RABEB GHANMI – JUDIT NAVRACSICS

University of Pannonia, Veszprem, Hungary
rabeb.ghanmi@phd.uni-pannon.hu
navracsicsjudit@almos.uni-pannon.hu

Rabeb Ghanmi – Judit Navracsics: The relationship of metalinguistic awareness with motivation and proficiency in bi- and multilingual learners of Hungarian as an additional foreign language
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The relationship of metalinguistic awareness with motivation and proficiency in bi- and multilingual learners of Hungarian as an additional foreign language

Previous research on metalinguistic awareness has revealed its crucial role in successful additional language learning experience. Scholars (e.g., Alderson et al, 1997) were interested in the possible effects of individual difference variables, chief among which are motivation and proficiency, on learners' metalinguistic awareness level. The present study focuses on motivation and proficiency, exploring their relationships with the metalinguistic awareness of multilingual and bilingual learners of Hungarian as an additional foreign language (Ln). It also aims at examining the difference in the level of language motivation and metalinguistic awareness between multilingual and bilingual learners. Twelve bilingual and multilingual international adult learners of Hungarian as an Ln were administered a linguistic background questionnaire, a motivation/attitude questionnaire, and a metalinguistic awareness test. The results of statistical analyses indicated that there was a positive and significant relationship between learners' level of metalinguistic awareness and motivation. However, no relationship was found between learners' metalinguistic awareness and proficiency. The findings also showed that multilingual learners exhibited a higher level of motivation and metalinguistic awareness than their bilingual peers. Furthermore, significant positive correlations were found between the number of languages spoken by the learners and their metalinguistic awareness and motivation.

Keywords: metalinguistic awareness, motivation, proficiency, bilingualism, multilingualism

1. Introduction

It is believed that the number of languages a person knows influences the learning of additional languages i.e., the more languages someone speaks, the better the acquisition of other languages is (Cenoz, 2013). Bilinguals as well as multilinguals are more privileged than monolinguals when learning a novel language (Ln), as they develop a heightened level of metalinguistic awareness (MLA) that allows them to reflect upon the structural features of languages objectively and to switch focus between linguistic form and meaning (Jessner, 2006; Jessner and Allgäuer-Hackl, 2020). Multiple studies (e.g., Jessner, 2014; Kemp, 2001; Thomas, 1988; Woll, 2019) have proven that metalinguistic awareness plays a crucial role in successful additional language learning, resulting in a faster acquisition process. These studies report on multilinguals' higher level of metalinguistic awareness and therefore prove multilingual learners' advanced perception and understanding of metalanguage.

MLA researchers have indicated that speakers who use their metalinguistic abilities to gain insights into the given target language based on crosslinguistic similarities and differences can easily decode new structures, including syntactic and semantic constraints of that particular language (e.g., Peyer, Kaiser, and Berthele, 2010; Singleton and Aronin, 2007). Multilinguals usually display an expanded and deepened language awareness and tend to use the full array of their multilingual resources when learning or using a language (Singleton and Aronin, 2007). Multiple studies suggest that MLA plays an important role in language learning, not only because it helps learners understand the nature and value of language but also because it can (a) make one's mother tongue explicit and intuitive, (b) improve language skills, (c) enhance the effectiveness of communication in the mother tongue or a foreign language, (d) promote better relationships between different ethnic groups, and (e) help students handle linguistic disadvantages and prejudices (Anderson et al., 1997).

Multilinguals' ability to learn new languages is related to the number of literacies they know as well as the number of languages they have learned, i.e., the more languages they know, the better they perform in a test of learning the initial stages of a novel language (Kemp, 2001). Cenoz and Todeva (2009: 278) point out that "multilinguals get many 'free rides' when learning additional languages as their prior linguistic knowledge helps on all levels of language". Cenoz (2013) has shown that the prior linguistic knowledge acquired by multilinguals is shared by simultaneous bilinguals, as the linguistic background of both bi- and multilinguals help them develop an innate awareness of various sentence structures. Researchers investigating the acquisition of additional languages have stated that bi- and multilinguals are better language learners than monolinguals and that multilinguals use more learning strategies and exhibit greater cognitive versatility than both bilinguals and monolinguals, which suggests that the more languages a person speaks, the better and faster the acquisition of novel languages is (Cenoz, 2013; Nation and McLaughlin, 1986).

1.1. Differences between bilinguals and multilinguals in language learning

There has been a growing body of multilingual language acquisition research studies in recent years showing that there is a range of differences as well as similarities between bilingual and multilingual acquisition. These differences include the effect of the previous experience of studying more than one language when learning additional languages, greater cognitive versatility, greater metalinguistic awareness, and multiple strategies used by multilinguals (Aronin and Hufeisen, 2009; Cenoz and Jessner, 2009; De Angelis, 2007; Kemp, 2007). The magnitude or significance of such differences is still ambiguous due to the limited research studies on multilingual acquisition/learning especially in the psycholinguistic domain (Butler, 2013). However, it seems important to assume that multilinguals are not the same as bilinguals.

In this framework, numerous research studies have identified a 'threshold', a 'system shift' or other remarkable events indicating the transition from bilingualism to multilingualism (Aronin, 2019). Applied linguists and sociolinguists have reached a consensus that significant changes take place with the acquisition of the L3 and of the Ln in general. In a study conducted by Berkes and Flynn (2012) on a group of Hungarians learning L2 English and another group learning L3 English, results show that the L3 study group outperformed the L2 group in the production of correct relative clauses. These findings indicate the development of learners' syntactical knowledge due to their multilingual experience. This result is of huge importance in terms of multilingual acquisition.

Multilinguals are proven to have the ability to pick up the grammar of another language faster than bilinguals, as they develop high grammatical metalinguistic awareness due to their experience of language learning (Kemp, 2001). Kemp (2001) notes that the more languages one speaks, the more grammatical metalinguistic awareness he/she develops. Investigating the use of grammar learning strategies by bilinguals and multilinguals, it is found that the more languages learners know, (a) the more grammar learning strategies they use in the course of learning a new language and (b) the more frequently they use them (Kemp, 2007). These are important quantitative findings that show that bilinguals are less experienced language learners due to the fact that their working memory is taken up with processing the cognitive load while less attention is given to internalizing the grammatical form of the input (Kemp, 2007). This threshold effect, according to these findings, implies that, compared to L2 acquisition, the increase in number and frequency of used grammar learning strategies occurs to a larger extent during L3 acquisition, increasing significantly in additional languages.

Multilinguals' ability to learn new languages develops due to the demands of processing several languages needed in their environment. These cognitive demands lead multilinguals to be better at learning new languages as they develop automaticity in processing these languages, in addition to the other social, affective, experiential and cognitive benefits of becoming multilingual (Kemp, 2007). Multilingual learners have also shown a great flexibility in switching strategies and restructuring their internal representation of the linguistic input, which makes them better language learners than monolinguals as well as bilinguals (Nayak et al., 1990). The strategies that these learners use, during the learning process of a new language, are drawn from past experiences. As multilinguals learn more languages, their use of strategies would increase in number, frequency, complexity and appropriateness, including grammar learning strategies (Kemp, 2007).

However, it should be underscored that both bilinguals and multilinguals are more privileged than monolinguals when learning languages, as they rely on their previous learning experience which contributes to the development of their

learning strategies, their linguistic knowledge and most importantly their metalinguistic awareness giving them the ability to control and manipulate languages (Jessner, 2006). Findings of a study carried out by Randsell, Barbier and Niit (2006) show that bilingual and multilingual learners have better metalinguistic awareness of their language skills in reading and greater working memory capacity compared to monolingual learners. Indeed, metalinguistic awareness has been proven to be promoted by bi-/ multilingualism (Nation and McLaughlin, 1986). It is also indicated that MLA is only one of the cognitive advantages resulting from living with two or more languages (Sanz, 2012). In this vein, the results for positive effects of knowing multiple languages on the development of metalinguistic awareness are quite robust (Sanz,2012).

This relationship between bi-/multilingualism and metalinguistic awareness has long been established in previous studies. However, it has been noted that a positive significant relationship between bi-/multilingualism and MLA depends on a certain number of social, psychological and educational factors (Titone, 1997). Motivation as a psychological construct affecting the process of second and foreign language learning and strongly linked to a learner's success at learning additional languages (Bower, 2019; Csizer and Dörnyei, 2005; Dörnyei, 1998, 2001; Gardner, 1985) has been proven to be related to metalinguistic awareness (Takahashi, 2005; Titone, 1997). Likewise, proficiency is another variable that has been suggested to reflect metalinguistic awareness (Renou, 2001). However, in view of the growing number of MLA studies, only few researchers have investigated the interaction of these individual difference variables, namely motivation and proficiency, with learners' metalinguistic awareness (e.g., Amjadiparvar and Zarrin, 2019; Renou, 2001; Takahashi, 2005). Hence, a further investigation can be carried out to probe into the relationship of MLA with learners' motivation and proficiency.

1.2. The relationship between metalinguistic awareness and motivation

Motivation in language learning, defined as the preparedness and the desire shown by the learner to master the new language (Gardner, 1985), has been widely acknowledged, by researchers and teachers, as one of the key factors influencing the development of second and foreign language learners. Motivation is regarded as the primary catalyst to start learning the new target language and eventually the impetus to withstand the long, often challenging, learning process (Dörnyei, 1998). It strongly influences and enhances the learning strategies, skills, and practices of language learners. In other words, it has a high impact on learners' communication with foreigners, determining the amount of learning, as well as developing the appropriate levels of language teaching such as reading, comprehension, speaking, and writing. In a nutshell, motivation has a direct effect on both quality and quantity of language learning (Mahadi and Jafari, 2012).

Takahashi (2001) suggested that motivation can be one of the most influential individual differences to account for variations in individuals' learning of the pragmatic features of the target language. In this context, the inclusion of the motivation variable in future research was suggested in various interlanguage pragmatics studies (Takahashi, 2005). In the same vein, a study conducted by Takahashi (2005) on Japanese EFL adult learners proves the positive and significant relationship between MLA and motivation. The findings of the study investigating Japanese EFL learners showed that learners' pragmalinguistic awareness was positively and strongly correlated with their motivation, particularly, intrinsic motivation. Additionally, in a study conducted on learners of Japanese as a foreign language at the University of Hawaii, Tateyama (2001) found that highly motivated JFL learners outperformed those who were less motivated in a role-play in which a Japanese routine formula, 'sumimasen', used for getting attention, apologizing, and expressing gratitude, had to be produced. Therefore, it was suggested that motivation affected learners' pragmalinguistic awareness and performance in the treatment sessions (Tateyama, 2001).

1.3. The relationship between metalinguistic awareness and proficiency

Although some research studies (Alderson and Steel, 1994; Alderson et al., 1997; Takahashi, 2005) failed to show the relationship between metalinguistic awareness and proficiency, Renou (2001) reported that a number of second-language research studies suggested that metalinguistic awareness is a reflection of developing second-language competence which can be clearly manifested by L2 proficiency. Additionally, Sorace (1985, cited in Renou, 2001) showed that increases in learners' scores on the grammatical judgement test that served as a measure to test metalinguistic awareness were proportional to improvements in L2 proficiency. In the same vein, Leow's (1996) study indicated that learners' performance in the grammaticality judgement tasks reflected their L2 development. In a similar vein, Renou (2001) explored the relationship between advanced-level French L2 learners' metalinguistic awareness and L2 proficiency, concluding that increases in metalinguistic awareness were associated with increases in proficiency. In her study, Renou (2001) adopted Bialystok and Ryan's (1985) information-processing model that offers a theoretical background for investigating the relationship between MLA and L2 proficiency. This model maintains that analyzed knowledge, i.e., conscious knowledge as opposed to knowledge that is intuitive, and control over that knowledge are the main processing components responsible for successfully meeting task demands including metalinguistic awareness tasks (Renou, 2001). However, more thorough research on the relationship between Ln proficiency and MLA need to be conducted, given that a study carried out by Liceras (1983) showed inconsistencies in the relationship between the judgement test and learners' competence.

2. The study

Several research studies have been conducted on the relationship between metalinguistic awareness and the acquisition of second or foreign languages in the past 20 years (e.g., Jessner, 2006, 2014; Kemp, 2001; Nation & McLaughlin, 1986; Renou, 2001; Takahashi, 2005). However, scarce is the literature addressing the relationship between metalinguistic awareness, motivation, and proficiency in the context of an additional language or Ln learning. The very few studies (Amjadiparvar & Zarrin, 2019; Takahashi, 2005) that explored this relationship were conducted mainly on EFL learners. The current investigation aims at contributing to the research field concerning the relationship of metalinguistic awareness with motivation and proficiency in Ln acquisition and to the debate concerning the difference, in terms of MLA and motivation, between bilingual and multilingual learners of Hungarian as an additional foreign language. This study addresses the following research questions:

1. Is there a relationship between Hungarian as an additional foreign language learners' level of metalinguistic awareness and their motivation?
2. Is there a relationship between Hungarian as an additional foreign language learners' level of metalinguistic awareness and proficiency?
3. To what extent do multilinguals show higher level metalinguistic awareness compared to bilinguals?
4. To what extent do multilinguals show higher level motivation compared to bilinguals?
5. Is there a relationship between the number of languages spoken by multilingual learners and their level of metalinguistic awareness?

2.1. Research Hypotheses

The current study tends to investigate the following hypotheses:

H1: Ln learners' metalinguistic awareness and motivation correlate.
H2: Ln learners' metalinguistic awareness and proficiency correlate.
H3: Multilinguals show higher level metalinguistic awareness than bilinguals.
H4: Multilinguals show higher level motivation than bilinguals.
H5: The number of languages spoken by multilingual learners will not have an effect on their level of metalinguistic awareness.

2.2. Participants

Twelve international students (8 males) learning Hungarian as an additional foreign language in two different universities in Hungary (the University of Pannonia, Veszprém and the University of Debrecen, Debrecen) were tested. They were divided into two different groups: A1 and B1, according to their Hungarian proficiency levels. Each group was divided into two sub-groups: bilingual and multilingual learners. The age of the participants ranges between 20 and 29 years. Seven among them are enrolled in English programs while the other five are enrolled in Hungarian programs. They came to Hungary in different

periods of time and therefore each participant's length of residence in Hungary is different (M = 20.5 months).

2.3. Materials

2.3.1. Linguistic background questionnaire

The questionnaire was designed to collect information about the participants' personal and linguistic backgrounds in a written form. It was also aimed at having an insight into the linguistic background of bilingual and multilingual learners of Hungarian as an additional foreign language and at gathering self-reported data about their proficiency in all their spoken languages. The questionnaire focuses on the proficiency level and use of the Hungarian language in particular. It is divided into two major parts: A and B, which gives detailed information about their personal and educational background as well as language learning experiences with a special focus on Hungarian.

2.3.2. Motivation/Attitude Questionnaire

The motivation questionnaire used in the present research was inspired by the Attitude/Motivation Test Battery (AMTB) developed first by R.C. Gardner to assess the non-linguistics factors affecting the process of language learning. The questionnaire includes forty-three different items. After each statement, there is a six-point Likert scale for participants to choose one alternative according to their agreement or disagreement. The questionnaire assesses the participants' extrinsic and intrinsic motivation and attitude towards learning Hungarian. It also assesses language anxiety exhibited by participants in foreign language situations and in foreign language classrooms. The Attitude Motivation Index (AMI) is formed by summing the raw scores of the language motivation and language attitude categories and subtracting the scores for language anxiety. This is the same methodology used by Gardner (1980) and Kemp (2001) in order to obtain ratio data to fulfill the assumptions required for parametric statistics.

2.3.3. Hungarian B1 level test

Previous research studies have proved that self-report tasks are not accurate in assessing one's proficiency as learners cannot objectively use self-assessment to track their language improvement and proficiency (e.g., Ma & Winke, 2019; Herreen & Zajac, 2018). In the present research, participants were asked to assess their language proficiency in Hungarian. However, a Hungarian B1 level test was administered to participants who do not have a Hungarian language certificate and are not enrolled in Hungarian classes. The test used in this study is available online on the website of ELTE Origó Language Center (Origó Nyelvvizsga) on the following link <https://www.onyc.hu/mintafeladatok>

2.3.4. Metalinguistic awareness test

The metalinguistic awareness test designed to serve the aims of the current study is inspired by two MLA tests, namely the Metalinguistic Awareness Tests developed originally by Pinto in the 1990s and ETECT (The English Teaching Competency Test) developed by the Hellenic American Union (2015) to measure, in the same vein, individuals' language awareness. The current test consists of six tasks belonging to six different categories as mentioned below:

- Verbs; Form and Use (Task 1)
- General Errors (Task 2)
- Morphological competence (Task 3)
- Pragmatic competence (Task 4)
- Semantic differences (Task 5)
- Comprehension (Task 6)

The scores given for the responses of each task were added together to give the total score for the learner's metalinguistic awareness.

2.4. Procedure

Initially, we piloted two of the instruments, namely the linguistic background questionnaire and the motivation/attitude questionnaire on two learners of Hungarian having similar characteristics to the main participants of the present study to get their feedback and ensure that the two firstly administered instruments were reliable enough to be used in this current research. Afterwards, thirteen foreign students learning Hungarian as an additional language in different faculties in Hungary were chosen based on convenient sampling. Then, we contacted them in person and online, according to their availability, to provide them with a brief description of the aims and hypotheses of the current study. One of the participants had to be excluded from the study as she did not complete the questionnaires. we obtained the written consent of the other twelve participants to take part in this study and started administering the data collection instruments.

2.5. Methods of data analysis

This study is based on a quantitative method that will serve to answer the research questions. This approach is used to compare between the language motivation and metalinguistic awareness in bilinguals and multilinguals, to study the correlation between the participants' metalinguistic awareness and their motivation and Hungarian proficiency, and to investigate whether there is a significant relationship between the number of literacies (i.e., languages spoken) and metalinguistic awareness, through comparing the scores of the participants. The difference in the scores obtained by the A1 and B1 level groups in each section of the MLA test is also explored. All of the data obtained from the participants are analyzed using the SPSS and Excel programs.

3. Results

3.1. Motivation in bilingual and multilingual learners

The motivation/attitude questionnaire was used to measure participants' motivation towards learning Hungarian as an additional language. After checking the normal distribution of the data through Kormogorov-Smirnov and Levene's tests, a comparison between both groups was made as shown in Table 1. The means of both groups show that multilinguals scored higher than bilinguals in the motivation/attitude questionnaire.

Table 1. Results of descriptive statistics for the motivation in each group

	N	Range	Minimum	Maximum	Mean		Std. Deviation
	statistic	statistic	statistic	statistic	statistic	Std. Error	statistic
Motivation in bilinguals	5	32	99	131	115.80	5.678	12.696
Motivation in multilinguals	7	39	109	148	135.57	5.009	13.252

To further explore the difference in motivation between the two groups, an independent sample t-test was conducted as shown in Table 2.

Table 2. Independent samples t-test for the motivation in bilinguals and multilinguals

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Motivation	Equal variances assumed	.098	.760	-2.591	10	.027	-19.771	7.631	-36.775	-2.768
	Equal variances not assumed			-2.611	9.01	.028	-19.771	7.572	-36.897	-2.646

As shown in Table 2, $t(10)=-2.591, p=0.027$, which indicates that multilinguals have statistically higher language motivation than bilinguals.

A Pearson correlation coefficient was computed, as shown in Table 3 below, to assess the relationship between the motivation scores and the number of languages spoken by the participants.

Table 3. Results of Pearson Correlation Coefficient for the Motivation/Attitude Questionnaire and the number of languages spoken by the participants (Correlation is significant at the 0.01 level (2-tailed))

		Motivation	Languages Spoken
Motivation	Pearson Correlation	1	.729
	Sig. (2-tailed)		.007
	N	12	12
Languages Spoken	Pearson Correlation	.729	1
	Sig. (2-tailed)	.007	
	N	12	12

There was a positive correlation between the two variables, $r = 0.729$, $p = 0.007$. Therefore, it can be concluded that there is a significant strong positive relationship between the learners' motivation and the number of languages they speak. Increase in the number of their literacies positively correlates with their language motivation.

3.2. Correlation between metalinguistic awareness and motivation

After checking the normal distribution of the data obtained from the metalinguistic awareness test, a Pearson correlation test was conducted, in order to investigate any significant relationship between motivation and metalinguistic awareness. Table 4 demonstrates the results of Pearson correlation coefficient for the motivation/attitude questionnaire and metalinguistic awareness test.

Table 4. Results of Pearson Correlation Coefficient for the Motivation/Attitude Questionnaire and the Metalinguistic Awareness Test (Correlation is significant at the 0.05 level (2-tailed))

		Motivation	MLA
Motivation	Pearson Correlation	1	.674
	Sig. (2-tailed)		.016
	N	12	12
MLA	Pearson Correlation	.674	1
	Sig. (2-tailed)	.016	
	N	12	12

As indicated in Table 4, there is a positive correlation between the two variables, $r = 0.674$, $p = 0.016$. It can therefore be deduced that there is a strong positive relationship between the learners' motivation and metalinguistic awareness. Increases in the level of their motivation to learn Hungarian is positively correlated with their metalinguistic awareness.

3.3. Metalinguistic awareness in bilingual and multilingual learners

In order to investigate the extent to which multilinguals show higher level metalinguistic awareness than bilinguals, a comparison between the two groups

was carried out. Table 5 shows the results of descriptive statistics for the metalinguistic awareness in each group.

Table 5. Results of descriptive statistics for the metalinguistic awareness test in each group

	N	Range	Minimum	Maximum	Mean		Std. Deviation
	statistic	statistic	statistic	statistic	statistic	Std. Error	statistic
MLA in bilinguals	5	9	23	32	27.7	1.6401	3.6674
MLA in multilinguals	7	19,5	32	51.5	46.857	2.5744	6.8112

The mean metalinguistic awareness score obtained by multilinguals is 1.7 higher than the one obtained by bilinguals, which indicates that multilinguals have higher level of metalinguistic awareness than bilinguals.

To further investigate the question whether multilinguals exhibit higher level metalinguistic awareness than bilinguals, an independent sample t-test was conducted as shown in Table 6.

Table 6. Independent samples t-test for the metalinguistic awareness in bilinguals and multilinguals

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
MLA	Equal variances assumed	.464	.511	-5.677	10	.0002	-19.157	3.374	-26.676	-11.638
	Equal variances not assumed			-6.276	9,509	.000	-19.157	3.052	-26.006	-12.307

Multilinguals have statistically higher metalinguistic awareness than bilinguals with $t\ (10) = -5.677$, $p = 0.0002$.

3.4. Correlation between multilingual learners' metalinguistic awareness level and the number of the languages they speak

To address the research question whether there is any significant relationship between the multilingual learners' level of metalinguistic awareness and the number of languages they speak, a Pearson correlation coefficient was computed as shown in Table 7 below.

Table 7. Results of Pearson Correlation Coefficient for the metalinguistic awareness test and the number of languages spoken (correlation significant at the 0.01 level (2-tailed))

		MLA	Number of Languages Spoken
MLA	Pearson Correlation	1	.790
	Sig. (2-tailed)		.002
	N	12	12
Number of Languages Spoken	Pearson Correlation	.790	1
	Sig. (2-tailed)	.002	
	N	12	12

The correlation coefficient index between MLA and the number of languages spoken by multilinguals turned out to be $r = 0.79$ which is significant at 0.01 with $p = 0.002$. It can be thus concluded that there is a strong positive relationship between the Hungarian learners' level of metalinguistic awareness and the number of languages they speak.

3.5. Correlation between metalinguistic awareness and proficiency

To explore the relationship between Hungarian proficiency and metalinguistic awareness, a comparison between the metalinguistic awareness in A1 and B1 level groups was carried out. Table 8 shows the results of descriptive statistics for the metalinguistic awareness in each group.

Table 8. Results of descriptive statistics for the metalinguistic awareness test in each group

	N	Range	Minimum	Maximum	Mean		Std. Deviation
	statistic	statistic	statistic	statistic	statistic	Std. Error	statistic
MLA in A1 group	4	19.5	28.5	48	38.625	4.9048	9.8096
MLA in B1 group	8	28.5	23	51.5	39	4.4591	12.6124

The mean metalinguistic awareness score obtained by A1 level learners is almost the same as the one obtained by B1 level learners, which indicates that there is no difference between the two groups in their levels of metalinguistic

awareness. Although B1 level learners scored the highest in the MLA test, no large difference between the two groups is observed.

To further explore the question whether more proficient Hungarian learners exhibit higher level metalinguistic awareness, an independent sample T-Test was conducted as shown in Table 9 below.

There is no relationship between the participants' level of metalinguistic awareness and their proficiency, *t (10) = -0.052, p = 0.96*.

Table 9. Results of Independent samples t-test for the metalinguistic awareness according to language proficiency

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
MLA	Equal variances assumed	4.093	.071	-.052	10	.960	-.3750	7.2513	-16.532	15.782
	Equal variances not assumed			-.057	7.742	.956	-.3750	6.6288	-15.750	15.000

3.6. Differences in the MLA scores of A1 and B1 level groups

A closer look at the participants' metalinguistic awareness scores indicates that the four highest scores (49.5, 50, 51 and 51.5 points) were obtained by four B1 level learners. Three A1 level participants majoring in Applied Linguistics obtained the next three highest scores. They indeed scored higher than some B1 level learners. Table 10 below shows the mean scores obtained by both groups in each task of the MLA test. A1 level learners scored higher than their B1 level peers in all tasks except the third one (Table 10). However, the B1 level learners outperform their A1 level peers when it comes to the morphological competence (Task 3).

Table 10. Mean scores per task in each group

Hungarian Proficiency		TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6
A1	Mean	3.125	13.750	6.000	3.750	4.750	7.500
	N	4	4	4	4	4	4
	Std. Deviation	3.4248	4.0311	2.9439	.5000	2.2174	1.0000
B1	Mean	2.813	13.375	8.000	3.375	4.500	7.000
	N	8	8	8	8	8	8
	Std. Deviation	3.1953	3.5431	2.8284	.7440	3.9641	1.0690
Total	Mean	2.917	13.500	7.333	3.500	4.583	7.167
	N	12	12	12	12	12	12
	Std. Deviation	3.1176	3.5291	2.9025	.6742	3.3699	1.0299

4. Discussion

The present study aims at exploring the relationship of metalinguistic awareness with motivation and proficiency in adult learners of Hungarian as an additional foreign language. It also studies any significant relationship between the level of metalinguistic awareness and the number of languages spoken by the learners. Another issue that has scarcely been addressed by previous research studies and is empirically investigated in this study is the difference between bilinguals and multilinguals in learning an additional foreign language. This current research investigates the extent to which multilinguals show higher level metalinguistic awareness and motivation than bilinguals.

In this study, we found a positive significant relationship between learners' metalinguistic awareness and motivation. The increase of motivation is accompanied with an increase of metalinguistic awareness. The findings are in line with Amjadiparvar and Zarrin (2019), who reported a significant positive relationship between Kurdish EFL learners' language awareness and motivation. The findings of Takahashi's study (2005), exploring the relationship between Japanese EFL learners' pragmalinguistic awareness and their motivation, prove the positive and significant relationship between both variables. Takahashi (2005) demonstrated that motivation is related to learners' awareness of pragmalinguistic features and is definitely a crucial manifold cognitive construct, which is closely related to attention and awareness in processing L2 input. Her findings indicated that intrinsically-motivated English learners showed great interest in the English language and in learning activities to gain language skills for more successful L2 communication. She thus assumes that learners with great motivational orientation pay much attention to pragmalinguistic forms as they consider them as very important in successfully learning the target language. In the same vein, Tateyama (2001) states that motivation affects learners' pragmatic awareness and

therefore performance, in her study conducted on university students learning Japanese as a foreign language.

Concerning proficiency, the findings of the current research indicate that there is no relationship between learners' level of metalinguistic awareness and proficiency. The mean metalinguistic awareness scores of the A1 and B1 level learners, in this study, is almost the same, which proves that proficiency is not associated with learners' level of metalinguistic awareness. These current results corroborate findings from two previous studies conducted by Steel and Alderson (1994) and Alderson et al (1997). In both studies addressing the relationship between metalinguistic knowledge and language proficiency and aptitude in freshmen learners of French, it has been shown that the relationship between metalinguistic knowledge and language proficiency is weak. University French L2 learners' scores on metalinguistic knowledge did not correlate with their scores on French A-level exams considered by the researchers to be the most comprehensive measure of L2 proficiency in the UK (Renou, 2001). Therefore, it has been concluded that metalinguistic knowledge and language proficiency seem to constitute two separate factors of linguistic ability (Alderson et al, 1997). In the present study, all A1 level learners are majoring in Applied Linguistics and therefore have a very solid linguistic background, which might have helped them answer and sometimes outperform B1 level learners in the grammatical, pragmatic, semantic and comprehension tasks of the metalinguistic awareness test. However, the B1 level learners outperform their A1 level peers with regards to the morphological competence (Task 3), which can be explained by B1 learners' regular use of Hungarian.

The results of the present study indicate that multilingual learners show higher motivation than their bilingual peers. The multilinguals, involved in this study, speak three to six languages, excluding Hungarian, which indicates their considerably large experience in language learning as a result of which they exhibit very low language anxiety, as opposed to bilinguals. Although most bilinguals are B1 level learners, they reported that they feel anxious or slightly anxious when they ask a question in class and most of them feel embarrassed to some extent when they use Hungarian to order food or give street directions. In addition, multilingual learners show a greater desire than bilinguals to learn Hungarian and a more positive attitude towards learning and using Hungarian with native speakers and in class. With respect to multilingual learners' drive to learn Hungarian, multilinguals exhibit higher level intrinsic motivation. They either want to assimilate in and get the approval of the Hungarian society, know more about the culture of the country they are living in, or enlarge their linguistic repertoire as they are interested in learning foreign languages. On the other hand, most bilinguals are more extrinsically motivated. They claim that Hungarian is important to them because they need it for their studies and to get good grades only, as they are majoring in Hungarian programs. More intrinsically-motivated

learners show a very positive attitude towards learning Hungarian as all of them reported that they pay much attention to the feedback they receive from their Hungarian teachers or friends and that they have a desire to learn all aspects of the Hungarian language so as to reach a native-like proficiency. The findings of the present study are in line with Takahashi (2005) who stated that intrinsic motivation is greatly involved in noticing and hence learning the pragmalinguistic features of English by Japanese EFL learners. All multilingual learners claimed that they enjoy studying Hungarian and are interested in learning other foreign languages. Therefore, their motivation comes from inside and is related to their sense of identity and well-being. It is also suggested that multilinguals strive to learn new languages because of the satisfaction and self-efficacy experienced during the learning process. The more languages a learner speaks, the higher motivation he/she shows. This reinforces the claim that more experienced language learners have the tendency and desire to enlarge their linguistic repertoire. Their sensation of enjoyment, competence and self-efficacy experienced during the learning activities drive them to explore and learn other languages (Bandura, 1997).

In this study, multilingual learners show a higher level of metalinguistic awareness than bilinguals. The more experienced language learners tend to use the knowledge acquired during previous language learning experiences to learn the new additional one. These findings are in line with Jessner (1999), who stated that the development of competence in multiple languages might result in higher levels of metalinguistic awareness and that multilinguals use the cognitive mechanisms underlying these processes of transfer and enhancement in order to learn the new language. General findings, in the same vein, suggest that multilingual learners have greater metalinguistic awareness and cognitive versatility (Aronin and Hufeisen, 2009; De Angelis, 2007; Thomas, 1988). Multilingualism is therefore claimed to have robust positive effects on metalinguistic awareness (Sanz, 2012). Multilingual learners are also suggested to use more learning strategies than bilinguals, which indicates that the more languages a learner speaks, the better and faster the acquisition of novel languages is (Cenoz, 2013). There is a positive significant relationship between metalinguistic awareness and the number of languages spoken by multilinguals, which suggests that the more languages a learner knows, the higher his/her level of metalinguistic awareness. This indicates that more experienced language learners develop a deeper understanding of language as they develop more cognitive abilities that allow them to distance themselves from the content of speech so as to consciously ponder about and manipulate the structure of the target language.

5. Conclusion

The present study evidenced that metalinguistic awareness is positively correlated with learners' motivation to learn Hungarian, which corroborates with findings of previous studies (e.g., Amjadiparvar & Zarrin, 2019; Takahashi, 2005; Tateyama, 2001), yet not with language proficiency.

Multilinguals' metalinguistic awareness is found to be more developed due to their relatively large past experiences in language learning. They also exhibit a higher motivation level than bilinguals, which can be explained by their keen desire and interest in learning foreign languages and enlarging their linguistic repertoire. Additionally, significant positive correlations were found between the number of languages spoken by the learners and their metalinguistic awareness and motivation. This can suggest that multilingualism have robust positive effects on the development of learners' metalinguistic awareness and intrinsic motivation that drives them to learn novel languages. However, in order to conclusively claim this, and accounting for the small sample studied, we need to undertake further investigation into the relationship of metalinguistic awareness with learners' motivation and proficiency and into the difference between bi- and multilinguals in Ln learning, since the comparison of both groups pointed out to the impact of a larger linguistic profile on learners' motivation and MLA.

6. Limitations of the study and suggestions for future research

The sample used in this pilot study consisted of twelve learners of Hungarian as an additional foreign language. Considering this number of participants, more research studies are required with a greater number of participants examining larger groups of bi- and multilingual learners having different proficiency levels. For a larger-scale future research, more refined instruments will have to be elaborated.

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