to the L2 outside of the classroom and of instruction fostering routine-like production of formulaic language (Macrory & Stone 2000: 67).

Ellis' (2005) study on the validity of different measures of the two types of knowledge yielded similar results. Formal instruction correlated with explicit knowledge as tested by an untimed grammaticality judgment test (Ellis 2005: 154), and the later the starting age of instruction, the weaker the performance on the timed grammaticality judgment test, tapping into implicit knowledge (Ellis 2005: 165). By drawing on this test battery designed by Ellis (2005), Philp investigated the variables of starting age and length of instruction, number of years spent in an Anglophone country, and type of instruction (Philp 2009: 198). As in Ellis (2005), results suggest that an early starting age of instruction leads to high levels of implicit knowledge (Philp

2009: 210), and that the length of the period of instruction increases performance in general (Philp 2009: 211). This finding could show that throughout instruction, knowledge of grammatical structures that were taught explicitly is proceduralized and becomes implicit. Although results reported in Macrory and Stone (2000) indicate that implicit knowledge did not improve a year after the first cycle of testing, an increase in knowledge might only be visible when observing an extended period of time. While the analysis of type of instruction remains somewhat unclear in Philp (2009), there are indications that form-based teaching with a lack of exposure leads to relatively poor performances on the timed grammaticality judgment test (2009: 211), which is supported by Zhang (2015). Zhang found that her participants, university-level L2 learners of English, had higher levels of explicit than of implicit knowledge (2015: 477-8). This was attributed to the primarily form-based instruction with limited teacher talk and restrained opportunities to use English with native speakers in the context of China (Zhang 2015: 468).

In sum, naturalistic studies report learning outcomes to depend on learner and contextual factors such as the starting age and length of instruction and exposure. While a relationship between form-based instruction and the development of explicit knowledge rather than implicit knowledge is apparent in Macrory and Stone (2000), Philp (2009), and Zhang (2015), there is a need to explore attainment of high levels of implicit knowledge. Moreover, Higgins indicates a lack in research focusing on "the links between instructed contexts of L2 learning and L2 use in other contexts" (2009: 401-2). Indeed, naturalistic research investigating L2 language learning as influenced by the amount and type of exposure remains limited.

4. Research questions

The purpose of the present study was to seek out the very particular context of Sweden, in which learners have extensive exposure to English through the media, as a learning environment for English as a second language. More specifically, Swedish learners' implicit and explicit morphosyntactic knowledge of selected structures was examined in light of (1) the amount and starting age of EE and (2) the type of instruction. In order to do so, the broader research question indicated in the introduction was split into four more specific sub-questions listed below. Each research question will be followed by a brief outline of the hypotheses.

(1) Which type of morphosyntactic knowledge of L2 English dominates in Swedish learners?

Considering the subjects' vast amount of exposure to mostly oral English in combination with instruction that is assumed to be primarily fluency-based, it was expected that they have

considerable levels of implicit knowledge of the target features. In light of the likelihood of an interface between implicit and explicit knowledge (see section 2) and given the generally very high levels of English in the Swedish population (Education first 2017), the learners are assumed to have explicit knowledge substantial enough to be relatively successful in the judgment of sentences according to their grammaticality, i.e. while performing an untimed grammaticality judgment test. Metalinguistic knowledge, in contrast, exists quite independently of analyzed knowledge (see section 2), and can hardly be assumed to be fostered by high levels of implicit knowledge. Thus, implicit knowledge was expected to be highest, followed by analyzed and metalinguistic knowledge (hypothesis 1).

(2) What is the effect of extramural English *on the learners' implicit knowledge?*

Implicit knowledge was hypothesized to correlate significantly with the overall amount of EE, and in particular with audiovisual activities, such as watching movies and YouTube videos in English due to the multimodality of those input types (hypothesis 2). Although incidental learning conditions do not necessarily lead to implicit knowledge (see section 2), a correlation between the two might nevertheless indicate a relationship between the type of learning and the resulting knowledge.

(3) How do the relative components of morphosyntactic knowledge – implicit and explicit – seem to relate to instruction?

One of the study's aims was to determine whether the participants' classroom instructions were primarily fluency or accuracy based (for the characterization of fluency vs. accuracy-based instruction, see section 2). A number of studies have found that instruction focusing on form rather than meaning seems to promote the development of explicit knowledge more than it fosters implicit knowledge (e.g., Macrory & Stone 2000; Elder & Ellis 2009; Zhang 2015; see section 3). Therefore, it is expected that in the present study, too, the levels of implicit and explicit knowledge reflect the type of instruction as reported by students (hypothesis 3).

(4) To what extent are the different measures of implicit and explicit grammatical knowledge interrelated?

Finally, the study also allows for interesting insights into the relationship between the different types of grammatical knowledge of Swedish learners and their respective measures. A negative correlation between implicit and explicit knowledge would suggest that the selected tests successfully tapped into two distinct types of knowledge and could hint at the latter being largely independent. A positive correlation, in contrast, might indicate that explicit knowledge has developed into implicit knowledge, or vice versa. It is expected that students with high

levels of implicit knowledge generally have a good command of English and therefore also show relatively high scores on the explicit measures (hypothesis 4). Last but not least, given the fact that Ellis qualified the untimed grammaticality judgment test and the metalinguistic knowledge test as valid measures of explicit knowledge (Ellis 2005; see section 5.3), they are expected to show a significant correlation (hypothesis 5).

5. Methodology

In this section, the methodology of the study will be outlined. First, the learner group that performed the tests will be characterized. Second, the target structures used in the experiments will be listed and their selection explained. Third, the test battery, consisting of different measures of implicit and explicit knowledge, and the learning experiences questionnaire will be described in detail.

5.1 Participants

In total, 39 (25 male and 14 female) 17-18 year old participants took part in the study. The vast majority of them was born and grew up in Sweden, and all of them attended the same upper secondary high school in central Sweden. This school is a three to four-year upper secondary school that students can go to after having completed a 9-level comprehensive school (*Grundskola*). It is a vocational non-profit free school, i.e. a school that is not controlled by local authorities, and the participants were taken from three subsections of the technological branch (*teknikprogrammet)*: engineering sciences (*teknikvetenskap*), production technology (*produktionsteknik*), and design and production technology (*design och produktionsteknik*). All the participants were then taking the English course referred to as “Engelska steg 6” in the Swedish national curriculum (Skolverket 2011: 6), in which they were split into three separate groups, each with a different English teacher. The entire group took part in the experiments on a voluntary basis, and, depending on their age, they or a legal guardian signed a letter of consent prior to testing. While the participants knew about the overall structure of the study, they were not informed about its focus on grammar, which was necessary in order to avoid biased results on the implicit knowledge test.

5.2 Target structures

The following three target structures were chosen for measuring implicit and explicit knowledge: unreal conditionals, irregular past tense forms (*hung, felt, fell, hurt, gave, got, came,*

left, caught, ran), and *for/since*. The selection of target features is based on a number of criteria briefly explained in what follows.

First, they are said to be universally problematic for learners of L2 English in general (Burt & Kiparsky 1972) as well as for Swedish learners in particular (Köhlmyr 2003). Second, the features are not acquired at an early, but rather an intermediate or late stage of L2 acquisition (Erlam 2006: 475-6). This is important, since features that are acquired at an early stage of L2 acquisition might be too easy for the target group in question and therefore not allow for sufficient discrimination of implicit and explicit knowledge. Third, the selection of target structures includes both morphological and syntactic language features (2006: 473). Finally, the factor of practicality also played a role; Given the general difficulty of generating a test that isolates implicit grammatical knowledge, it was important to choose features that could be made salient enough in the stimulus context to be reproduced by a large part of the participants (see 5.3.).

5.3 Test battery

The test battery is based on a study by Ellis (2005: 141), who investigated the validity of different measures of implicit and explicit knowledge. The tests he suggested have been approved by a number of researchers (e.g. Philp 2009; Ellis 2006b; Ellis, Erlam & Loewen: 2009) and were adapted for the purpose of the present study. The following test types were selected: an oral narrative test, an untimed grammaticality judgment test, and a metalinguistic knowledge test.

The **oral narrative test** (ONT), which proved to be a valid measure of implicit knowledge in Ellis (2005), engages participants in a meaning-focused production task. Since participants were asked to orally repeat a text within three minutes after having read it twice (2005: 156), it arguably put a heavy burden on working memory. Therefore, in the ONT designed for the present study, the input medium consisted of two audiovisual video clips of 1.5 minutes each, which were shown twice. The subjects were then asked to repeat the content while watching the video without the sound. The motivating factor behind this modification was (1) focus on meaning, which is essential when the aim is to tap into implicit knowledge (Ellis 2005: 152), and (2) facilitating remembering and repeating the content of the stories. The issue of rote repetition of the stimuli was resolved through initial focus on meaning as well as the time lag between listening and repeating the structures, as suggested in Sarandi (2015: 499) and Erlam (2006: 488). The narratives shown in the videos were based on the tales “The fox and the grapes” and “Money can’t buy everything”, but the text was largely adapted in order to

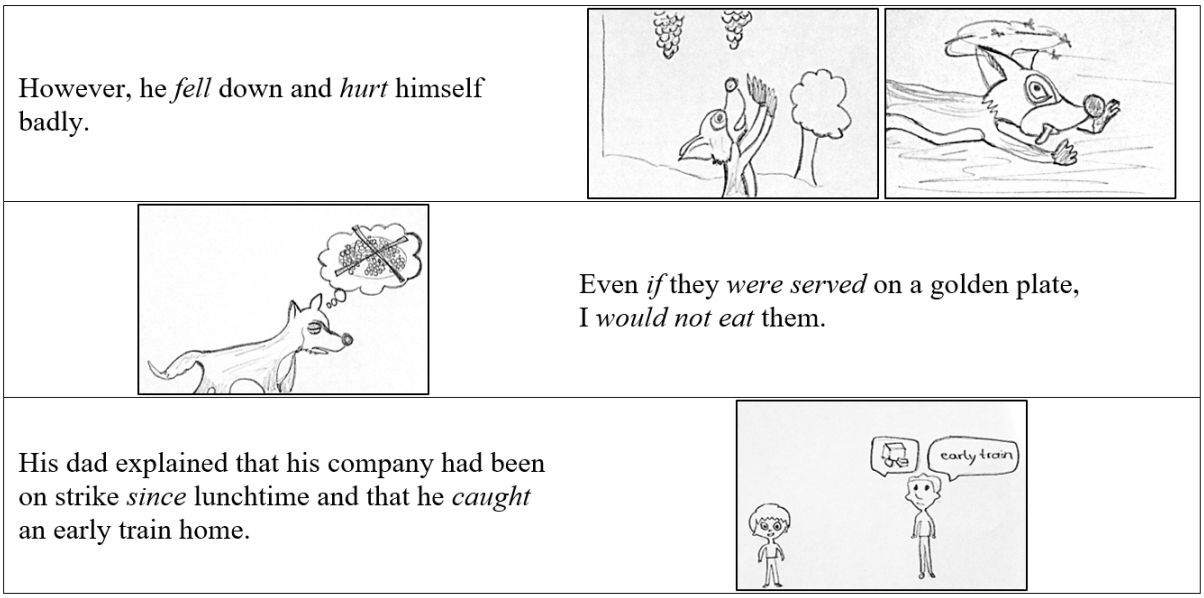

Figure 1 Extract from the oral narrative test[1] (here, symbolic pictures are used to represent the original pictures)

integrate the target structures (see section 10.1). The pictures were picked from the web and adapted by means of inserting speech and thought bubbles and other additional graphics. In this editing process, the aim was to modify graphics in such a way as to not only elicit the main ideas of the storyline from the participants, but to successfully trigger a maximum of the specific target structures (see figure 1[1]). Once first versions of the videos were generated, they were piloted in two circles on University students of the University of Vienna and Austrian pupils who were at the same age as the Swedish target population and who were also attending a technical school. For the analysis of the data, the audio files were transcribed and correct and incorrect reproductions of the target structures were allocated scores of 1 and 0 respectively, with replaced structures being disregarded (see section 1.6).

In contrast to the oral narrative test, the untimed grammaticality judgment test and the metalinguistic knowledge test focus attention on form and are intended to tap into analyzed and metalinguistic explicit knowledge respectively (Ellis 2005: 157; see section 1). The **untimed grammaticality judgment test** (UGJT; see section 10.3) consisted of correct and incorrect statements that had to be judged according to their correctness. Since the test is intended to tap into explicit knowledge, correct responses should ideally be based on rule-based knowledge. Therefore, for each statement, students were asked to specify whether they had applied 'rule' or 'feel', which should be 'rule' in the case of explicit knowledge being applied (Ellis 2005: 157). The UGJT was split into two parts, in each of which the targeted irregular verbs appeared

[1] For sources, see the appendix (A.1)

only once. In this way, the correctly supplied forms cannot influence the participants' responses to the incorrect statements.

The **metalinguistic knowledge test** consisted of two parts, MKT(1) and MKT(2). Part one, which differed from the MKT designed by Ellis (2005), tested the participants' knowledge of metalanguage by asking them to label different constructions (see appendix 10.4.) and thus tapped into metalinguistic knowledge (Ellis 2006a: 95; see section 2). In part two, a multiple choice test, participants had to explain why a given statement was grammatically incorrect by ticking the option(s) that applied. Thus, as is the case in the test designed by Ellis (2005), MKT(2) was intended to gauge analyzed knowledge (Ellis 2006a: 95; see section 2) instead of knowledge of the actual terminology. For instance, incorrect use of *for/since* was exemplified by use of *since* in combination with a duration of time:

I have known my best friend since three years.

"three years" is a specific point in the past, which is not expressed by "since".	O
"three years" is a duration of time, which requires "for", not "since".	O
"three years" is a short period, which requires "in", not "since".	O
"since" requires past tense, not present perfect tense.	O

As discussed in Philp (2009), learner variables such as length of residence in an Anglophone country as well as type of instruction are of potential relevance to success in language acquisition (2009: 198). Therefore, in order to get an insight into the target group's experiences learning L2 English, a **learning experiences questionnaire** was created (see section 10.2). Subjects were asked about the amount of time they had spent in an Anglophone country and the relative amount and starting age of out-of-class use of English of different types (i.e. watching TV, movies[2], YouTube, reading, and speaking English; see section 10.2). The questionnaire also included two questions on whether fluency, accuracy, or a combination of both seems to have been the focus in the CLT-based instruction (see section 2). For each of the four stages of schooling in Sweden (i.e. *lågstadium, mellanstadium, högstadium and gymnasium* of three years each), pupils were asked "what is/was more important in English lessons": A) "grammatically correct speaking and writing", B) "making oneself understood", or C) "both". The other question sought to investigate at what stages of the Swedish school system the target structures, i.e. unreal conditionals, irregular past tense and *for/since*, were taught.

2 The category 'TV' includes any type of exposure to programs that are broadcasted by TV channels. The category 'movies' refers to movies being watched everywhere but on TV channels, e.g. on DVD, Blue-ray, the internet, or at the movie theatre. This distinction was orally explained to the participants immediately prior to testing.

Once all the data from the three tests and the questionnaire were obtained, an investigation of the extent to which these variables were interrelated was carried out. To this end, Pearson product moment correlations and T-tests (using Microsoft Excel 2007) were performed.

6. Results and discussion

In what follows, the results of the study will be outlined and discussed. As a first step, the current project sought to identify the dominant type of morphosyntactic knowledge, implicit or explicit, among Swedish learners of English, which will be dealt with in section 6.1. Secondly, the impact that extramural English and the type of instruction on the development of such knowledge will be subject of section 6.2 and 6.3, respectively. Finally, the relationship between implicit and explicit knowledge will be discussed in section 6.4.

6.1 The dominant type of morphosyntactic knowledge

The overall score attained on the oral narrative test was significantly higher than the scores attained on the tests measuring explicit knowledge, which was the result of a two-tailed T-test ($p < .05$). This result suggests that implicit knowledge dominates in Swedish learners of English – and this holds true for each of the three target structures – followed by analyzed and metalinguistic knowledge (hypothesis 1). In this first section of the results, the calculated levels of implicit and explicit knowledge according to the specific measures will be given, compared, and discussed.

In the ONT, the target structures were (1) correctly produced in 52 percent of the responses, (2) given in an incorrect form in 5 percent, and (3) replaced in 43 percent of the cases. However, disregarding structures that were replaced by alternative wordings, 91 percent of the structures were correctly reproduced and 9 percent incorrectly (see table 1). Regarding the individual participants, the success rate of correct answers per number of triggered structures ranges from 72 percent to 100 percent, with a mean of 91 percent and a standard deviation of .09 points.

Table 1 Scores achieved on the oral narrative test disregarding replacement

	Total		**Unreal conditional**		**Irregular Past**		**For/since**	
correct	**485**	**91%**	114	79%	204	94%	167	97%
incorrect	**48**	**9%**	30	21%	12	6%	6	3%

In the UGJT, 81 percent of the incorrect statements were correctly identified as being erroneous. In terms of individual scores obtained by the participants, the least successful student received a score of 42 percent and the most successful participant 100 percent. The mean score was 81 percent, and the standard deviation .136, which was higher than that of the ONT. With regard to incorrect statements, the use of "rule" was indicated 383 times and the use of "feel" 338 times, but no relationship with implicit/explicit knowledge was detected. For an overview of the scores achieved on the UGT, see table 2.

Table 2 Scores achieved on the Untimed Grammaticality Judgment Test

	Total		**Unreal conditional**		**Irregular Past**		**For/since**	
correct	**600**	**81%**	127	65%	326	84%	147	94%
incorrect	**140**	**19%**	67	35%	64	16%	9	6%

In the first part of the MKT, a total of 30 percent of the items were correctly answered. While the scores attained by the participants ranged from 0-43 percent, the median was 29 percent, and the mean 30 percent. The standard deviation of the MKT(1) was .122, which is higher than that of the oral narrative test but slightly lower than that of the UGJT. In part two of the MKT, an overall score of 73 percent was achieved by the entire learning population. Individual students' scores on the six items ranged from 17-100 percent, with a median of 67 percent and a mean of 73 percent. The standard deviation was .208, which is the lowest of the entire test battery. Arguably, however, as it was the case in the MKT(2) used in a number of studies presented in Ellis et al. (2009), explicit knowledge might not be needed in order to answer the items. Based on the examples provided in the options (see section 10.5), it might be possible to indicate the right answer by means of intuitive knowledge. This potential flaw in the test design needs to be addressed in future research. An overview of the scores achieved on the individual target structures in MKT(1) and MKT(2) is provided in table 3.

Although correct productions of target structures clearly outnumber incorrect responses, one must consider that a total of 43 percent of the target structures were replaced. Irregular past was often substituted by alternative verbs, circumlocutions, or a different tense or aspect (e.g. *took an early train* instead of *caught an early train*; *Then, he said 'ok, I earn 25$/week'* for *Finally, he gave in …*). Replaced *for*/*since* was either omitted, as in *One day, Nick's father got a new job* instead of *Since the day that Nick's father …*, or circumscribed, such as in *From that day, …* instead of *Since that day, …. If*-sentences were very frequently substituted by simpler structures, such as in *Will you spend two hours with me for fifty dollars?* instead of … *if I gave*

Table 3 Scores achieved on the Metalinguistic Knowledge Test

MKT(1)	**Total**		Unreal conditional		Irregular Past		*For/since*	
correct	**82**	**30%**	0	0	68	87%	14	36%
incorrect	**191**	**70%**	156	100%	10	13%	25	64%
MKT(2)	**Total**		Unreal conditional		Irregular Past		*For/since*	
correct	**171**	**73%**	45	58%	67	86%	59	76%
incorrect	**63**	**27%**	33	42%	11	14%	19	24%

you fifty dollars? Cases where *if*-sentences were omitted can be explained by redundancy in terms of content, since the mere purpose of including a total of three pairs of *if*-sentences was to elicit a minimum of 3 individual unreal conditionals from each subject.

While in Ellis (2005) replaced target structures were classified as avoidance behavior and counted as incorrect productions, it is argued in the present study that replacement does not naturally imply a gap in implicit knowledge. Upon scrutiny of individual student performances on the oral narrative test, it appears that frequently, the circumvention of a target structure co-occurs with flexible language use. A case in point is the following example of a student performance, in which non-realized structures are marked in grey:

> *Long ago there lived a fox who I guess loved to eat. One day he saw some grapes [that hung there] up on the tree. He had been waiting for weeks and this time he was determined to get them. [Since the first time] The first time he saw them he thought [if…] they were beautiful and thought they would be very very, very tasty. Cause they looked … and stuff. He said he would be the happiest fox if he ate them. After waiting for two weeks or so he decided to jump and try to get them but he fell, he failed [and hurt himself]. So he tried again and again but he failed. And then he came to the realization that getting those grapes will never happen so he just gave up and he started hating those grapes. [If…] And he said he would never eat them even if they were served on a golden plate.*

This student, who received an overall score of 100 percent on the oral narrative test, avoided 10 structures, i.e. 42 percent of the target features. In the first part of the student's performance given above ('The fox and the grapes'), the five structures seem to have been replaced quite naturally. *The grapes that hung there* was replaced by the circumlocution … *some grapes up on the tree*. *The first time…* occurred instead of *Since the first time*, which was in fact done by many of the participants. This might be due to the visual support of the video containing the words *the first time*, where students were expected to fill in *since*. In the case of *hurt*, the student apparently replaced it by *failed*. Although this is not a synonym for *hurt*, it matches the visual

support showing the fox feeling dizzy, and therefore can be claimed not to be a case of deliberate avoidance. Finally, regarding the two missing *if*-sentences, it can be argued that they were left out due to redundancy. The sole purpose of including a total of six *if*-sentences in the stimuli was to elicit a minimum of three responses from each subject. Clearly, this student's performance is proof of flexible language use in the case of replaced and omitted target structures. However, this is also the case for replacement that occurred in lieu of non-target features, which resulted in structures even more complex than the language provided in the stimulus, such as *he was determined to get them* and *he came to the realization that*.

While participants scored lowest on unreal conditionals (13 percent incorrect productions as compared to 3 percent and 2 percent in the case of irregular past and *for/since*), avoidance behavior occurred more frequently for the features irregular past and *for/since* (45 percent each as compared to 38 percent in the case of unreal conditionals). A Pearson correlation between the number of replaced structures and the success rate shows no significance ($r = .181$, $p = .27$). While a negative correlation would have indicated a relation between weak performance and increased replacement behavior, results seem to suggest that the latter does not appear to be a deliberate means of circumventing seemingly difficult structures. In light of the co-occurrence of alternative wordings with highly flexible language use, it is argued that the 91% of correctly produced structures validly reflect implicit knowledge despite avoidance behavior being disregarded in the calculation.

6.2 The impact of extramural English

Another aim of the study was to explore the potential impact of out-of-class use of English on the development of implicit and explicit knowledge. In the present section, results as to the relationship between the two types of knowledge and levels of exposure will be reported. As can be seen in figure 2 the vast majority of participants, 87 percent, had only been to an English-speaking country for up to four weeks. The use of extramural English in the students' home country Sweden, however, mostly begins very early, at the age of 8-13 years. For 10 and 14 students respectively, exposure to TV and movies even started at the age of 7 or earlier (see figure 3)[3]. Indeed, many of the television programs in Sweden are in English, and already younger children, who cannot read, are exposed to the sound of the English language (Sundin 2000: 154). As seen in figure 4, of the five types of extramural English activities – 'TV',

[3] Since not every student responded to every item, the number of responses for Figures 3 to 5 do not always add up to 39.

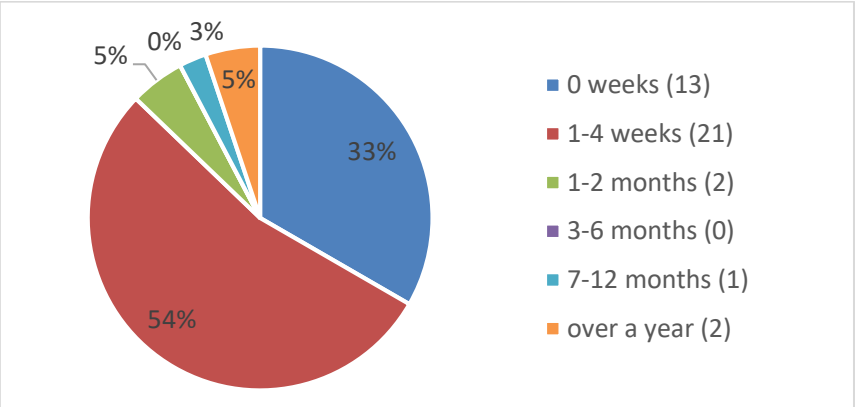

Figure 2 Amount of time spent in an English-speaking country

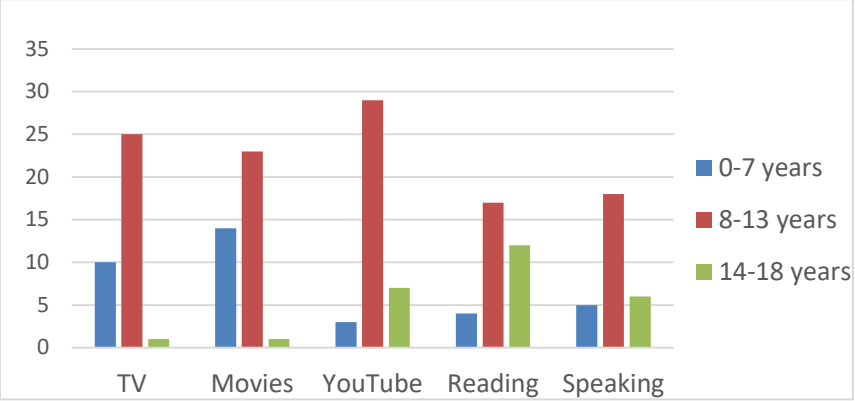

Figure 3 Starting age according to type of extramural English activity

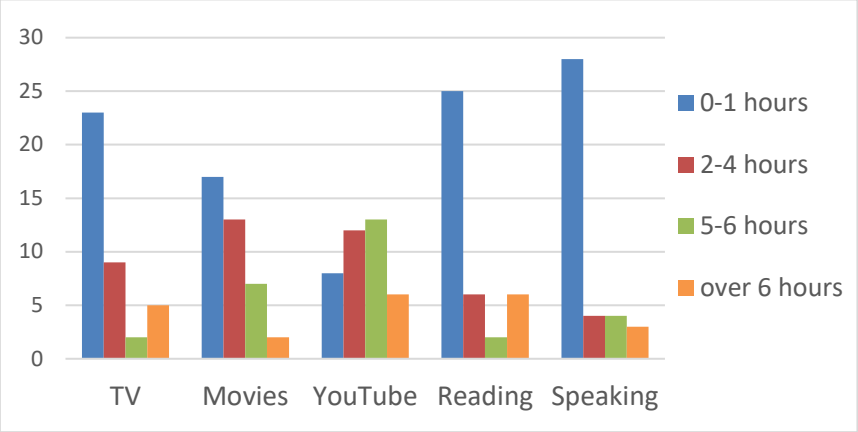

Figure 4 Weekly amount of extramural English according to type of activity

'movies', 'YouTube', 'reading' and 'speaking' – most time is spent on watching videos on YouTube in English, which half of the pupils do over 5 hours a week. TV and movies are the second most popular: 9 and 13 pupils respectively indicated that they watched movies and TV

in English a minimum of two hours or longer a week, which is comparable to a study conducted by Sundqvist, who reports about 4 hours of TV consumption a week for 15-16 year-old Swedes (2009: 117). As indicated by the Swedish Media Council, exposure including TV, movies, use of the mobile phone, the internet and video-gaming starts early and becomes even more intense during teenage years (2017: 7-8). Reading and speaking in English, albeit less common than exposure to audiovisual media, is done by about 25 out of 39 pupils for at least two hours a week, which is a considerable amount if done regularly.

While overall the data indicate a very positive influence of EE on the development of implicit knowledge, the amount of time that participants had spent in an Anglophone country did not correlate significantly with implicit knowledge (r = .134, p = .415). The same finding is reported in Philp (2009: 212), who attributes the unclear relationship between knowledge and length of residence to the limited time that students had spent in the English-speaking country. In Flege and Liu (2011), effects on morphosyntactic knowledge are reported to be apparent only after several years of residence. Likewise, the starting age of out-of-class use of English showed no significant correlation with implicit knowledge (r = .077, p = .641). It can perhaps be argued that while some students had been exposed to English earlier than others, this contact might not have been intensive enough to have had an effect on language attainment. Results show that it is rather the amount of input per week, i.e. the intensity and regularity of EE, that has a strong impact on implicit knowledge: The overall amount of weekly EE correlated significantly with implicit knowledge (r = .388, p = .015). Regarding the individual input types, it is the amount of time participants spend watching TV (r = .373, p = .019) and speaking English (r = .323, p = .045) that were seen to have a significant correlation with implicit knowledge. Surprisingly enough, the input types ‘YouTube’, ‘movies’ and ‘reading’ did not show a correlation with implicit knowledge (r = .167, p = .309; r = .022, p = .895; r = .117, p = .477). While it is somewhat unclear why watching YouTube and movies does not have the same effect as watching TV, it might be that the type of audiovisual input and the quantity and quality of language it provides plays a significant role here. If the target population primarily watches gaming videos, for instance, the input might be denser in visuals than in language and thus be inferior to a documentary or a news report seen on TV. In terms of the positive correlation between speaking and implicit knowledge, it is clear that this type of language use is distinctive from many other EE activities since it requires and promotes productive rather than receptive skills. In addition, in most cases, speaking implies being involved in a conversation, which makes learners encounter and try out new forms on which they receive feedback by the interlocutor (Long & Robinson 1998: 23).

Finally, while there was no significant correlation between explicit knowledge and EE (r = .065, p = .696), specific types of EE seem to have an impact on overall morphosyntactic knowledge as measured by the ONT, UGJT, and MKT(2). The starting age of watching YouTube (r = .419, p = .008) and the amount of time spent weekly speaking English (r = .349, p = .029) yielded a significant correlation with such overall knowledge. This finding, which shows that not only implicit but also explicit knowledge is positively impacted, could be taken as an indication that the two types of knowledge represent two interrelated sets of competences, rather than two distinct systems. Similarly, Philp observes that students who performed best on implicit and explicit measures taken together were also the ones who reported greatest use of L2 English in everyday life (2009: 212).

While there is no doubt that the Swedish population is highly proficient in English when compared to other European nations (Education first 2017) – which is commonly claimed to be the result of early and high exposure to English through the media (Bolton & Meierkord 2013: 96) – there has been no prior study that investigated implicit vs. explicit knowledge of Swedish learners of English. The present study thus is the first one to propose that Swedish learners have significantly higher levels of implicit than explicit knowledge, and that this result seems to be related to extramural English. However, it remains unclear whether EE fosters implicit knowledge, or whether higher levels of implicit knowledge encourage students to make use of EE. In addition to the issue of causality, the development of implicit knowledge certainly is a multifactorial process, with instruction constituting another factor that plays an important role in the type of knowledge being constructed.

6.3 The impact of instruction

Data collected in relation to the type of instruction as experienced and reported by the students should provide deeper insights into the learning environment in question. In what follows, the seemingly dominant didactic approach taken by the students' teachers will be interpreted in light of the two types of knowledge.

For grades 1-3, the majority of students, 69.2 percent, indicated a fluency-based L2 English classroom. For years 4-6, the English classroom was reported as fluency-based by 46.2 percent of the participants and as both fluency- and accuracy-directed by 33 of the learners. For years 7-11, nearly 60 percent of the students reported a focus on the combination of both aspects (see figure 5). Considering these results, it seems that although the English classes that the participants attended were largely communicative and fluency-based (in particular in grades 1-6), it did not preclude focus on grammar. Especially in the higher grades 7-11, instruction seems

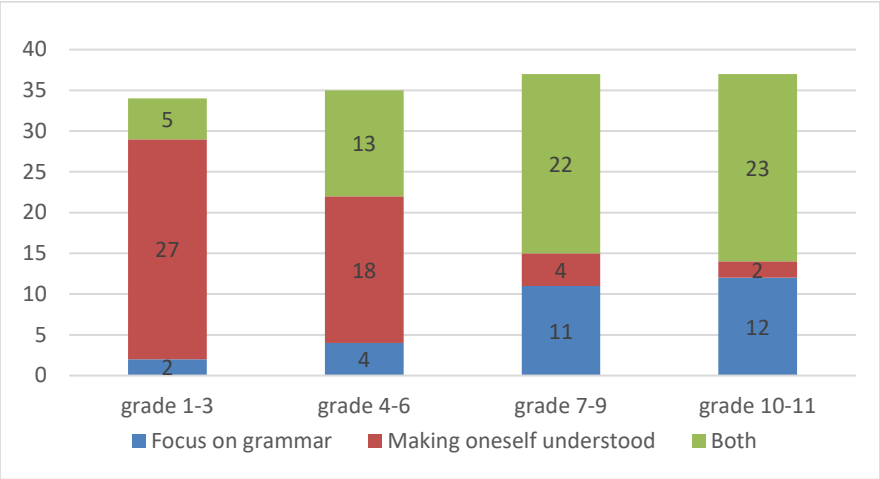

Figure 5 Self-reported type of instruction according to *level of instruction*

to have been directed at the development of communicative competence integrating a focus on accuracy. The extent to which focus is directed at accuracy could not be ascertained from the collected data.

The second item focusing on instruction asked students at what level individual grammatical structures were introduced. However, the data that was obtained from it should be treated with caution, since students struggled to answer it, claiming not to know what the features were. This insecurity, combined with the replies to the type of instruction, suggests that English classes attended by the participants relied on a fluency-based approach to teaching rather than on explicit grammar instruction. One student noted the following on their questionnaire: "I'd like to point out that I speak english [sic] fluently, although I've never learned the proper terms for all of the uses of words, never having had a need, nor an interest. Honestly, the Swedish terminology escapes me as well". Interestingly, this comment hints at the acquisition of L2 English in Sweden being perceived as similar to the naturalistic L1 learning. This view was also shared by English teachers and other students who took part in a discussion upon the completion of the questionnaire. It was argued that given that students are frequently exposed to English prior to the start of instruction, teachers build on this knowledge through a communicative approach to language teaching that prioritizes vocabulary learning and free language production at the expense of explicit grammar instruction. This report seems to be in line with studies investigating Swedish teachers' practices and beliefs (e.g., Vasiljeva 2007: 20; Petersson 2016: 21).

Despite the fact that no causal relationship between the type of instruction and the dominant type of knowledge can be expected, previous research points out their potential interplay. Multiple studies trace the dominance of explicit knowledge back to form-based

teaching and minimal meaning-based exposure (Macrory & Stone 2000; Elder & Ellis 2009; Zhang 2015). On the other hand, Philp puts forward the idea that the high levels of implicit knowledge among Malaysian students might be due to their embedding in a "multilingual environment in which English played a strong role in education and business contexts" (2009: 214). Similarly, the students' high levels of implicit knowledge, relatively low levels of explicit knowledge and poor command of metalinguistic terms might be associated with a communicative approach to teaching that prioritizes fluency over accuracy.

6.4 The implicit-explicit interplay

As to the interplay of the three tests used in the study, both the levels of implicit and explicit knowledge as well as the two separate measures of explicit knowledge can be compared to one another. To begin with, no statistically significant correlation was found between implicit and explicit knowledge as constituted by analyzed and/or metalinguisic knowledge (see table 4).

Table 4 The correlation between implicit knowledge and explicit knowledge according to measure

Type of knowledge correlated with implicit knowledge	Measures used	*r*-value	*p*-value
(1.a) Analyzed	UGJT, MKT(2)	.259	.111
(1.b) Analyzed	UGJT	.313	.053
(2) Explicit (metalinguistic & analyzed)	UGJT, MKT	.307	.055

Nevertheless, hypothesis 4 can partly be confirmed. Although implicit knowledge seems to dominate, the participants demonstrated a considerable degree of explicit knowledge, in particular as tested by the UGJT. As Rebuschat points out in his comments on the presence of both conscious and unconscious knowledge, "this is to be expected given that people are likely, in any learning scenario outside of the experimental laboratory, to become aware of some of the knowledge they have acquired" (2013: 613). Likewise, Cinciala and Scheffler found that Polish learners of English have explicit knowledge of the implicitly used structures of tense and aspect, modals, and pronominal forms (2011: 13). They conclude that rule-based knowledge is fundamental for the learning process in general, allowing learners to understand input and their own output and giving them a sense of security and achievement (Cinciala & Scheffler 2011: 22). Whereas this study thus assumes explicit knowledge to serve as the prime basis for learning, it is unclear to what extent this claim holds true for the present investigation. Considering the fluency-based approach to teaching and the high levels of EE as reported by the participants, it seems to be equally likely that implicit knowledge serves as a basis for the

development of explicit knowledge, rather than vice versa. However, these considerations on the interplay of the two types of knowledge are mere speculations and clearly need to be further investigated in future research.

The interplay of different measures of explicit knowledge also deserves further consideration. Hypothesis 5, which proposed that the different measures of explicit knowledge would show a significant correlation, can be confirmed. A significant correlation could be found between all the measures of explicit knowledge (see table 5). The significant correlation between UGJT and MKT(2) underlines the fact that both measures gauged analyzed knowledge. In addition, there also seems to be a relationship between analyzed knowledge (UGJT) and knowledge of technical terms (MKT(1)), which corroborates Ellis and Hans' claim that explicit knowledge "may be preciser, clearer and better-structured if the learner has access to metalingual terms" (1998: 5-6). MKT(1) and MKT(2), too, show a significant correlation, which could be taken as an indication that the metalinguistic knowledge test, albeit bipartite, taps into a coherent type of knowledge.

In sum, the results discussed in this section offer support to the claim that despite the tripartite nature of the measures of explicit knowledge implemented in the present study (UGJT, MKT(1) and MKT(2)), they seem to tap into a coherent type of knowledge. Moreover, explicit knowledge appears to be unrelated to the measure of implicit knowledge, i.e. the oral narrative test.

Table 5 The correlation between different measures of explicit knowledge

	UGJT	**MKT(2)**
MKT	$r = .694, p < .05$	-
MKT(1)	$r = .697, p < .05$	-
MKT(2)	$r = .535, p < .05$	$r = .432, p = .006$

7. Limitations and outlook

The study reported in this paper has a number of shortcomings. While some are rooted in the limited scope of the study, others are based on erroneous items included in the test instruments.

Although the test battery was intended to tap into two distinct sets of knowledge, there is no guarantee for the collected data to be based on purely implicit or explicit knowledge. As indicated by Ellis (2005), "even if task conditions that inclined learners to use one type of knowledge in preference to the other could be identified, it would be impossible to construct

tasks that would provide pure measures of the two types of knowledge" (Ellis 2005: 153). The claim that the oral narrative test gauges memory capacity rather than implicit knowledge was partly mitigated by the time lag between reception and production in the oral narrative test used in the present study, Nevertheless, this predicament still exists and might have caused biased results (see section 5.4). In addition, the oral narrative test as designed by Ellis (2005) arguably taps into performance rather than competence, which is a factor that should not be taken lightly given that knowledge, implicit or explicit, might not be assessable based on the production of language in real-time. Therefore, the integration of an additional measure of implicit knowledge and a higher number of target structures would have allowed the triangulation of results and could have probed more carefully into contributing factors such as the degree of complexity and the stage of acquisition. Considering the learning experiences questionnaire, a wider range of types of exposure in the questionnaire would guarantee that all types of use of English outside school are reflected in the data. When it comes to the investigation of the type of instruction as experienced by the participants, more clear-cut results could have been drawn by a greater variety of items.

In terms of the MKT(2), a major lacuna is found in the faulty labelling of conditional and main clause. Nevertheless, since no participant was able to correctly name the two parts of the unreal conditional in MKT(1), the confounded labelling in MKT(2) is expected to not have impacted results (see appendix 10.5). Another shortcoming is constituted by question number four on the amount of exposure per week, where students could tick the case "0-2 hours a week" (see section 10.5), which should have been 1-2h in order to adjudicate between zero and minimal EE.

In sum, the present study is exploratory in nature and does not allow for generalizations to be drawn. Rather, the results and their implications that are put forward must be interpreted in relation to the specific context, learner population, and target structures of the experiments. Importantly, the finding of significant correlations between implicit knowledge and certain types of exposure does not imply that this type of knowledge was developed merely through EE: an equally important impact of the type of instruction on implicit knowledge is highly likely. Thus, the relative impact of the amount of exposure and the type of instruction remains unclear and should be subject to future research. A replication of the current study in a context providing less exposure, or with learners of alternative age groups would be extremely desirable.

8. Conclusion

This paper has reported the findings of an investigation into the levels of implicit and explicit morphosyntactic knowledge of Swedish learners of L2 English. The particular context of Sweden, which affords ample opportunities for EE use, has not yet been looked at in relation to implicit and explicit knowledge prior to this study. Once the levels of the two types of knowledge were determined, the aim was to identify the potential impact of a largely fluency-based learning environment on the construction of implicit and explicit knowledge.

Based on Ellis' study on the validity of measures of the two types of knowledge (2005), an oral narrative test, an untimed grammaticality judgment test and a metalinguistic knowledge test were conducted, which yielded rich results. Students scored significantly higher on the measure of implicit knowledge than on their explicit counterparts and were least successful in the completion of the metalinguistic knowledge test. The learning experiences questionnaire revealed high levels of EE, of which three factors showed a significant correlation with implicit knowledge: the total amount of EE ($p = .015$), the amount of watching TV ($p = .019$), and the time spent speaking English ($p = .045$). While the measures of implicit v. explicit knowledge seemed unrelated ($p = .055$), the different measures of explicit knowledge, UGJT and MKT, showed a significant correlation ($p < .05$).

Overall, the study suggests a very positive influence of high levels of EE on the development of implicit knowledge. The prevalence of a fluency-based approach to instruction might be seen to partially account for the students' lower levels of explicit knowledge. Nevertheless, the exact extent to which instruction influences the development of either type of knowledge still requires further research. Clearly, the current study is merely exploratory in nature and does not allow for generalizations to be made, which is why future research with a similar focus is needed. Indeed, a replication of the same study in other contexts would allow for fruitful comparisons between different learning environments and learner populations.

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Material used for the creation of the videos

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Appendix

A.1 Script

The fox and the grapes

Long, long ago, there lived a fox who loved to eat. He lived close to a vineyard. **For** weeks, he had been staring at the lovely grapes that **hung** there. **Since** he first saw the grapes, he thought: "Oh I am sure that **if I had them in my mouth, they would melt**. **If only I could reach them, I would be the happiest fox in the world**". One day, he **felt** like he had been waiting **for** ages, and he jumped to reach the grapes. However, he **fell down** and **hurt** himself badly. A week later, he jumped again, but again the grapes were far higher than he had thought. The fox **gave up** and said: "Those grapes surely must be sour". **Since** that day, he thought: "**If someone gave them to me, I would refuse. Even if they were served on a golden plate, I would not eat them**."

Adapted from Kidsgen: Fables and fairytales.
http://www.kidsgen.com/fables_and_fairytales/fox_and_grapes.htm (10 Dec. 2016)

Money can't buy everything

Nick was a 10 year old boy. **Since** the day that Nick's father **got** a new job, he rarely spent time with his son. He has been working as a CEO of a big company **for** three years now. He **came** home after Nick had gone to bed, and **left** the house the next day without playing with his son. One day, Nick was surprised to see his father at home in the afternoon. That had not happened **for** a long time! His dad explained that his company had been on strike **since** lunchtime and that he **caught** an early train home. Nick asked his dad how much he earned in an hour. His father was surprised by the question and did not want to answer. When Nick asked again, his father **gave up** and said that he earned around $25 per hour. Nick **ran** out of the room and **came** back with his savings. "Dad, I have $50 in my piggy bank. **Would you spend two hours with me if I gave you the money? If I gave you $50, would you mark me in your schedule?"**

Adapted from Kids World Fun: A portal for kids, parents and teachers. http://www.kidsworldfun.com/money-cannot-buy-everything-story.php (10 Dec. 2016).

A.2 Learning Experiences Questionnaire

Questionnaire – Part 1 (English profile)

This questionnaire consists of 3 parts and contains questions about your exposure to English and your grammatical knowledge. You have as much time as you need.

1) Tick the length of your longest stay in an English-speaking country.

1-4 weeks	O	7-12 months	O
1-2 months	O	Over a year	O
3-6 months	O		

2) At what age did you <u>start</u> doing these activities outside of school? Tick the cases that correspond.

	Age 0-7	Age 8-13	Age 14-18
Watching TV in English	☐	☐	☐
Watching movies in English	☐	☐	☐
Watching youtube videos in English	☐	☐	☐
Reading in English	☐	☐	☐
Speaking English	☐	☐	☐

3) At what stages of your education were you taught what kind of grammatical features, if any?

	If-sentences	irregular past tense	*For/since*
Lågstadiet	☐	☐	☐
Mellanstadiet	☐	☐	☐
Högstadiet	☐	☐	☐
Gymnasium	☐	☐	☐

4) How much time do you usually spend on these out-of-school activities <u>a week</u>? Tick the cases that correspond.

	0-2 hours	3-4 hours	5-6 hours	more than 6 hours
Watching TV in English	☐	☐	☐	☐
Watching movies in English	☐	☐	☐	☐
Watching youtube videos in English	☐	☐	☐	☐
Reading in English	☐	☐	☐	☐
Speaking English	☐	☐	☐	☐

5) What is/ was more important in your English lessons?

	Grammatically correct speaking and writing	Making oneself understood	Both
Lågstadiet	☐	☐	☐
Mellanstadiet	☐	☐	☐
Högstadiet	☐	☐	☐
Gymnasium	☐	☐	☐

Questionnaire - Part 1 (Grammar test)

For each sentence, indicate

- whether the underlined words are grammatically correct (✓) **or** incorrect (x), and
- whether you used the grammatical rule (R) **or** feel (F) in order to say so.

	Correct (✓) or incorrect (x)?	**Rule (R) or feel (F)?**
Harry Potter gotted the key to the secret chamber.		
I know that if she was a good girl, she would get more presents for my birthday.		
Sue has been waiting for her boyfriend since 20 minutes.		
Yesterday I hung up a new picture in my apartment.		
I gave anything to go on vacation if I didn't have to take the final tests.		
The horse felt that something was wrong.		
If I did all my homework, I wouldn't have any time for playing.		
He has been here for 9am.		
This is where I really hurt my arms and fingers.		
If I had been a teacher, I did everything very differently from my teacher.		
The librarian gave me the key to the basement.		
I leaved the living room and decided to continue reading in my room.		
Jimmie works as a school teacher since January 2001.		
Fortunately, I catched the last train home.		
If I would owned an island, I would celebrate my birthday by the sea and invite about 150 people.		
I runned to the bus stop, hoping to still be able to catch it.		
Earlier on, my mother come in without knocking.		
My grandparents have been married for 40 years.		
The next minute the horseman fell from the horse.		

Once you have finished, raise your hand and you will receive part two of the questionnaire.

Questionnaire - Part 2 (Grammar test)

For each sentence, tick

- whether it is grammatically correct (✓) **or** incorrect (x), and
- whether you used the grammatical rule (R) **or** feel (F) in order to say so.

	Correct (✓) or **incorrect (x)?**	**Rule (R)** or **feel (F)?**
According to Mrs Donaugh, the family would not have yet another Au Pair even if she expected another child.		
Last year I got a new car for my birthday.		
When I left the house it was already dark outside.		
People have been listening to the radio for a long time.		
On my trip to northern Sweden I nearly caught a cold.		
Nina told me that if I gave her a pencil, she would invite me for lunch.		
My sister wanted to have a piece of cake, too, and ran down the stairs.		
Since the postman started drinking tea at my neighbor's, he is always late.		
The whole family came to the living room and we had a nice chat.		
If I would be a teacher, I would never assign any homework and I would never teach grammar.		
I called Tom, we talked for a minute and he hanged up without saying good-bye.		
I had lived in New York for my childhood.		
At first, Harry Potter feeled very uncomfortable to sit next to Hagrid.		
I climbed the ladder to reach higher and falled down.		
If I had a bookshop, I would have managed it excellently.		
My brother has been away since six weeks now.		
Last winter she went skiing and hurted her knee badly.		
However, the thought of grandma's cake given me joy and I decided to have a piece.		

A.4 Metalinguistic Knowledge Test (1)

1) Fill in the blanks with the right verb form.

	Past tense	Conditional Simple
to hang*		
to feel		
to fall		
to hurt		
to give		
to get		
to leave		
to catch		
to run		
to come		

*in the sense of “to hang a picture on the wall”

2) What word class do “for” and “since” in the context of the following sentences belong to?

I have been living in Paris <u>for</u> three years.
I play volleyball <u>since</u> the age of six.

Adjective O
Preposition O
Adjunct O
Subject O

3) Name the two parts of the sentence:

If I would own an island, I would celebrate my birthday by the sea.

_____ clause _____ clause

Once you have finished, raise your hand and you will receive the third and final part of the questionnaire.

A.5 Metalinguistic Knowledge Test (2)

Questionnaire – Part 3 (Grammar test)

Each of the sentences 1-6 contains a grammatical mistake. For each sentence, tick the right explanation(s) for <u>why it is grammatically incorrect</u>.

a) If I would own an island, I would celebrate my birthday by the sea.
(main clause)[4] (conditional clause)[4]

"Would + verb" is very rarely used in the conditional clause. O
The conditional clause requires present tense (= "celebrate"). O
The conditional clause requires past tense (= "celebrated"). O
The main clause requires past tense (= "owned"). O

b) I gave anything to go on vacation right now if I didn't have to take the final tests.
(conditional clause)[4] (main clause)[4]

The main clause requires past perfect tense (= "had not taken") O
The main clause requires "would + verb" (= "would not take"). O
The conditional clause requires present tense (= "give"). O
The conditional clause requires "would + verb" (= would give"). O

c) I saw that I was late and run to the bus stop.

"run" is the past tense form. O
"run" is the present tense form. O
"run" needs to be in past tense. O
"to run" is an irregular verb. O

d) I climbed the ladder to reach higher and falled down.

"to fall" is an irregular verb. O
The suffix –ed is only used for regular verbs. O
"falled" is the past tense form. O
"falled" is the past participle. O

e) I have known my best friend since three years.

"three years" is a specific point in the past, which is not expressed by "since". O
"three years" is a duration of time, which requires "for", not "since". O
"three years" is a short period, which requires "in", not "since". O
"since" requires past tense, not present perfect tense. O

f) She has been very generous for the day she won the lottery.

"the day she won the lottery" is a specific point in the past, which requires "since". O
"for" requires past tense, not present perfect tense. O
"the day she won the lottery" is a duration of time, which requires present perfect. O
"the day she won the lottery" is a very unspecific moment, which requires "since". O

[4] The faulty labelling of *conditional* and *main clause* in the two example sentences a) and b) as well as in the options provided was unintentional. However, since no participant named the two parts of the *unreal conditional* in item 3 of MKT(1) correctly, this flaw in test design is argued not to have affected student responses.

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IMPRESSUM:
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