

DARIN NSHIWI – ULRIKE JESSNER

Multilingualism Doctoral School, Pannonia University, Veszprem, Hungary
Department of English, University of Innsbruck, Innsbruck, Austria
dareen33omar@gmail.com
ulrike.Jessner@uibk.ac.at

Darin Nshawi–Ulrike Jessner: The Effect of Metalinguistic Awareness and the Previously Learned Foreign Languages on Fourth Language Acquisition by Adult Learners
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The Effect of Metalinguistic Awareness and the Previously Learned Foreign Languages on Fourth Language Acquisition by Adult Learners

The dynamics and complexity of the multilingual system have attracted many linguists to study and explore this phenomenon. Some researchers concentrate on the linguistic system itself. Others believe that social and educational bonds are the driving forces in this process. The overall aim of this study is to contribute to our understanding of the role of metalinguistic awareness and the previously learned foreign languages on learning German by adult learners. The main framework of this study is the Dynamic Model of Multilingualism (Herdina & Jessner 2002). Ninety-two true-beginner learners of German in Syria took part in this study. The data analysis showed that there is a significant correlation between English and French language proficiency and German language acquisition. Moreover, the linear regression test demonstrated that English and German metalinguistic test scores reinforce learning the German language. Both age and educational background were also found significant variables whereas gender was not.

Keywords: Metalinguistic awareness, M-factor, multilingual acquisition, Dynamic Model of Multilingualism

Introduction

Studying the increasing phenomenon in multilingualism has been a challenging topic in the last three decades because of its complex and diverse nature. There are around 7,000 languages in the world and about 200 independent countries (Cenoz, 2013: 1). Cenoz (2013b: 2) states that "[m]ultilingualism is a very complex phenomenon and it can be studied from different perspectives in linguistics, psycholinguistics, anthropology or sociolinguistics. Different aspects of multilingualism receive more or attention depending on the discipline". Furthermore, De Zarobe & de Zarobe (2015) affirm that multilingualism is a reflection of the speakers' society.

This reflection can be seen in the Syrian context during the current crisis. Despite the ongoing war in Syria, adult students aspire to master foreign languages as they are regarded as a prerequisite to gain knowledge and seek a better future. However, the Syrian crisis and sanctions on Syria isolated the students from the rest of the

world. Before 2011, there were international institutes where learners could learn foreign languages from native speakers such as the British Council and the Goethe Institute. In 2013, most foreign institutes and embassies closed due to sanctions. As a result, adult students do no longer have the chance to communicate or learn a foreign language from native speakers. Moreover, they cannot reach authentic material via the internet because both the electricity and internet are rationed. For these reasons, foreign language teachers and learners have to resort to building up their own strategies, such as similarities between foreign languages and use their metalinguistic skills, rather than external resources to fill this gap. This recent phenomenon has induced the need to study it and explore how students can benefit from their previously learned languages and cognitive skills to facilitate the acquisition process of learning new foreign languages.

The Dynamic Model of Multilingualism by Herdina & Jessner (2002) as a Framework for Exploring Multilingual Acquisition in the Syrian Context

The Dynamic Model of Multilingualism (hereafter DMM) describes research on multilingualism as referring to any kind of language acquisition and discusses the qualitative changes in language learning related to an increase in the number of languages involved in multilingual development and use (Jessner, 2008). The rationale behind choosing this model as the framework of this study can be attributed to the fact that it examines the internal and external variables in a multilingual learner in an integrated manner in which all of these variables form parts of the psycholinguistic system. Thus, this model acknowledges the impact of the cognitive, linguistic, social, psychological, and educational resources on multiple language development and use. The DMM applies Dynamic Systems Theory to the study of multilingualism. This approach can be seen as related to Complexity Theory, Chaos Theory and so-called emergentist and usage-based approaches to language development.

Multilingual proficiency in DMM is seen as a fluctuating construct rather than a stable one. Jessner (2017: 5) defined multilingual proficiency as "a cumulative measure of psycholinguistic systems in contact". In the DMM multilingual development is modelled to include negative and positive growth to suit the perceived communicative needs of the multilingual learner.

According to the DMM, the development of multilingualism is complex, dynamic, and nonlinear, and it cannot be predicted. Moreover, different factors such as metalinguistic awareness (Jessner, 2006), language learning strategies (Kemp, 2001 & 2007), and cross-linguistic knowledge (James, 1996) can enhance language learning in educational contexts (see also Jessner, 2017).

The multilingual system, according to DMM, is sensitive to the initial state, and it is conditioned by the interaction of the learner's multiple languages (e.g. Todeva and Cenoz, 2009). De Bot et al. (2007: 8) confirm the importance of the initial state by pointing out that "the development of some dynamic systems appears to be highly dependent on their initial state, minor differences at the beginning may have dramatic consequences in the long run". This so-called butterfly effect is one of the key characteristics of dynamic systems in the development of Lx. According to the DMM both internal and external factors can cause a change in the multilingual system. This is confirmed by Larsen-Freeman (2014: 15) who states that "systems with different initial conditions follow different trajectories, leading to divergent outcomes".

The M-factor

The multilingualism factor (hereafter M-factor) is seen as the cornerstone element in third language acquisition (hereafter TLA) or multilingual proficiency. Herdina & Jessner (2002: 131) define the M-factor as including skills that are "developed in the multilingual speakers. These skills show several characteristics clearly distinguishing the monolingual from the multilingual speaker and are taken to include skills in language learning, language management, and language maintenance". The M-factor is an emergent property that can contribute to the catalytic or accelerating effects in TLA. The key variable in the M-factor is metalinguistic awareness (hereafter MLA), which consists of a set of skills or abilities that the multilingual user develops due to her/his prior linguistic and metacognitive knowledge.

Malakoff (1992: 512) illustrates that metalinguistic awareness "allows the individual to step back from the comprehension or production of an utterance to consider the linguistic form and structure underlying the meaning of the utterance". MLA is regarded as one of the positive outcomes of the learner's cognitive development (Vygotsky, 1962). To be metalinguistically aware, then, is to know how to approach and solve certain types of problems that themselves demand certain cognitive and linguistic skills. Jessner (2017: 5) describes MLA as "part of the multilingualism factor which also relates to cognitive aspects of multilingual learning such as an enhanced multilingual monitor and/or catalytic effects of third language learning". Creativity and information reorganization are skills developed in highly metalinguistically aware learners (Hamers & Blanc, 1989).

In a recent study conducted by Rauch et al. (2012) data from 299 secondary school learners (158 are German monolinguals; 141 are German/Turkish bilinguals) were collected to examine the role of biliteracy (German and Turkish) and MLA on L3 English reading proficiency. The researchers used the cognitive part of a test by Fehling (2008) to measure MLA, which included unknown languages such as

Swedish and Dutch. The data analysis showed a positive relation between L3 reading proficiency and MLA and thus the researchers concluded that "the beneficial effects full biliteracy has on L3 reading proficiency are due to a better metalinguistic awareness in full biliterates" (Rauch et al. 2012: 414).

Other studies in the field of multilingual acquisition also manifest that multilingual learners develop high levels of MLA (Bono & Stratilaki, 2009; Jessner, 1999, 2006). For example, Thomas (1992) conducted a comparative study with bilingual students (English and Spanish) learning French as an L3, and English monolinguals learning French as an L2 at Texas A&I University. The participants completed tasks modified from Elbaum's (1989) Implicit Theories Assessment to explore the beliefs of the students about the ideal MLA activities. The results show that bilingual students have developed a more conscious awareness of their language systems than monolinguals. In addition, she confirmed that MLA can play a positive role while learning a third language because bilingual learners were able to link "awareness of forms with awareness of function" (Thomas 1992: 541).

Multilingual Acquisition

Traditionally many scholars have considered multilingual learners as second language learners with an extra language. For that reason, most of the language acquisition research has focused on the first and second languages. However, during the last twenty years theoretical and empirical studies have proved the different nature of second and third language acquisition. Cenoz & Jessner (2000: vi) explain the differences by pointing out that L3 learners "have more experience at their disposal than second language ones do, and have been found to present more strategies and a higher level of metalinguistic awareness". Amaro et al. (2012: 33) reiterate that "L3/Ln language learners are distinct from typical adult L2 acquirers since the former possess a larger repertoire of linguistic and metalinguistic knowledge (among other factors)". Cenoz (2003: 71) affirms that TLA refers "to the acquisition of a non-native language by learners who have previously acquired or are acquiring two other languages".

Furthermore, the process of second and third language acquisition differs in terms of the order they take. For example, second language acquisition can take place simultaneously while acquiring the first language or consecutively after the first language is fully acquired. On the other hand, TLA has more diverse orders as a result of the number of the involved languages and hence the more diverse linguistic background has been proved by many researchers to affect the acquisition of the L3 (Cenoz, 2013; Sanz, 2000).

The context of multilingual acquisition is as diverse as its order. For instance, it can take place naturally (at home), as in the case of immigrants or diverse language

backgrounds such as in South Africa and Indonesia; or it can take place formally (at school) such as in the case of Basque county. Other variables that are distinct by third language learners are the linguistic and cognitive processes involved in the multilingual acquisition process, which are also considered influential in the study of this phenomenon.

The previously acquired languages in the multilingual repertoire are considered an important asset (Cenoz, 2003; Herdina & Jessner, 2002). In his Interdependence Hypothesis Cummins (1981-2000) describes linguistic transfer that activates the learner's prior knowledge in the central processing system as a result of the common underlying proficiency of linguistic knowledge, skills, and concepts. Hereby Cummins affirms that L1 linguistic development enhances L2 acquisition. He portrays the two linguistic systems as two icebergs overlapping underneath the surface level. The two languages appear as two separated systems in terms of vocabulary, pronunciation, and grammar but at the same time, they share the cognitive and linguistic abilities of the speaker.

Furthermore, he depicts second language development in a matrix. The horizontal axis represents the L2 basic interpersonal communicative skills, also known as BICS, as a continuum that ranges from tasks that require context-embedded knowledge in which the speaker depends on varied clues such as facial gestures, intonation, and context to decode the message to tasks in situations where the speaker has to use linguistic cues and background knowledge to comprehend the meaning. On the other hand, the vertical axis exhibits cognitive academic language proficiency (CALP) as a continuum that ranges from cognitive undemanding activities, i.e. the task does not require an increased level of cognitive ability, for example, matching words with pictures. The other extreme is embedded in the cognitively demanding tasks, for instance, a poem would require linguistic cues and cognitive ability to comprehend. In the bilingual mind this common underlying proficiency can enable the transfer of cognitive ability and academic skills between the two linguistic systems. Cummins (2000: 69) classifies five routes for transfer:

1. Transfer of conceptual elements (e.g., understanding the concept of photosynthesis);
2. Transfer of metacognitive and metalinguistic strategies (e.g., strategies of visualizing, use of graphic organizers, mnemonic devices, vocabulary acquisition strategies, etc.);
3. Transfer of pragmatic aspects of language use (willingness to take risks in communication through L2, ability to use paralinguistic features such as gestures to aid communication, etc.);
4. Transfer of specific linguistic elements (knowledge of the meaning of photo in photosynthesis);

5. Transfer of phonological awareness (the knowledge that words are composed of distinct sounds).

However, Jessner (2006: 35) affirms that multiple languages systems not only overlap but also develop or in other words "the interaction between the three systems results in different abilities and skills that the learners develop due to their prior language learning experience". Previous linguistic repertoires can impact the nature of this complex linguistic system on the linguistic and cognitive level of learning (Bialystok, 1988; Cenoz, 2013; Sanz, 2000), as discussed above and in fact many TLA studies link MLA to better multilingual learning by adults and young learners (Hofer & Jessner, 2019; see also Stavans & Jessner, in press).

The study

The aim of this research is to investigate the role of the previously learned foreign languages and MLA on the acquisition of German by adult learners in Syria. The following research questions are presented:

1. Does the foreign language repertoire play a facilitator role while acquiring an additional language?
2. What is the role of metalinguistic awareness while acquiring a fourth language?
3. Can psycholinguistic variables such as gender, age and education affect the additional language performance?

Research hypotheses

This research aims to investigate the following hypotheses: H1: English and French Proficiency can enhance facilitate the German language acquisition. H2: Metalinguistic awareness is linked to successful fourth language acquisition. H3: There are differences in the German exam scores according to gender, age and educational background of the participants.

Setting

This study was held at the public Higher Language Institute (hereafter HLI) which is responsible for hiring language teachers at Damascus University, Syria. It offers language courses for lecturers at Damascus University for free during the morning courses. It also provides language courses for adult learners above the age of 18 during the evening courses. The duration of the German course A1/1 is fifty hours per course (five days a week). Each session lasts two and a half hours. The coursebook is Menschen. Six units are usually covered during the A1/1 course, and the researcher collected data from six classes during 2018. The rationale behind choosing this institute to conduct this study can be attributed to its ranking.

According to the Webometrics ranks of institutions (2018), Damascus University ranked first among Syrian universities.

Participants and data collection

One hundred and eighteen true-beginner learners taking German courses at the HLI participated in this study. 92 learners completed all the tests. Additionally, eight German language teachers were interviewed. Data collection lasted for three months at the HLI and the researcher collected data from six classes. A questionnaire was passed to the learners at the HLI on the first day of the course to get more background information about the participating learners in this study. In the second stage of the data collection the English and French C-tests were administered during course time. Each test lasted for 20 minutes. The third stage was implemented in the third and fourth week in which the English and German metalinguistic tests were passed. On the last day of the course stage 4 involved examining German proficiency in usual two phases. The first day is allocated for the written test in which the learners are examined in the three skills reading, listening, and writing. The second phase is allocated for the oral test, which examines the speaking skills of the learners.

Ethical considerations

To conduct this research, the Higher Education board at Damascus University granted the researcher a written permission statement to carry out this research at the HLI. Besides, informed consent was obtained from all the participants and teachers at the HLI.

Research design

The methods in this research are both descriptive and analytic to investigate the impact of interrelated factors on learning German as a third foreign language by adult Syrian learners. Mixing the methods can contribute to answering questions that are complementary in two domains to facilitate reaching valid answers to research questions, as also suggested by Cameron & Larsen-Freeman (2007).

Research tools

Language Background Questionnaire

This questionnaire is divided into four parts. The first section concentrates on the background information of the participants, such as age, gender, and education, etc. The second part covers their language background while the third section investigates the degree of exposure to their foreign languages. Finally, the last part explores the motivation of the students to learn the German language.

C-Tests

Khoshdel (2017: 1) defines a C-Test as “a gap-filling test belonging to the family of the reduced redundancy tests which is used as an overall measure of general language proficiency in a second or a native language”. Both C-tests (English and French) that are used in this study start with a demo paragraph and contain four paragraphs arranged from the easiest to the hardest.

Metalinguistic tests

Metalinguistic knowledge has typically been operationalized as learner ability to correct, describe, and explain L2 errors. It is also defined as including explicit knowledge about categories (e.g. ‘noun’; ‘verb’; ‘adjective’) as well as explicit knowledge about relations between categories (e.g. ‘subject of the main clause’; ‘In English, an –s needs to be attached to the verb if it expresses the third person present tense). The researcher designed metalinguistic tests in English and German, which include two sections. The first section is the terminology section, where the students were asked to underline the proper terminology. The second part contains fifteen sentences and the students were asked to determine whether the sentence is correct or false. In case the sentence is incorrect, the students have to correct the mistake and explain the mistake. This test was adapted from Elder et al. (1999) and Green and Hecht (1992).

German Achievement Test

This test is divided into four parts in which each part examines one skill (reading, writing, speaking, and listening). The test is usually conducted on two days. The first day is allocated to the written test and the second day to the oral test. The total score is 100 and the passing score is 60.

Validity and reliability of the used questionnaire and tests

Checking the validity of a test is one of the most important elements in any research (McDonough, 2014; Seliger and Shohamy, 1989). As for the instruments used in this study, a group of experienced referees was invited to check the validity of the questionnaires and tests.

To confirm the validity of the questionnaires, two referees were requested to check their validity as designed and organized by the researcher who based her work on Jessner (2008) in classifying the factors that can affect TLA. The rationale behind checking the validity is to confirm that all the elements in the questionnaire are accurate and suit the topic of the research. To confirm the validity of the C-Tests (English, French), the supervisor and three lecturers at the HLI Institute were asked to proofread the tests and check whether these tests suit the learners' level of

proficiency in the tested languages. The first question was modified to suit the purpose of the research. Then the C-Tests were passed on to 15 learners at the HLI. Next, two texts were exchanged with other suitable texts. The validity of the German and English metalinguistic tests was verified by asking the supervisor and two lecturers at the HLI to check them. Consequently two items had to be removed from the first section in the German metalinguistic test as they did not suit the learners' level of proficiency.

Cronbach's Alpha test was used to check the reliability of the questionnaire and tests, and the results were the following: the first section was 92, the second section was 77, and the third section was 84. Moreover, the test reliability rate was 79, which means that the stability condition was fulfilled and the questionnaire and tests are reliable.

Findings

Q1: Does the foreign language repertoire play a facilitator role while acquiring an additional language?

To answer Q1, a Pearson correlation test was calculated and the results are represented in the following table.

Table 1: Means, standard deviations and correlations

Variable	<i>M</i>	<i>SD</i>	1	2
German exam score	78.66	9.64		
E c-test	60.86	25.08	.442**	
F c-test	10.51	9.132	.268**	.409**

*.Correlation is significant at the 0.05 level (2-tailed).

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

As noticed from Table 1, there is a significant correlation between the German proficiency test and the English proficiency test, $r(90) = .44$, $p < 0.01$. Moreover, there is also a significant correlation between German proficiency test and French proficiency test $r(90) = .26$, $p < 0.01$.

Q2: What is the role of metalinguistic awareness while acquiring a fourth language?

To answer Q2, a simple linear regression test was calculated and the summary of the results is represented in Table 2.

Table 2: Summary of regression analysis of variables predicting German proficiency

Variable	<i>B</i>	95% <i>CI</i>	<i>B</i>	<i>t</i>	<i>P</i>
E metalinguistic test	.47	[.27, .66]	.40	4.69	.000
G metalinguistic test	.54	[.32, .77]	.41	4.84	.000

Note. R2 adjusted=.47. CI= Confidence interval for B.

The results of the regression model indicated that the two predictors explained 47% of the variance ($R^2=.47$, $F(2,89) = 44.06$, $p < 0.01$). It was found that English and German metalinguistic awareness significantly predicted German proficiency (English metalinguistic test ($\beta = .47$, $p < 0.01$) German metalinguistic awareness ($\beta = .54$, $p < 0.01$)).

Q3: Can psycholinguistic variables such as gender, age and education affect the additional language performance?

To answer Q3, three Independent-sample t-tests were conducted, and Tables 3, 4 and 5 show the summary of the findings.

Table 3: Independent t-test (gender/German exam scores)

	Gender	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SEM</i>	<i>T</i>	<i>df</i>	<i>P</i>
German exam score	Male	22	78.05	9.85	2.10	-0.34	90	0.73
	Female	70	78.86	9.65	1.15			

Table 4: Independent t-test (educational background/German exam scores)

	Education	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SEM</i>	<i>T</i>	<i>Df</i>	<i>P</i>
German exam score	High school	11	71.91	8.07	2.43	-2.55	90.00	0.01
	BA	81	79.58	9.52	1.06			

Table 5: Independent t-test (age/German exam scores)

	Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SEM</i>	<i>T</i>	<i>Df</i>	<i>P</i>
German exam score	18-30	82	79.59	9.50	1.05	2.72	90.00	0.01
	31-58	10	71.10	7.64	2.41			

As can be noticed, there are no significant differences in the German exam score according to gender. However, there are significant differences in the German exam scores according to the educational background and age.

Discussion of the results

The objective of this study is to examine variables that can affect the acquisition of German as a fourth language. Different factors which are hypothesized to affect this process such as previously learned foreign languages that are typologically related,

metalinguistic awareness, and sociolinguistic variables, were examined. The findings of the tests have been compared to the results of previous studies in this field.

Foreign languages proficiency role while acquiring the fourth language

Question 1 in this study addressed the relationship between English as an L2, French as an L3, and German as an L4. To investigate the first hypothesis, a Pearson correlation test was used to explore the relationship between English and French proficiency and German language acquisition as a fourth language. The results show a significant correlation between the German and English C-Test scores. Moreover, there is also a significant correlation between the German exam scores and the French C-Test scores. The results of the first question are in line with the assumption of the DMM that asserts the positive role of the previously learned on the acquisition of an additional language under certain circumstances. Many researchers attribute this superiority to the broader linguistic repertoire acquired by bilinguals and multilinguals. From the DMM perspective, third language learners differ from second language learners in many ways. Jessner (2008b: 5) explains this as "the influence that the development of a multilingual system exerts on the learner and the learning process such as greater expertise in learning skills and qualities distinguishing the experienced from the inexperienced learner." (p: 5). This is in line with Cummins' Interdependence hypothesis, i.e. the previous linguistic knowledge of the learners from English and French which adds to their common underlying proficiency is found to be a significant variable. This means they can enhance the cognitive transfer and academic skills based on the two foreign languages (English and French) to the newly acquired language (German).

Not only linguistic knowledge but also the linguistic distance among the three foreign languages in this current study has a key influence over the newly acquired knowledge. The L1 Arabic is typologically distant from all the foreign languages in this study and therefore has not been tested in the L1 speakers of Arabic. The positive influence between the foreign languages has been attributed to the closely related languages (see also Rothman, 2011). The three foreign languages i.e. English, French and German are Indo-European languages sharing typologically similar systems and so transfer is believed to occur between those and not with the unrelated L1. Jessner (2006: 118), whose study also concentrated on German, Italian, and English in adult learners, affirms that "typology and recency of use seem to play a decisive role in multilingual production".

Metalinguistic awareness and fourth language acquisition

Another factor linked to multiple language learning is MLA whose crucial role is based on a large body of studies on TLA, as discussed above. From the DMM

perspective, a high level of MLA is associated with the acquisition of multiple languages. The second hypothesis in this study assumes that the German language proficiency would be affected by MLA in English and German. A simple linear regression test was calculated and the results show that English and German MLA scores can predict 47% of the variance. This regression analysis assesses the relationship between English and German MLA and German language proficiency, which is in the same vein with many studies that highlight the direct connection between MLA and the acquisition of an additional language. Jessner (2014) confirms that multilingual learners develop multilingual awareness and skills as a result of their multiple linguistic resources. From the DMM perspective, second language learners differ from third language learners in terms of their metalinguistic level, learning strategies, and their acquisition of an additional language due to contact with an L3. For example, Jessner (2006) collected data from trilingual adults learning English as an L3 by using think-aloud protocols in academic writing tasks in L3 and points out that "[m]etalinguistic awareness, which is seen as enhanced in multilinguals, plays a central and facilitating role in the acquisition of additional languages". More recently Cenoz & Gorter (2011: 4) collected data from 165 secondary school students who speak Basque or/and Spanish as L1 and English as L3. They also pointed out that "one of the outcomes of bi/multilingualism often associated with the acquisition of additional language is the development of metalinguistic awareness". This result supports the hypothesis that multilingualism is associated with higher levels of metalinguistic awareness which in return can facilitate learning German as a fourth language.

Question 3 investigates the role of some the sociolinguistic variables such as gender, educational background, and age on the acquisition of German. The Independent t-test shows that there are no significant statistical differences in the exam scores between males and females. This result is in line with a study that was conducted by Dewaele (2007) to predict L1/Dutch, L2/French, L3/English, and L4/German high school learners' scores according to some psychological and sociocognitive variables. Dewaele collected data from 47 females and 42 males aged between 17 and 21. The results affirm that gender differences do not affect the learner scores. Another study was carried out by Nshwi and Failsofah (2019) to investigate the language fluency of adult multilingual participants. The results show that females outperformed males in the semantic and phonological tasks. However, no significant influence of this outperformance was found because most of the participants were MA and Ph.D. students who have relatively the same educational background and exposure, and all of them are residents in Hungary. Many studies that highlighted the connection between language acquisition and gender considered the social context of the study as well as the associations between gender and other variables such as

exposure and the degree of use to explain the gender differences while acquiring an additional language. For example, Ellis (1994) stated that Asian males in Britain outperformed females in English as L2. However, he asserted that this outperformance might be connected to other factors such as the degree of exposure. Another study on L2 reading, which was conducted by Piasecka (2010), reports that females usually outperform their male peers in verbal abilities and relates this to their social engagement in schools.

TLA research very often controls age and education variables because most of the studies are conducted at schools or universities. However, the first part of the current study was conducted at the HLI that offers courses to learners beyond the age of 18 after they take a placement test. For that reason, these two variables needed to be studied and explored. The differences in the exam scores according to the participant level of education and age have been found significant. The results of the Independent t-test show that there are significant differences in the exam marks according to education. The participants who have a bachelor's degree outperformed the learners who have a high school degree. Several studies focused on the role of literacy and the educational background on TLA, for example, the role of literacy or MLA in language learning (Galambos & Goldin-Meadow, 1990; Jessner, 1999; Kemp, 2001; Swain, Lapkin, Rowen, & Hart, 1990; Thomas, 1992). This result can be linked to the fact that the educational background is associated with higher levels of MLA. Cook (1995) affirms that multicompetence resulting from a higher level of education is characterized by diverse mental abilities and greater metalinguistic awareness.

When concentrating on the age variable, the results reveal significant differences. In general, the participants aged between 18-30 outperformed the older participants aged between 31-58. This result is in line with many studies that confirm that younger adult learners outperform older ones. The result can be linked to the intensity of exposure to these foreign languages in the younger group. Most of the first group of participants (18-30) are still learning English and French at the university. Therefore, the degree of use and the intensity of the exposure are higher than for the older participants. This result is in line with the study that was conducted by Singleton & Ryan (2004) to investigate the age factor in foreign language learning in elementary school. The results showed that early starters outperformed later starters because of longer instruction and exposure. Nevertheless, as Singleton (1995: 1) stated, learning at every stage is possible if it is "appropriately focused, abundant, and enhanced". Schleppegrell et al. (2008: 9) link the outperformance of the college-age learners over the older ones to the differences in their physical abilities. However, they assure that "the older adults could achieve well by making the most of their extensive vocabulary and knowledge of grammatical principles".

Another factor which might explain the age differences in the language tasks are teaching approaches. Already Stephens & Joiner (1984: 13) state that elderly foreign language learners might encounter difficulties "if their first foreign language experience involved an approach radically different from the one employed by their present instructor". In the case of the HLI, where teachers use the communicative approach, adult learners who are used to the grammar-translation approach might face problems.

Conclusion

This study aims at exploring the impact of metalinguistic awareness and previously learned languages on learning German as a fourth language by adult learners at the HIL in Damascus. It attempts to find out if German language acquisition differs with regard to the learners' previously learned foreign languages, metalinguistic awareness, gender, educational background, and age. The findings of this research are based on the data obtained from true-beginner German language learners. The results of this research are supported by findings of similar studies of instructed multilingualism and can be summarized as following:

1. A significant correlation between English and French proficiency and successful German language acquisition is in line with previous research conducted in the field of TLA and thus promotes the positive influence of prior language knowledge on the acquisition of an additional Indo-European language (Jessner, 2006; 2014; 2017).
2. Metalinguistic awareness predicts German language scores in the Syrian context of the study. This result supports the importance of the role of MLA while acquiring an additional language and thus it is evidenced that MLA can reinforce learning German as the fourth language by Syrian adult learners who have already learned English and French as foreign languages.
3. Gender differences between males and females while acquiring German are not found statistically significant in this context.
4. Moreover, there were significant differences in the German exam scores based on the participant age and educational background at the Higher Language Institute.

Limitations

As for limitations of this research it must be taken into consideration that the researcher collected data only from the true-beginner level, namely A1/1. Investigating other levels may add more insights into the process of multilingual learning development.

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