Investigating language aptitude in the success of adult second language acquisition

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ABSTRACT

The present study was conducted by using mixed methods design to investigate the role of language aptitude in second language acquisition (SLA). The quantitative method involved Hungarian adults (N = 27) of two kinds of schools: a technical school and three different universities. These adults participated in completing the aptitude test called Hungarian Language Aptitude Test (HUNLAT). The qualitative part included an in-depth interview, which was conducted with six participants mainly focussing on their learning habits in order to examine if there is any correspondence between aptitude and language learning habits in this sample. Within this sample, males achieved significantly higher scores on the Grammar analysis task and older students scored significantly higher on three tasks: additionally, they scored significantly higher on the total score of the HUNLAT. Furthermore, those students who scored high on the aptitude test regard themselves to be successful and those who scored low regard themselves less successful language learners. The major pedagogical implication that can be drawn from this particular research is that there are many constructs that may influence language aptitude including language learning habits, motivation, and language learning strategies; thus, EFL teachers may reconsider the role of this construct in SLA.

KEYWORDS

SLA, aptitude, HUNLAT, adult learning, mixed methods

INTRODUCTION

Language aptitude as an individual difference (ID) is an extensively researched construct in the area of second language acquisition (SLA) and cognitive psychology (e.g., Carroll, 1981; Parry & Stansfield, 1990; Wen & Skehan, 2011). SLA researchers (e.g., Kiss & Nikolov, 2005; Ottó, 2002) investigated aptitude and there were several attempts to establish predictors of language learning success and language achievement in the form of language aptitude tests. The question why successful language learners can master their second language (L2) seemingly quickly and easily and why unsuccessful students are inclined to face obstacles during their language learning also seems to be a challenging issue. Therefore, the attempt to find and interpret the connection between aptitude and learning habits of the participants is the aim of the research. Mixed methods design was employed in this research to explore the language aptitude of the participants and to gain deeper understanding of their learning habits.

One of the most interesting aspects of SLA research is to detect the main differences between learners who can master their L2 more easily without much effort and those who constantly face difficulties and obstacles. The rationale for conducting research on aptitude lies in the fact that cognitive constructs in SLA – such as aptitude – are considered to be more strongly correlated with the success of SLA as compared to affective constructs such as motivation (Marinova-Todd, Marshall, & Snow, 2000); therefore, in the present research paper, the focus will be on a cognitive construct that may significantly contribute to language achievement and success in SLA. Additionally, in their empirical study, Ehrman and Oxford (1995) have shown that within the ID variables, aptitude measures – for example, the Modern
Language Aptitude Test (MLAT; Carroll & Sapon, 1959) – were the ones that most strongly correlated with language proficiency.

Consequently, the aim of this research endeavour is to examine the possible relationship between aptitude and language learning habits of the selected participants since in spite of the comprehensive research in SLA, little is said about aptitude and learning habits. After defining the research niche, two research questions were formulated. In an attempt to find answer to two research questions, mixed-methods study was conducted involving an aptitude test and in-depth interviews.

**REVIEW OF LITERATURE**

Previous language aptitude research included the investigation of verbal working memory and phonological working memory and their role in language aptitude (Kormos & Sáfár, 2006, 2008). Miyake and Friedman (1998) claimed that working memory and language aptitude should be considered as being the same constructs (working memory as language aptitude hypothesis). However, the author views the construct of language aptitude as a more complex one involving more than what working memory entails. Miyake and Friedman proposed – along with Wen and Skehan (2011) – that when trying to define language aptitude, researchers should consider working memory to be the central component of language aptitude, which seems to be a convincing viewpoint. The purpose of this study is to examine the interplay of language aptitude and learning habits since there is little research concerning the relationship of the two.

Since there are multiple interpretations of aptitude (e.g., Oxford, 1990; Sáfár & Kormos, 2008; Wen & Skehan, 2011), before testing the above-mentioned hypothesis, the conceptualisation of aptitude that was employed throughout this study is to be elaborated first. For example, as Kormos and Sáfár (2006) pointed out, language aptitude as a factor is stable and cannot be changed easily from one day to the other; accordingly, language aptitude as such forms a continuum, not a dichotomy which would only differentiate learners with or without talent for languages. Moreover, Csöllő and Kormos (2004) explained that this construct cannot simply foretell if a learner is able to learn a foreign language or not, but it may foretell the rate of progress the individual will probably make.

Oxford (1990) claimed that the dictionary definition of language aptitude is the following: “a natural tendency or inclination; an ability, capacity, or talent; a quickness to learn or understand” (p. 68). According to Ehrman (1998), there is a “kind of aptitude-personality nexus that consists of cognitive flexibility, tolerance of ambiguity [. . .] and ability to make use of random-access strategies.” (p. 61). The conceptualisation of language aptitude as proposed by Wen and Skehan (2011) is as follows: high-aptitude students are talented in their abilities and skills of acquiring new linguistic items (i.e., they acquire these features relatively easily and faster than others). As another example of the interpretation of language aptitude presented by a researcher in the field, “language aptitude is what language aptitude tests measure” (Dörnyei, 2005, p. 35). This post hoc approach facilitates the formulation of conceptualisations based on aptitude tests. Thus, along with the above-mentioned modern revised definitions, this paper is following the traditional Carrollian approach (1981, 1990) which conceptualisation was formed after creating and validating the MLAT (Carroll & Sapon, 1959).

According to Carroll (1990), the four components of language aptitude are the following: phonetic coding ability – the ability to identify unfamiliar sounds –, inductive language learning ability – the ability to identify rules and patterns –, grammatical sensitivity – the ability to recognise the grammatical functions of words – and memory abilities or rote learning ability – the ability to remember associations. Consequently, the present paper is going to interpret language aptitude as it is defined by contemporary researchers and its components are the ones proposed by Carroll.

**Measuring aptitude**

In order to explore how quickly and easily one can learn foreign languages and to predict the likelihood of the success of learners, several attempts have been made to design aptitude tests. The most well-known instruments are the Modern Language Aptitude Test (MLAT; Carroll & Sapon, 1959), and the Pimsleur Language Aptitude Battery (PLAB; Pimsleur, 1966). Within these instruments, the MLAT is the most influential and it has several adaptations (Ottó & Nikolov, 2003). For example, as mentioned by Ottó and Nikolov, there is a version designed for primary school students (EMLAT; Carroll & Sapon, 1967), and a version for native speakers of Japanese (LABJ; Sasaki, 1993). Besides, there are also tests designed for the American military (DLAB; Petersen & Al-Haik, 1976; VORD; Parry & Child, 1990).

There are two aptitude tests designed to measure Hungarian learners’ language aptitude and the present research used the aptitude test called Magyar Egységéteselvörzés Teszt or Hungarian Language Aptitude Test (MEYET or HUNLAT; Ottó, 2002). This is the only aptitude test to measure Hungarian students’ aptitude besides INYET 6 (Kiss & Nikolov, 2005), which is based on the tasks of the HUNLAT, but INYET 6 is particularly designed for 12-year-old test takers. Since the intention was not to measure the aptitude of children but adults, the HUNLAT was chosen as the instrument to measure aptitude in this research. The strength of these instruments is that these are validated by various researchers in the field, but a notable weakness of these aptitude tests is that researchers did not conceptualise the construct of language aptitude before designing these instruments. As it highlighted by Dörnyei (2005), designing an aptitude test and then formulating the definition of language aptitude may lead to various non-identical – and even contrasting – conceptualisations of
aptitude. In this respect, construct validity in these tests may be questionable to a certain extent.

Research questions

After reviewing the relevant literature and establishing the research niche, two research questions were formulated. This research paper is going to present the findings of a small-scale study on the possible relationships between aptitude and language learning habits of the selected participants. The research attempted to find answer to the following research questions:

1. What age and gender differences seem to be in the characterised aptitude of the selected sample?
2. What kind of learning habits do high aptitude and low aptitude participants have?

The researcher proposed the following hypotheses prior to the research: there are significant age and gender differences at least in one component of the aptitude test and there is a difference in the learning habits of high-aptitude and low-aptitude participants.

METHODS

In order to find the answer to the research questions, mixed-methods design was applied. The reason for choosing mixed methods is that – as it is emphasised by Dörnyei (2016) – the strengths of one method can be employed to overcome the weaknesses of the other. The quantitative part of the present study includes the HUNLAT. The qualitative part contains an in-depth interview devised to obtain information about the language learning habits of the students. Triangulating the data of the aptitude test scores and the in-depth interview guide is useful in the attempt to gain better insight into the phenomenon of language aptitude.

Participants

The participants of this research (N = 27) were chosen from four Hungarian institutes except for the eldest participant, who is not studying anymore, but is still an active user of English and thus included in the analysis because the aim was to study a more diverse sample. There were altogether 6 males and 21 females, and their age ranged from 18 to 59 (M = 22.59, SD = 7.68). The first language of the participants is Hungarian, and their second language is English. All of the 27 participants took part in completing the aptitude test and six of them were asked to participate in the in-depth interview. Convenience sampling was applied, and participants were chosen from four different institutes because the intention was to see multiple variations of possible scores (i.e., diversity of the selected sample). The most important background information of the selected six interviewees can be seen in Table 1.

Instruments

The HUNLAT as the quantitative instrument employed is to be discussed in detail in the following subsection. After examining the HUNLAT (see Appendix A), the qualitative instrument, an in-depth interview is going to be described (see Appendix B).

HUNLAT. As it was mentioned above, the instrument used in this study to measure Hungarian learners’ language aptitude is called Hungarian Language Aptitude Test (HUNLAT; Ottó, 2002). This aptitude test consists of four tasks in which there are altogether 80 items, 20 items in each task. The instrument was piloted with technical school students and university students. 16 technical school students filled in the aptitude test and one additional student was asked to fill it in with think-aloud protocol. Two university students were also asked to fill it in with think-aloud protocol.

The first task is called Hidden sounds, this measures the component called phonetic coding ability (Carroll, 1990) of the students in which they have to identify sounds that are unfamiliar to them. This task type is similar to that of MLAT called Phonetic script (Ottó & Nikolow, 2003). The second task is called Grammar analysis. This is the part that measures students’ inductive language learning ability (Carroll, 1990), in which test takers have to identify rules and patterns. This task type is adapted from Pimsleur’s PLAB.

| Pseudonym | Age | L exam certificate | Education and profession | Ls and perceived level of proficiency | HUNLAT score (Max. = 80) |
|-----------|-----|--------------------|--------------------------|--------------------------------------|-------------------------|
| Benpegúz  | 27  | Eng.: C1ESP, B2German: B2 | University student (second lieutenant) | Eng.: C1German A2French A1 | High (73) |
| Mária     | 22  | –                  | Technical school student (hairdresser) | Eng.: A2+Dutch A1 | Low (32) |
| Attila    | 24  | Eng.: B2 + C1Slovakian: B2 | University student (Eng. language tester, translator, and interpreter) | Eng.: C1–C2Slovakian: B1German: A2Italian A1 | High (78) |
| Ilona     | 59  | –                  | Housewife                | Eng.: A1+German: A1 | High (48) |
| Edgár     | 26  | Eng.: B2Russian: B2 | University student (works in catering) | Eng.: B2Russian: C1German: A1 | High (48) |
| György    | 23  | Eng.: B2 (written part) | University student (tourism) | Eng.: B2-German: A1 | High (53) |

Note. L: language; Eng.: English; ESP: English for Specific Purposes.
Language analysis task. The third task is called Words in sentences. This task measures the ability to recognise the grammatical functions of words, thus the grammatical sensitivity component (Carroll, 1990), and it is adapted from the Words in sentences part of MLAT (Ottó & Nikolov, 2003). The fourth task is Vocabulary learning, which measures rote learning ability (Carroll, 1990), where students have to remember word associations in a widely unknown language. The task is based on the exercise called Paired associates in MLAT (Ottó & Nikolov, 2003).

**In-depth interview guide.** A semi-structured interview guide was devised by the researcher with mostly open-ended questions focussing on students’ language learning habits. This particular format was applied because according to Wallace (1998), this format creates control and freedom at the same time for developing the instrument. The purpose of this instrument was to gain qualitative data about the possible constructs that may have a relationship with aptitude, for example, emotions, motivation, and habits of the learners. I was also interested to see if they consider themselves to be conscious or unconscious learners. The qualitative part included six participants who were chosen based on easy accessibility after they have completed the aptitude test. This interview guide has also gone through piloting after which no major modifications were made. The interview guide was refined and finalised.

The interview in each case lasted from 35 to 45 minutes. The interview guide that the researcher has compiled contains altogether 28 questions (see Appendix B). The first set of questions intended to investigate the personal background of each participant, information about their language learning, and their motivation towards learning these languages. In the next set of questions, they were asked about their learning habits to elicit data that can be connected to their scores on the aptitude test.

**Data collection procedures**

Measuring students’ aptitude took approximately one hour in each occasion. The completion of the second, third, and fourth task of the aptitude test within the three think-alouds were recorded with the participants’ consent for later analysis of the cognitive processes, but are not analysed in the present paper. The interview was conducted on a one-to-one basis with each of the six participants in Hungarian, the mother tongue of the interviewees and the interviewer. Some of the interviews’ transcriptions were done on the spot during the interviews, some were recorded with the participants’ consent and later transcribed verbatim. One interview transcription was double-checked by member-checking after which no modifications were necessary in the transcript. The transcripts yielded a fairly rich database of approximately 6,000 words and the English excerpts are the author’s translations.

**Data analysis**

Descriptive and inferential statistics were calculated with the SPSS software version 22. As an internal consistency (reliability) measure, Cronbach alpha coefficient was calculated (see Table 2), and for each of the four tasks, the reliability coefficients are relatively high. After calculating the internal consistency value, no items were left out as even the lowest reliability coefficient is acceptable and exceeds 0.60. According to Dörnyei (2016), the Cronbach alpha coefficient can be lower due to the complexity of L2 acquisition processes, but there is only a problem when the scale does not reach 0.60. Consequently, the constructs within the aptitude test are considered to be a reliable.

In an attempt to answer the research questions, it was necessary to categorise students to two groups; those who have high aptitude and those who have low aptitude based on the scores on the aptitude test. For characterising the aptitude of participants, defining a cut-off score was indispensable. It was performed in a norm-referenced way: the average score was calculated, and then students who met the average (M = 48.48, see Table 3) or scored above the average were considered to be high aptitude scorers and those students who scored below average were regarded as low aptitude scorers. The reliability of this interpretation was also checked with cluster analysis in SPSS. Two groups were created with cluster analysis thus having students fall into either of the two categories. There were two instances where the researcher had to make a decision as to which category should students be assigned because they fall exactly in between the two categories. In these two instances, they were placed to the high aptitude category, though the cluster analysis put them to the low aptitude category. Considering the qualitative part, content analysis was used to code the emerging themes, establish patterns, and make interpretations (Dörnyei, 2016).

**Table 2. Reliability coefficients of the four tasks of the HUNLAT**

| Tasks of the HUNLAT         | N | Cronbach’s α |
|-----------------------------|---|--------------|
| Task 1 – Hidden sounds      | 27| 0.884        |
| Task 2 – Grammar analysis   | 27| 0.873        |
| Task 3 – Words in sentences | 27| 0.702        |
| Task 4 – Vocabulary learning| 27| 0.889        |

**Table 3. Descriptive statistics of the HUNLAT scales (N = 27)**

| Task                    | M  | Med | Mo  | SD   | Min | Max |
|-------------------------|----|-----|-----|------|-----|-----|
| Hidden sounds           | 11.96 | 12.00 | 12.00 | 5.18 | 4   | 20  |
| Grammar analysis        | 14.00 | 16.00 | 17.00 | 4.75 | 6   | 20  |
| Words in sentences      | 8.22 | 7.00 | 5.00 | 3.65 | 3   | 18  |
| Vocabulary learning     | 14.22 | 13.00 | 20.00 | 5.04 | 3   | 20  |
| Total score             | 48.48 | 48.00 | 38.00 | 15.18 | 24  | 78  |
The following two subsections are going to elaborate on the findings of the quantitative and qualitative part of the study. After this, the findings of the qualitative and the quantitative parts of the study are going to be linked.

### Quantitative results

The analysed descriptive and inferential statistics of the aptitude test are going to be discussed. This paper shall start with discussing the descriptive statistics of the scores on HUNLAT, presented in Table 3.

Paired samples $t$-tests were calculated to analyse the data gained from the aptitude test. The results of the paired samples $t$-tests show that there is a statistically significant difference between the mean values of Words in sentences and Grammar analysis, $t(26) = 6.78, P < 0.001$ (two-tailed) and between the mean values of Words in sentences and Vocabulary learning, $t(26) = 6.08, P < 0.001$ (two-tailed). Grammar analysis and Vocabulary learning show the highest mean values ($M = 14.00$ for Grammar analysis and $M = 14.22$ for Vocabulary learning), which probably means that for this sample, analysing phrases and word memorisation were the two easiest exercises within the four tasks. The most difficult task appeared to be Words in sentences as it can be seen from the lowest mean value ($M = 8.22$). Regarding previous research (e.g., Ottó & Nikolov, 2003; Sáfár & Kormos, 2008), Words in sentences, which measures grammatical sensitivity, is likely to be the most challenging part of the aptitude test. Furthermore, it is important to mention that nobody of the 27 participants could reach the maximum points in the Words in sentences task ($Max = 18$), whereas in the other three tasks at least one person has scored maximum points. Sáfár and Kormos’s results are very similar to the findings of this study: in their study, the control group ($N = 21$) and the experimental group ($N = 40$) both showed similar tendencies to the present sample: the highest mean score achieved was on the Grammar analysis task, the second highest on Vocabulary learning, while the lowest mean value was achieved on the Words in sentences task (Sáfár & Kormos, 2008).

The highest standard deviations are in Hidden sounds ($SD = 5.18$) and Vocabulary learning ($SD = 5.04$), whereas the lowest standard deviation can be seen in the scores of Words in sentences ($SD = 3.65$). The high standard deviation on Vocabulary learning can be interpreted as that there seem to be some students who managed to memorise the words quite well, but there were also some who did not. The low standard deviation along with its lowest mean value on the Words in sentences task can be interpreted as if almost every student managed to score relatively similar low on this task. Although the participants scored relatively high in this aptitude test – altogether, the mean value of the total scores is 48.48, which is 60.6% – nobody could actually reach the maximum of 80 points of the 27 participants. The highest total score on the HUNLAT was 78, and the lowest was 24.

In addition, the means of the achieved scores were calculated to see the differences in the scores based on participants’ age. Ottó and Nikolov (2003) also examined HUNLAT scores with regard to age differences. The results of the $t$-test are presented in Table 4 below. The present paper shall elaborate on the answer to the first research question in the following paragraphs. Students were grouped into two groups and the cut point was set to 22, this way there were 13 students at the age of 22 or above ($\geq 22$) and there were 14 students below 22 (<22). According to the independent samples $t$-test, the performance of the older students was higher on average ($M = 56.76$) compared to

### RESULTS AND DISCUSSION

The following two subsections are going to elaborate on the findings of the quantitative and qualitative part of the study. After this, the findings of the qualitative and the quantitative parts of the study are going to be linked.

### Table 4. Independent samples $t$-test between age differences on the HUNLAT

| Tasks            | Age | M     | SD | M     | SD | $t$-value | $P^*$ | df | Cohen’s $d$ |
|------------------|-----|-------|----|-------|----|-----------|-------|----|-------------|
| Hidden sounds    | ≥22 | 14.30 | 5.64 | 9.78  | 3.70 | 2.47      | <0.05 | 25 | 0.99        |
|                  | <22 | 6.08  | 3.70 | 6.15  | 2.39 | 2.71      | <0.05 | 25 | 0.97        |
| Grammar analysis | ≥22 | 17.07 | 3.20 | 11.14 | 4.18 | 4.33      | <0.001| 25 | 1.65        |
|                  | <22 | 8.72  | 4.18 | 6.78  | 2.39 | 2.71      | <0.05 | 25 | 0.97        |
| Words in sentences | ≥22 | 9.84  | 4.14 | 6.71  | 2.39 | 2.71      | <0.05 | 25 | 0.97        |
|                  | <22 | 13.14 | 5.64 | 11.14 | 3.70 | 1.03      | ns    | 25 | 0.47        |
| Vocabulary learning | ≥22 | 15.38 | 5.45 | 13.14 | 4.55 | 1.03      | ns    | 25 | 0.47        |
|                  | <22 | 14.22 | 5.04 | 12.62 | 4.33 | 0.81      | ns    | 25 | 0.27        |
| Total            | ≥22 | 56.76 | 16.23 | 40.78 | 9.23 | 3.24      | <0.005| 25 | 1.27        |
|                  | <22 | 58.85 | 21.03 | 44.78 | 12.62 | 3.24      | <0.005| 25 | 1.27        |

Note. *two-tailed significance.

### Table 5. Independent samples $t$-test showing the HUNLAT score differences in terms of gender

| Tasks     | Gender | M     | SD | M     | SD | $t$-value | $P^*$ | df | Cohen’s $d$ |
|-----------|--------|-------|----|-------|----|-----------|-------|----|-------------|
| Words in sentences | Male   | 12.83 | 3.06 | 6.90  | 2.60 | 4.73      | <0.001| 25 | 2.28        |
|           | Female | 9.78  | 2.60 | 6.90  | 2.60 | 4.73      | <0.001| 25 | 2.28        |

Note. *two-tailed significance.
younger students \( (M = 40.78) \) and this was a statistically significant difference based on the probability measure, \( t(25) = 3.17, P < 0.005 \) (two-tailed). Moreover, the standard deviation from the average in the case of older students was higher \( (SD = 16.23) \) than that of younger learners \( (SD = 9.23) \). Hidden sounds, Grammar analysis and Words in sentences tasks all displayed significant differences between ages, including the total score on the HUNLAT. Cohen’s delta \( (\text{Cohen, 1988}) \) was also calculated to study the effect size and it proved to be large on the tasks except for the Vocabulary learning task where there were no statistically significant differences regarding age. Ottó and Nikolov \( (2003) \) showed that in their sample, younger students scored higher on the aptitude test as compared to older learners and the difference was significant. The assumption that can be made from this information is that other factors – such as social background and education – also play a crucial role in language aptitude.

The assumption that can be made from this information is that other factors – such as social background and education – also play a crucial role in language aptitude. Sáfár and Kormos \( (2008) \) has shown, for example, that language learning experience has an effect on LA.

After examining the age differences, in an attempt to answer the second part of the first research question, possibly statistically significant gender differences were analysed in the aptitude test. Although there were almost four times as many females than males in the present study, it is still worthwhile to analyse the differences. The independent samples \( t \)-test (see Table 5) showed that the difference was only statistically significant in the Words in sentences task \( t(25) = 4.73, P < 0.001 \) (two-tailed). Consequently, males seemed to achieve significantly higher mean score \( (M = 12.83) \) on the Words in sentences task as compared to females \( (M = 6.90) \), Cohen’s delta was calculated as well to analyse the effect size since the two groups compared were unequal: \( d = 2.28 \), which belongs to large effect size \( (\text{Cohen, 1988}) \).

**Qualitative findings**

In the process of data analysis of the interviews, several themes emerged, which were grouped into the following categories: emotions (mainly positive: openness, enjoyment, being interested) and experiences (both positive and negative), self-regulation (including motivation; strengths and weaknesses, goals, attitude; language learning strategies; language learning habits), language usage (frequency and context). It must be noted that while conducting the interview, there was a particular focus on participants’ English language learning.

Considering the emerging theme of emotions and experiences, the majority of the participants claimed to be interested in British and American culture. Mária, Bendegúz, and Attila mentioned some positive emotions (e.g., openness, enjoyment, and being interested) and experiences in connection with learning English: “it gives a feeling of openness towards meeting foreigners and getting to know them and their culture” \( (\text{Mária, p. 2}) \). Bendegúz has given an account of enjoyment: “I like learning it because it’s enjoyable to learn this language and getting to know more and more about English.” \( (\text{p. 1}) \). Attila said that he likes learning English because he is interested in it: “I started to be interested in learning English at a very young age, in my childhood when I was in primary school.” \( (\text{p. 1}) \). György emphasised that he likes English because it is simple and logical, but he does not like that there are twelve tenses. Ilona added that she likes the sound of it and she also likes the culture. György mentioned that he likes learning English because it is a very good feeling when he can understand a lot of things in English. From this data, it can be concluded that the selected participants have mainly positive emotions regarding learning English.

With regard motivation within self-regulation, all of the six participants emphasised that if one has adequate knowledge of English, there are various opportunities within Hungary and abroad, as well. Each of the six students are highly motivated to learn English. Mária said that she wants to work abroad, specifically in England. Bendegúz has set out the goal of reaching a native-like level in English, especially in terms of pronunciation: “My ultimate goal is to reach a native-like level in English. I would like to be able to differentiate various accents and dialects from each other, moreover, acquire them.” \( (\text{p. 2}) \). Attila emphasised that his motivation is twofold:

I have instrumental motivation to learn English, that is, I can easily get a job with the knowledge of English, as I have obtained a job at British Council, and my motivation is also integrative because I would like to speak English well and develop my skills. \( (\text{Attila, p. 2}) \)

Ilona said that although she stopped learning languages, her goal is: “to be able to communicate with people who don’t speak Hungarian and to be able to understand lyrics” \( (\text{p. 1}) \). György said that his aim is to obtain the other half of the language exam certificate. Edgár admitted that he does not have a goal in learning English other than being able to communicate with people while working abroad.

Concerning their strengths and weaknesses within self-regulation, it was interesting to see that Attila claimed that “Grammar is easy for me and vocabulary is easy as well. What causes difficulties is pronunciation.” \( (\text{p. 1}) \). Bendegúz basically said the contrary:

I perceive native pronunciation quite well, I mean the sound of it at least. . . Of course, I’m not sure if I imitate it well, but I think pronunciation can become native-like by practice. My weakness is when I have to produce complex sentences. The issue is that Englishmen and Hungarians think differently, and it’s hard to switch. \( (\text{Bendegúz, p. 2}) \)

Mária said the following regarding her strengths and weaknesses: “I would say that grammar is easy for me, I can understand it quite quickly. What causes difficulties is listening and vocabulary.” Ilona emphasised that “tenses caused difficulties, and communication always went smoothly.” \( (\text{p. 1}) \). György mentioned that “My strength is in studying words, because I always cram words and terms, my weakness is grammar and the gift of the gab [speaking].” \( (\text{p. 2}) \). Edgár said the complete opposite: “Grammar is always easy for me, while vocabulary learning is not . . . and this applies to all of the languages I study.” \( (\text{p. 2}) \).
Regarding goals and attitude within self-regulation, three of them (Mária, Bendegüz, and György) admitted that they had to consult a private tutor of English when it came to challenges. Mária is now preparing to obtain a BME type language exam certificate and in order to achieve this, she believes that the help of the private teacher is necessary. Bendegüz decided to consult a private tutor when he wanted to obtain both the NATO STANAG 2.2.2.2 certificate – equivalent of level B2 based on the Common European Framework of Reference for Languages (CEFR; Council of Europe, 2011) – and the GE ECL C1 certificate. György admitted that he had five private teachers altogether. Four of the five teachers have prepared him for specific challenges, two of them for obtaining a language exam certificate, two of them for other exams and one in primary school to catch up with the material. Attila mentioned that he only had a private tutor in primary school when he started to be interested in English. His objective with the help of the private teacher was to develop his skills. This is the same for Edgár, who turned to a private teacher because he wanted to catch up with the material and develop his skills. Ilona said she only studied German with the help of a private teacher.

What is also interesting in the emerging theme of language usage is that four participants (Edgár, Mária, Bendegüz, and Ilona) do not use English every day. They say that they use English quite often, but apparently it does not play a main part of their lives every single day. Naturally, Attila, who works at British Council as an English language tester, works as a translator and interpreter and studies English applied linguistics – is using English every single day. György is also using English every day on his computer for collecting data for statistics, finding streams, looking up and checking things on the web.

In connection with their learning strategies within self-regulation, Bendegüz emphasised that he organises his studying beforehand to make it as diverse as possible, for example, using tasks involving pronunciation practice, vocabulary practice, looking up grammar rules thoroughly and using flashcards. Mária claimed that she likes watching series in English either with English subtitles or Hungarian, reading books in English and playing on computer games which are not translated to Hungarian. Edgár mentioned that he likes watching TV channels and films to learn languages; besides, he likes to read newspapers. Attila reported that he is always creating chunks or units when he wants to study, he learns these units one-by-one and after this, he tries to say out loud the whole to himself thus understanding all the material. Ilona said that she used to facilitate her learning by listening to music while studying. György said the opposite, he does not like listening to music because it causes a great distraction for him and he does not employ any strategies for studying.

Turning to the learning habits of the students – still considered to be in self-regulation –, the aim was to see whether these participants use explicit (conscious) or implicit (unconscious) learning mechanisms and which type of learning they prefer. Two groups were formed based on the mechanisms the researcher hypothesised the students usually apply: the first group is the explicit group including György and Bendegüz. The second group contains four individuals who use rather implicit learning mechanisms: Mária, Attila, Ilona and Edgár. It must be noted that the mechanisms the students usually apply may in some cases differ from the mechanisms they find more efficient.

Within the first group of students (using explicit learning mechanisms), György is going to be quoted first, a high-aptitude student who favours explicit learning and finds it more efficient as compared to implicit learning. He mentioned the following regarding his language learning habits:

I would rather sit down and try to cram […] but watching series for language learning is not efficient for me, I don’t think so that it would help anything at all. Except maybe for the skill of listening. But I cannot observe and understand grammatical rules only by watching series, I can only memorise one or two words maximum. I would say that cramming is definitely the most efficient way to learn languages. Others may find the other type of learning more efficient, but for me, only this type of learning works. (György, 23)

Bendegüz, a high-aptitude student and the second participant of the explicit group reported that usually he applies explicit methods, but finds implicit learning methods to be more efficient:

I often study English with rule-cramming, but I think reading, speaking with native speakers can be more beneficial. Of course, we have to cram words and terms to make them fixed in our memory. But in order to have a relatively wide passive vocabulary, I believe that watching series is the best option to enhance understanding and to make a grammatical formula become fixed in our brain. […] Overall, I think that sometimes sitting down and learning rules is the better method, but in other cases, acquiring items by watching series passively can be more efficient. […] Studying for an exam is different… So, for challenges like obtaining a language exam certificate, I only prepared by intensive rule-learning and cramming. Mastering a foreign language to be able to speak at a native-like level, on the other hand, requires the same method as we acquired our mother tongue: not being afraid of making errors and no intensive rule-learning. (Bendegüz, 27)

It is engaging to see the opinion and learning habits of the eldest active language learner of this study. It can be concluded that he finds it essential to employ explicit learning methods for practical challenges, for example, when preparing for a language exam. However, he is convinced that implicit learning methods are more efficient if students are to master a foreign language at a native-like level.

In the second group (using implicit learning mechanisms), there is Mária, a low-aptitude student, who also favours implicit learning methods and she is convinced that these are more effective than explicit methods:

I usually study English by reading and watching series. And I like playing English computer games. I think this is the most efficient way to learn English: if I read, watch movies, and talk in English. And actually, these are recommended for
everyone, who is trying to acquire English, but the issue is that even if I know that this is the more efficient way, there are some people who favour cramming. [...] So, I think that the best method is if I’m just exposed to the English language by watching series and reading. In my case, cramming is not an option. For example, the last task of the aptitude test (Vocabulary learning) that we have done now was very difficult for me. I tried to observe and learn the words, but learning could not happen gradually, so I don’t like this kind of learning. I would remember and acquire more words if I had to read a book. (Mária, 22)

The second member of the implicit group is Attila, the participant scoring the highest on the aptitude test in this sample, who is convinced that implicit learning mechanisms are much more effective, and he usually applies implicit learning, but also admits that there is an underlying need for explicit knowledge:

Nowadays, I usually study English by reading and watching series, but in fact I think that there are some aspects, for example, grammar rules and vocabulary, that can only be learnt by cramming. Basically, I think that being exposed to the language is more efficient, especially at a younger age (before the critical period); however, I think that cramming and studying of rules are inevitable in some cases: this is the basis for the additional knowledge. Later, as an adult or elderly person, being exposed to the language is more efficient as well, but there are some aspects of the language (for example, words and grammar) that we can learn by cramming only. (Attila, 24)

Attila was the one scoring the highest in the aptitude test in this sample, and it was interesting to see his language learning habits. Ilona is going to be quoted after this, a high-aptitude participant who is the eldest participant of this research, not a language learner anymore, but still a language user:

In secondary school, there was a new English teacher who rather focused on pronunciation and practice. Since I was always interested in pronunciation, this was motivating for me. Back then, teachers used to teach by giving tables to the students which they had to cram, and this was very boring and monotonous. Luckily, with the new English teacher, we could learn in the more effective way. I think that learning is more efficient when you’re exposed to the language: in high school, after reading Sterne von Eger (Eng.: Eclipse of the Crescent Moon), my knowledge and skills of German developed greatly and rapidly, that’s why I think that being exposed is more efficient. (Ilona, 59)

Although Ilona is not a language learner anymore, she has given a detailed account of her language learning during primary and secondary school. Edgår, scoring high on the aptitude test, is using implicit learning mechanisms:

I like to acquire grammar rules in practice, not by cramming, and I usually extend my vocabulary with the help of newspapers and books. Truth to be told, I like both (learning mechanisms). (Edgår, 26)

Continuing the analysis of their learning habits, the level of consciousness involved in their learning was in the focus (if they plan or monitor their learning or not). Within the first group (explicit-users), Bendegüz, Edgår and György do not plan a logical order that they follow in their studies/homework assigned. However, Attila claimed that he likes to start with the most difficult task because he sees it as a challenge, while Mária and Ilona said that they like(d) to begin with the easiest tasks and with tasks that they like(d) in order to maintain motivation.

Regarding the habits of reading, Bendegüz and Ilona said that they are paying attention to pronunciation when reading, György only concentrates on the main message of the reading. Attila argued that he is focussing on new words and on reading critically, while Mária only concentrates on the main message of the reading. Edgår said that he is focussing on the main message but can be easily distracted. Although in some cases the perceived efficiency of either learning mechanisms did not seem to correspond to what was generally used by the participants, it can be claimed that in most cases used habits and favoured habits corresponded with each other.

**CONCLUSIONS AND PEDAGOGICAL IMPLICATIONS**

To sum up the research findings, it can be claimed that males seemed to score higher as compared to females in this sample on the Grammar analysis task within the HUNLAT, while older students performed better in three tasks and the total score of the aptitude test. These calculations were statistically significant, and the Cohen’s delta has shown that the effect size is large within this sample.

Concluding the quantitative and qualitative part, it can be claimed that the hypothesis – that high and low-aptitude students have different habits – seems to be correct. Thus, the answer to the second research question is that within this sample, there seems to be a difference in aptitude and learning mechanisms. A low-aptitude student is using implicit mechanisms and believes that explicit learning is more efficient. It would be interesting to see how would perform in the aptitude test if she used explicit mechanisms. Among the selected six interviewees, four students are convinced that implicit learning is more efficient. The two participating who scored highest on the aptitude test in the selected sample believe that there is an underlying need for explicit learning, but implicit learning is more effective. Only one student claimed that he believes that explicit learning is more effective.

Useful pedagogical implications of this study involve the notion that language learning habits may play an important part in language aptitude. Although learning habits were in the focus of the interviews, several other emerging themes showed that there are many more constructs that may influence language learners’ aptitude, including motivation, success, and learning strategies. Language educators should reconsider the importance of language aptitude as it seems to play a crucial role in the process of SLA.

However, as every study, this research had its limitations, as well. Generalisability of the results of the aptitude test is not possible due to the small sample size (Dörnyei,
In the independent samples t-test, the two groups compared were each below 20 participants; moreover, there were only six participants in the qualitative part of this research. For further research, it would be interesting to conduct a longitudinal study to investigate aptitude and see if these scores can change over time. The think-aloud protocol could also prove to be efficient during the completion of the aptitude test (e.g., Hild, 2007) as this method was also used when piloting the instrument. Furthermore, it is recommended to examine language aptitude on a larger sample.

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REFERENCES

Carroll, J. B. (1981). Twenty-five years of research in foreign language aptitude. In K. C. Diller (Ed.), Individual differences and universals in language learning aptitude (pp. 83–118). Rowley, MA: Newbury House.

Carroll, J. B. (1990). Cognitive abilities in foreign language aptitude: Then and now. In T. S. Parry & C. W. Stansfeld (Eds.), Language aptitude reconsidered (pp. 11–29). Englewood Cliffs, NJ: Prentice Hall.

Carroll, J. B., & Sapon, S. M. (1959). The modern language aptitude test. San Antonio, TX: Psychological Corporation.

Carroll, J. B., & Sapon, S. M. (1967). Modern language aptitude test-elementary. San Antonio, TX: Psychological Corporation.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Hillsdale, NJ: Lawrence Erlbaum Associates Publishers.

Council of Europe. (2011). Common European framework of reference for languages: Learning, teaching, assessment. Cambridge, UK: Press Syndicate of the University of Cambridge.

Csölle, A., & Kormos, J. (2004). Topics in applied linguistics. Budapest, Hungary: Eötvös University Press.

Dörnyei, Z. (2005). The psychology of the language learner: Individual differences in second language acquisition. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Dörnyei, Z. (2016). Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies. Oxford, UK: Oxford University Press.

Ehrman, M. (1998). The modern language aptitude test for predicting learning success and advising students. Applied Language Learning, 9, 31–70.

Ehrman, M. E., & Oxford, R. L. (1995). Cognition plus: Correlates of language learning success. The Modern Language Journal, 79(1), 67–89.

Hild, G. (2007). A magyar egységes nyelvérzékmérő teszt (MENYET) vizsgálatában hangos gondolkodtatásos eljárással. Iskolakultúra, 8–10, 108–116.

Kiss, Cs., & Nikolov, M. (2005). Developing, piloting, and validating an instrument to measure young learners’ aptitude. Language Learning, 55, 99–150.

Kormos, J., & Sáfár, A. (2006). The role of working memory in intensive language learning. In M. Nikolov & J. Horvath (Eds.), UPRT 2006: Empirical studies in English applied linguistics (pp. 99–115). Pécs, Hungary: Lingua Franca Csoport.

Kormos, J., & Sáfár, A. (2008). Phonological short-term memory, working memory and foreign language performance in intensive language learning. Bilingualism: Language and Cognition, 11, 261–271.

Marinova-Todd, S. H., Marshall, D. B., & Snow, C. E. (2000). Three misconceptions about age and L2 learning. TESOL Quarterly, 34(1), 9–34. https://doi.org/10.2307/3588095.

Miyake, A., & Friedman, N. P. (1998). Individual differences in second language proficiency: Working memory as language aptitude. In A. F. Healy & L. E. Bourne (Eds.), Foreign language learning: Psycholinguistic studies on training and retention (pp. 339–364). Mahwah, NJ: Lawrence Erlbaum.

Ottó, I. (2002). Magyar egységes nyelvérzékmérő-teszt. Kaposvár, Hungary: Mottó-Logic Book.

Ottó, I., & Nikolov, M. (2003). Magyar felsőoktatási intézmények elsőéves hallgatóinak nyelvérzéke: A magyar egységes nyelvérzékmérő teszt. Iskolakultúra, 13(6–7), 34–44.

Oxford, R. L. (1990). Styles, strategies, and aptitude: Connections for language learning. In T. S. Parry & C. W. Stansfeld (Eds.), Language aptitude reconsidered (pp. 67–125). Englewood Cliffs, NJ: Prentice Hall.

Parry, T. S., & Child, J. (1990). Preliminary investigation of the relationship between VORD, MLAT and language proficiency. In T. S. Parry & C. W. Stansfeld (Eds.), Language aptitude reconsidered (pp. 30–59). Englewood Cliffs, NJ: Prentice Hall.

Parry, T. S., & Stansfeld, C. W. (Eds.). (1990). Language aptitude reconsidered. Englewood Cliffs, NJ: Prentice Hall.

Peterson, C. R., & Al-Haik, A. R. (1976). The development of the defense language aptitude battery (DLAB). Educational and Psychological Measurement, 36(2), 369–380.

Pimsleur, P. (1966). Pimsleur language aptitude battery (PLAB). New York, NY: Harcourt.

Sáfár, A., & Kormos, J. (2008). Revisiting problems with foreign language aptitude. IRAL – International Review of Applied Linguistics in Language Teaching, 46(2), 113–136. https://doi.org/10.1515/iral.2008.005.

Sasaki, M. (1993): Relationships among second language proficiency, foreign language aptitude and intelligence: A structural equation modeling approach. Language Learning, 43(3), 313–344.

Wallace, M. (1998). Action research for language teachers. Cambridge, UK: Cambridge University Press.

Wen, Z., & Skehan, P. (2011). A new perspective on foreign language aptitude research: Building and supporting a case for “working memory as language aptitude”. A Journal of English language, literatures and cultural studies., 60, 15–44. https://doi.org/10.5007/2175-8026.2011n60p015.
Appendices

Appendix A. HUNLAT (or MENYÉT) sample tasks

Task 1 – Hidden sounds
A. /tɪk/
B. /tɪ:k/
C. /tɪb/
D. /tɪ:b/
E. egyik sem

Task 2 – Grammar analysis
A. kutya nézi a macskát.
A. kau meud so
B. kau meud si
C. meu kaud so
D. meu kaud si

Task 3 – Words in sentences
LONDON Anglia fővárosa.

Task 4 – Vocabulary learning (Szótanulás)

Appendix B. English version of the interview guide translated from Hungarian

Dear (name of the interviewee)! Thank you very much for volunteering to participate in this research. I am Anna Zólyomi and I obtained a BA degree in English and American studies at ELTE in 2017. Currently I am studying English applied linguistics at ELTE in the MA programme. In this research, I am investigating the role of language aptitude. With this interview, I would like to gain data about your language learning. This interview is going to be used for research purposes only and data are to be summarised and analysed later. Naturally, I am not going to use your real name in this research, but I am going to use pseudonyms. I would like to ask you to be honest when answering the interview questions thus ensuring that I can gain more precise data. There are no ‘good’ or ‘wrong’ answers in this case, I am interested in your personal opinion and experiences. The interview is going to be approximately 30 minutes and we shall start if you allow me to record our dialogue.

First of all, I would like to ask some questions about your personal background and about your English language learning:

1. How old are you?
2. What are you studying? / Where do you work?
3. How many years have you been learning English?
4. What do you think, what is your level of proficiency in English?
5. Do you have a language exam certificate in English? If yes, which level? When did you obtain it? If not, do you plan to get a language exam certificate? What kind of language exam? When?
6. Why do you like learning English? What is that you do not like about it?
7. What are your strengths and weaknesses in English? What was the thing that went easily, what caused difficulties?
8. Do you consider yourself successful in learning English?
9. What was your English teacher like in primary school and secondary school?
10. Have you ever learnt with the help of a private teacher? If yes, why?
11. What are your goals with English?
12. What were your goals that you have already achieved in English?
13. What makes you invest energy in developing your skills in English?
14. Who influenced / influences your English learning?
15. Who encouraged you to learn English?
16. In what contexts do you use English?
17. How often do you use English? Is it part of your everyday life?

In the following questions, I would like to enquire about your language learning habits:

1. How do you usually study English, which methods do you apply? (For example, do you cram/swot and try to memorise grammar rules or rather read and watch series in English?)
2. Which method do you find more efficient, cramming and rule-memorisation or reading, watching films or talking in English when you are just exposed to the input?
3. Can you tell me examples for trying to apply a method that worked previously, however, in another case, it did not lead to the expected outcome? Please tell me about it in detail.
4. How did you prepare for your latest challenge (obtaining a language exam certificate or final exam in English)? What methods did you apply?

5. Do you usually pay attention in foreign language classrooms? Do you follow the teacher? Do you ask for clarification if there is something you did not understand? Do you usually understand and memorise most of the material during the class?

6. Which part of the day do you usually prefer to learn English? Do you usually start studying immediately after you arrive home after class?

7. Do you usually create a logical order within the tasks of the homework or within the aspects you have to study in English? (For example, do you usually start with the easiest task or with the task you prefer? Or is it vice versa?)

8. While reading an English text or a book, do you usually pay attention to something else apart from focusing on the meaning of the text?

9. To what extent do you pay attention to the fact that when you start studying English, you are fresh and relaxed to ensure efficiency?

10. Do you usually study alone and independently on your own or with classmates or possibly with the help of a private teacher?

11. Before you sit down to study English, do you usually think through the material covered in class and if it has some connection with the assigned homework?

Do you have anything to add? If not, thank you again for participating in my research.