

First Language Lexical Retrieval Attrition Among Iraqi Kurdish Migrants in the Netherlands

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ABSTRACT

This research explores the phenomenon of first language (L1) lexical attrition among late-bilingual Kurdish migrants living in the Netherlands, focusing on their results in a verbal fluency task (VFT). The study focuses on lexical retrieval, which is a key area often impacted by attrition among migrant populations, as it depends on accessing the mental lexicon. A comparison was made between the lexical retrieval capabilities of 50 late-bilingual Kurdish migrants who have lived in the Netherlands for more than 15 years (migrated after the age of 17) and 50 matched monolingual Kurdish speakers residing in the Kurdistan Region of Iraq. The VFT was employed as a tool to examine the L1 lexical attrition among Kurdish migrants living in the Netherlands. The results showed that the bilingual group produced fewer correct lexical items compared to the monolingual group, suggesting a notable decline in lexical access consistent with L1 attrition. The study adds to the limited research on L1 attrition in the Kurdish context and provides valuable insights into how language dynamics change within migrant populations in multilingual settings.

1. Introduction

1.1 The Research Problem

Despite the growing body of research in the field of language attrition, there is still a significant lack of research specifically investigating the process of lexical retrieval attrition in L1 in Iraqi Kurdish migrants to the Netherlands, especially for those who moved after the critical period (age 17+) and have been in the host country for at least 15 years. This gap in the current literature calls for empirical investigation into the long-term effects of migration on the lexical accessibility of the L1 among this group.

1.2 Research Aim

This study aims to find out if Kurdish late-bilinguals residing in the Netherlands experience any signs of L1 lexical attrition.

To do so, the outcome of the mentioned groups' performance on the VFT will be compared to a monolingual control group residing in the Kurdistan Region of Iraq.

1.3 Research Question

How is L1 lexical attrition reflected in participants' performance of the bilingual group on the VFT?

1.4 Research Hypothesis

It is expected that participants' performance of the bilingual group will reflect L1 lexical attrition on the VFT.

1.5 The Rationale of the Study

This research examines the relatively neglected topic of lexical attrition in the L1 among Iraqi Kurdish immigrants residing in the Netherlands. Being a minority language with minimal institutional backing, Kurdish faces significant unanswered questions related to attrition within diaspora settings. By concentrating on challenges related to lexical access following extended exposure to Dutch, the

research seeks to illuminate how long-term migration affects L1 preservation and to enhance the sparse literature on Kurdish language attrition.

2. Theoretical Background and Previous Studies

2.1 Defining First Language Attrition

According to Schmid and Köpke (2019, pp. 182-183), Einar Haugen established the groundwork for the discipline of L1 attrition in 1938. His work is seen as the earliest systematic investigation of language deterioration among migrants.

Before defining L1 attrition, it is essential to first acknowledge that definitions of language loss in research often are not clear, as highlighted by De Bot and Clyne (1994, p. 3). They use the term “loss” for any decline in language skills, “shift” for intergenerational loss, and “attrition” mirrors the loss of language proficiency in individuals over time.

Hicks and Dominguez (2020, p. 1) note that L1 attrition refers to a decline of linguistic capabilities connected to the use, processing, and grammatical representation of someone’s L1. The decline could be lexical, phonological, semantic, or pragmatic. According to Cai (2022, p. 15), L1 attrition is a gradual and slow process that influences L1 skills or knowledge of someone’s L1, when intensive contact with an L2 is present affecting the contact with his or her native language. Cherciov (2011, p. 19) adds that L1 attrition must only be related to non-pathological adult speakers residing in an L2-dominant environment. However, Yilmaz (2013, p. 9) puts L1 attrition under a deterioration of L1 skills due to a limitation in the use and input of a certain native tongue as a result of migration. Datta (2013, p. 117) relates L1 attrition to a change in an individual’s L1 because of a decline in its use and/or the impact of an L2. Schmid (2013, p. 117) further states that an extended period of time of residency in an L2 environment changes one’s L1. However, Coulmas (1998, p. 149) states that L1 attrition only occurs among late-bilingual adult migrants, with children and adolescents excluded.

Hence, L1 attrition is the result of the exposure to a dominant L2 by a non-pathological late-bilingual migrant residing in an L2 environment which triggers a decline in the knowledge and use of the bilingual’s L1 covering the regression of

a range of different linguistic domains such as lexical retrieval ability and grammatical knowledge.

2.2 Lexical Retrieval and L1 Lexical Retrieval Attrition

Prior to discussing the process of lexical retrieval, it is essential to first address the notion of the mental lexicon. Anne Treisman's doctoral thesis from 1961, was the first work that introduced the concept of mental lexicon. The hypothesis made was related to the postulation of a mental lexicon (the term "dictionary" was used rather than "lexicon") having individual lexical items in the mind (Colheart et al., 2001, p. 151). Aarts et al. (2014, p. 233) argue that the mental lexicon serves as a lexical repository within the cognitive system where words are stored in a systematized manner. The sound and form representations of the lexical items are encoded in cognitive processes. Their sound representation is expressed through a phonetic or phonological form while their form is expressed through their written form. The mental lexicon normally stores this particular information (Traxler, 2011, pp. 79-80; O'Grady et al., 1997, p. 391). Haegeman (1994, p. 37) describes the mental lexicon as a mental dictionary where the entire range of linguistic information possessed by speakers concerning the vocabulary of the language exists.

The primary cause of L1 lexical attrition in bilinguals is the difficulty in accessing L1 items in the mental dictionary, because of being in an L2 environment. This phenomenon frequently arises in migrant situations where L2 is prevalent, resulting in the replacement or slow retrieval of L1 lexical words. The most impacted area is the mental lexicon (Cherciov, 2011, pp. 5-21; Schmid, 2011, pp. 18-39). Michael and Gollan (2005) add that one of the reasons why bilinguals experience difficulties in lexical retrieval is that they usually use one of the two languages less often if compared to monolinguals. This is also confirmed by Schmid (2007, p. 8). Moreover, the domain that will be impacted initially and most severely by attrition among bilinguals is the mental lexicon. It usually results in slower access thus responses and reduced accuracy.

It is worth emphasizing that the above phenomenon is usually investigated through VFTs in language attrition studies. A VFT is a task that is designed to

measure how often and quickly a participant reaches lexical items in his or her mental lexicon. Schmid (2005, p. 21) states that the more items a participant can name in a limited time frame, the better his or her lexical retrieval will be. Furthermore, studies show that bilinguals generally have a more vulnerable lexical retrieval capacity than monolinguals in the VFT (Schmid & Yılmaz, 2018, p. 5). Additionally, studies indicate that time-limited lexical tasks can reveal L1 attrition (Weltens, 1989).

2.3 Operational Definition

First language attrition refers to the gradual deterioration of a bilingual's language skills in his or her native language across various linguistic domains, which occurs due to extended immersion in an environment where a L2 is prevalent. Lexical retrieval attrition is a particular aspect of this phenomenon, characterized by a decrease in both the speed and precision of word access from the mental lexicon. Because of the lack of the migrants to adequate language to speak and because of the actual life needs, they sometimes use communication strategies to fill their needs- they are techniques utilized by the learners to overcome difficulties in communication. They are strategies in which the object is explained and described without mentioning the exact word. For example, for "refrigerator", they might say, "It's the big thing in the kitchen where you keep food cold" (circumlocution).

2.3 L1 Kurdish Migration to the Netherlands

Migration, influenced by a variety of political, economic, educational, and social elements, often compels individuals to adjust their language use, particularly in multilingual environments (Meshthrie, 2001, p. 11; Bell, 2014, p. 22; Davies, 2015, p. 94-95). For many migrants, including the Kurds, this results in bilingualism, where the host country's dominant language increasingly replaces their native language (Schmid & Keijzer, 2009, p. 83; Opitz, 2011, p. 1). Kurdish migrants in the Netherlands, many of whom escaped political turmoil and conflict in Iraq, have faced Dutch integration policies that stress the importance of language learning. Since the 1990s, they have been mandated to acquire Dutch proficiency,

sometimes even before their arrival (Lucassen & Penninx, 1997; Callejo et al., 2007, p. 9). This transition in language, particularly when combined with a decrease in native language usage and the pressure to conform, contributes to the attrition of the L1 among Kurdish migrants. While Kurds constitute a considerable segment of the Iraqi diaspora in the Netherlands (around 22,800 out of 38,000 Iraqis), their robust Kurdish identity and limited connections with other Iraqi communities further influence their distinct migratory and linguistic experiences (van Heelsum, 2004, p. 9).

2.4 Previous Studies

Yağmur (1997) investigated the L1 verbal fluency attrition among Turkish adult migrants living in Australia. The research included 80 subjects split into migrant (experimental) and control groups. Results from the VFT (naming animals and fruits/vegetables within a minute) revealed that participants residing in Turkey performed better than those in Australia, highlighted a significant decrease of L1 lexical retrieval among the Turkish migrants in Australia.

Rosselli et al. (2000) examined the impact of bilingualism on verbal fluency among Hispanic individuals. The study included 82 participants, consisting of monolingual speakers of English or Spanish and Spanish-English bilinguals. The findings revealed that bilinguals performed less effectively than monolinguals, especially when it came to naming animals and foods.

Golland and colleagues (2002) examined Spanish-English bilinguals alongside English monolinguals through tasks measuring semantic fluency. The findings indicated that bilinguals had significantly lower performance in all categories, with the most considerable disparity evident in the semantic fluency tasks that involved animals, fruits, and vegetables.

Cherciov (2011) investigated L1 maintenance among Romanian migrants in Canada. Using a VFT, participants named as many animals and fruits/vegetables as possible in 60 seconds. Results showed that bilinguals scored lower than the Romanian control group, indicating signs of L1 lexical attrition.

The literature reviewed indicates that the loss of the attrition of the L1, especially in terms of vocabulary, is a multifaceted and gradual phenomenon shaped by

decreased usage, extended exposure to a dominant L2, and alterations in the mental lexicon. Insights into the workings of the mental lexicon and the process of lexical retrieval reveal that bilingual settings can hinder access to the L1, particularly when under time pressure. Studies consistently demonstrate that bilingual individuals frequently exhibit lower lexical fluency in comparison to their monolingual counterparts, making verbal fluency tests a crucial method for detecting attrition in L1 vocabulary. In the case of Kurdish migrants in the Netherlands, extended residence integration policies prioritizing Dutch language acquisition, and limited chances for using the L1 have fostered an environment that may promote attrition in L1 vocabulary. Nonetheless, there is a limited amount of research that specifically addresses the experiences of Iraqi Kurdish migrants.

3. Methodology

3.1 Participants

All the subjects in the present study were native speakers of Kurdish, born and raised in the Kurdistan Region of Iraq. The project consisted of a total of 100 participants, who were divided into two matched cohorts: bilingual participants in the Netherlands and monolingual participants in Iraqi Kurdistan. The two groups were carefully matched according to demographics such as age, sex, education, and dialect for comparison purposes. For all participants, Kurdish was the L1, while Dutch was for L2 for the bilingual group.

Participants were recruited through non-probability purposive and snowball sampling methods, a common practice in research examining L1 attrition, particularly in hard-to-reach migrant populations. The group of bilingual speakers consisted of adult Kurdish speakers who had been in the Netherlands for at least 15 years and had moved abroad after the age of 17, thus ensuring that their L1 development had taken place in their country of origin. It is recommended by Schmid (2005:4) to investigate language attrition in its most stable state, therefore the mentioned minimum and maximum numbers of years are set in this study.

The VFT, which is typically used for the measurement of lexical retrieval attrition, was administered for both groups of participants. Testing was conducted in different locations across the Netherlands and Kurdistan Region (in both Northern and Central Kurmanji). The bilingual participants were in the attrition (target) group, while the monolingual participants served as a reference group to present a non-attributed benchmark for comparison purposes. This methodology allows for determining lexical attrition effects by comparing performance between bilingual speakers and those who have regular exposure to their L1. The utilization of monolingual speakers as counterparts in L1 attrition studies is a common and standard notion that can be observed in both past and recent studies (Flege, 1987; Waas, 1993; Yağmur 1997; Gross, 2000; Tsimplici et al., 2004; Beganovic, 2006; Ben-Rafael & Schmid, 2007; Keijzer, 2007; Dostert, 2009; Opitz, 2011; Badstübner, 2011; Gürel & Yilmaz, 2011; Yilmaz, & Schmid, 2012; Baladzhaeva, 2013; Ribes & Llanes, 2015; Karayayla & Schmid, 2018; Lerner, 2021; Cai, 2022).

Table 1: An Overview of the Research Participants

Bs					Ms				
Name	Gender	Age	Education	Dialect	Name	Gender	Age	Education	Dialect
B1	M	54	HS	Central Kurmanji	M1	M	54	BA	Central Kurmanji
B2	M	61	MA	Central Kurmanji	M2	M	62	MA	Central Kurmanji
B3	F	76	HD	Central Kurmanji	M3	F	77	BA	Central Kurmanji
B4	M	43	Ph.D.	Central Kurmanji	M4	M	45	Ph.D.	Central Kurmanji
B5	M	51	BA	Northern Kurmanji	M5	M	54	HD	Northern Kurmanji
B6	M	49	BA	Northern Kurmanji	M6	M	49	HD	Northern Kurmanji
B7	F	77	Ph.D.	Central Kurmanji	M7	F	76	Ph.D.	Central Kurmanji
B8	F	57	BA	Central Kurmanji	M8	F	57	BA	Central Kurmanji
B9	M	73	Ph.D.	Central Kurmanji	M9	M	69	Ph.D.	Central Kurmanji
B10	F	64	BA	Central Kurmanji	M10	F	62	BA	Central Kurmanji

B11	M	57	HS	Central Kurmanji	M11	M	60	HS	Central Kurmanji
B12	F	52	HD	Central Kurmanji	M12	F	53	HD	Central Kurmanji
B13	M	45	HS	Central Kurmanji	M13	M	46	HS	Central Kurmanji
B14	M	61	HD	Central Kurmanji	M14	M	60	HD	Central Kurmanji
B15	F	47	BA	Central Kurmanji	M15	F	48	BA	Central Kurmanji
B16	M	59	BA	Central Kurmanji	M16	M	59	BA	Central Kurmanji
B17	M	62	BA	Central Kurmanji	M17	M	63	BA	Central Kurmanji
B18	M	69	BA	Central Kurmanji	M18	M	72	BA	Central Kurmanji
B19	M	64	HS	Central Kurmanji	M19	M	66	BA	Central Kurmanji
B20	M	67	HD	Northern Kurmanji	M20	M	70	HD	Northern Kurmanji
B21	M	44	BA	Northern Kurmanji	M21	M	45	MA	Northern Kurmanji
B22	F	62	Ph.D.	Central Kurmanji	M22	F	66	MA	Central Kurmanji
B23	M	41	Ph.D.	Central Kurmanji	M23	M	40	MA	Central Kurmanji
B24	M	55	HD	Northern Kurmanji	M24	M	56	BA	Northern Kurmanji
B25	M	44	BA	Central Kurmanji	M25	M	42	BA	Central Kurmanji
B26	F	53	BA	Central Kurmanji	M26	F	53	BA	Central Kurmanji
B27	M	56	HS	Central Kurmanji	M27	M	54	HS	Central Kurmanji
B28	F	54	HS	Northern Kurmanji	M28	F	57	HS	Northern Kurmanji
B29	F	53	MA	Northern Kurmanji	M29	F	55	MA	Northern Kurmanji
B30	M	70	HS	Central Kurmanji	M30	M	70	HD	Central Kurmanji
B31	M	67	BA	Central Kurmanji	M31	M	68	BA	Central Kurmanji
B32	M	77	HD	Central Kurmanji	M32	M	80	BA	Central Kurmanji
B33	F	59	BA	Central Kurmanji	M33	F	57	BA	Central Kurmanji
B34	M	66	HD	Central Kurmanji	M34	M	67	HD	Central Kurmanji

B35	M	73	HD	Central Kurmanji	M35	M	75	BA	Central Kurmanji
B36	M	67	HD	Central Kurmanji	M36	M	67	BA	Central Kurmanji
B37	M	67	BA	Central Kurmanji	M37	M	67	BA	Central Kurmanji
B38	M	68	BA	Central Kurmanji	M38	M	69	BA	Central Kurmanji
B39	M	68	HS	Central Kurmanji	M39	M	69	BA	Central Kurmanji
B40	M	40	BA	Northern Kurmanji	M40	M	38	BA	Northern Kurmanji
B41	M	43	BA	Northern Kurmanji	M41	M	41	BA	Northern Kurmanji
B42	M	62	BA	Central Kurmanji	M42	M	65	BA	Central Kurmanji
B43	F	48	BA	Central Kurmanji	M43	F	47	HD	Central Kurmanji
B44	M	54	HD	Central Kurmanji	M44	M	54	BA	Central Kurmanji
B45	F	39	MA	Central Kurmanji	M45	F	39	MA	Central Kurmanji
B46	F	60	BA	Central Kurmanji	M46	F	60	BA	Central Kurmanji
B47	M	73	BA	Northern Kurmanji	M47	M	77	MA	Northern Kurmanji
B48	F	65	PS	Northern Kurmanji	M48	F	64	HS	Northern Kurmanji
B49	F	40	BA	Northern Kurmanji	M49	F	39	BA	Northern Kurmanji
B50	F	66	HD	Northern Kurmanji	M50	F	67	BA	Northern Kurmanji

Names coded:

B1-M50 = bilingual participants

M1-M50 = monolingual participants

Gender:

M = male

F = female

Educational Credentials:

PS = primary school

HS = high school

HD = higher diploma

BA = bachelor

MA = master degree

Ph.D. = doctoral degree

Monolingual Group

At the time the data was collected, the monolingual group was composed of 34% female participants and 66% male individuals, with an average age of 59 years. Participants' ages ranged from 39 to 80 years old. More than half (52%) possessed a bachelor's degree, while 6% had obtained a Ph.D. Regarding dialect 74% identified as Central Kurmanji speakers and 26% as Northern Kurmanji speakers. This group is categorized as monolingual based on questionnaire findings indicating their exclusive daily use of Kurdish, with no regular use of other language(s).

Bilingual Group

Throughout the study, the bilingual group consisted of 34% females and 66% males, with an average age of 58,24 years which is very close to the monolingual group's average age, spanning from 39 to 77 years old. The majority of participants (44%) possessed a bachelor's degree, while 6% had attained a master's degree. The distribution of dialects revealed that 74% were Central Kurmanji speakers and 26% were Northern Kurmanji speakers which is strictly in line with the monolingual group. Participants underwent pre-screening to ensure they met inclusion criteria: they were native Kurdish speakers, emigrated after the critical period (after age 17), had lived in the Netherlands for at least 15 years, and had no history of language disorders. Steps were taken to align the bilingual group with the monolingual group regarding essential mentioned demographic factors to reduce confounding variables and improve the study's reliability and comparability, which is also shared in the above-presented table.

3.2 Instruments

The lexical access was tested using the VFT in which participants were prompted to list as many animal names as possible from their L1, over a time span of 60 seconds. This task is standardized for measuring lexical retrieval skills. The

answers of the respondents were taped and transcribed and then submitted for quantitative analysis; repetitions and words outside of the L1 were not counted. As it was illustrated in the theoretical background and previous studies section, the use of an animal category was strategically chosen because animals are an important category for measuring L1 attrition. Steps were taken toward reducing participants' bias, specifically interest in animals, in order for responses from bilingual and monolingual groups to be comparable. The number of accurate items retrieved was regarded as an index for both lexical access fluency and overall linguistic skills (Schmid, 2007).

Table 2: Sampe of the VFT

Bilingual	Monolingual
که رویشک rabbit	به رخ lamb
کهو quail	بزن goat
چۆله که sparrow	مانگا cow
ته بر bird	گا bull
به رخ lamb	حوشتر camel
که له باب rooster	فیل elephant
میڤوله mosquito	شیر lion
میڤ housefly	پلنگ tiger
شیر lion	نه هه نگ shark
پلنگ tiger	ماسی fish
مه یمون monkey	پۆی fox
حوشتر times	مه یمون monkey

The table above illustrates a sample of the VFT performance produced by a bilingual and a monolingual speaker.

3.3 Ethics

The study followed the ethical guidelines of Salahaddin University - Erbil. In addition, the participants were informed clearly about the aims and advantages of the research and were assured that they could leave at any time if they wanted.

They agreed after signing the consent forms. To preserve personal information secrecy, all personal names were replaced with coded identities. These measures also ensured that no bias affected the researcher. All sources were properly referred to for maintaining academic honesty as well as to avoid plagiarism. The researcher also obtained an official approval from the Kurdistan Region's Ministry of Higher Education and Scientific Research to begin the Ph.D. study and from Salahaddin University – Erbil for travelling to the Netherlands to carry out data collection concerning the target group of the study.

4. RESULTS AND DISCUSSION

In the VFT, 100 participants were recruited, split evenly between monolingual and bilingual groups, and were requested to name as many names of animals as they could within a span of 60 seconds. The function of this task was to assess the participants' verbal fluency (lexical retrieval), which serves as a crucial indicator of lexical attrition in their L1. It is worth emphasizing that performing a reliability test on a single-item measure is not recommended (Wanous & Reichers, 1996; Zhang & Colvin, 2024), which means that Cronbach's Alpha is not applicable for the type of verbal fluency task here.

Regarding the VFT, it is recommended to perform a normality test to ensure the reliability and transparency of the study's methodology. Additionally, normality analysis is required if the research aims to include an analysis such as a t-test (Kusz, 2020; Ghasemi & Zahediasl, 2012; Keselman, Othman & Wilcox, 2013). Consequently, the subsequent figure displays a Q-Q Plot analysis for the VFT scores.

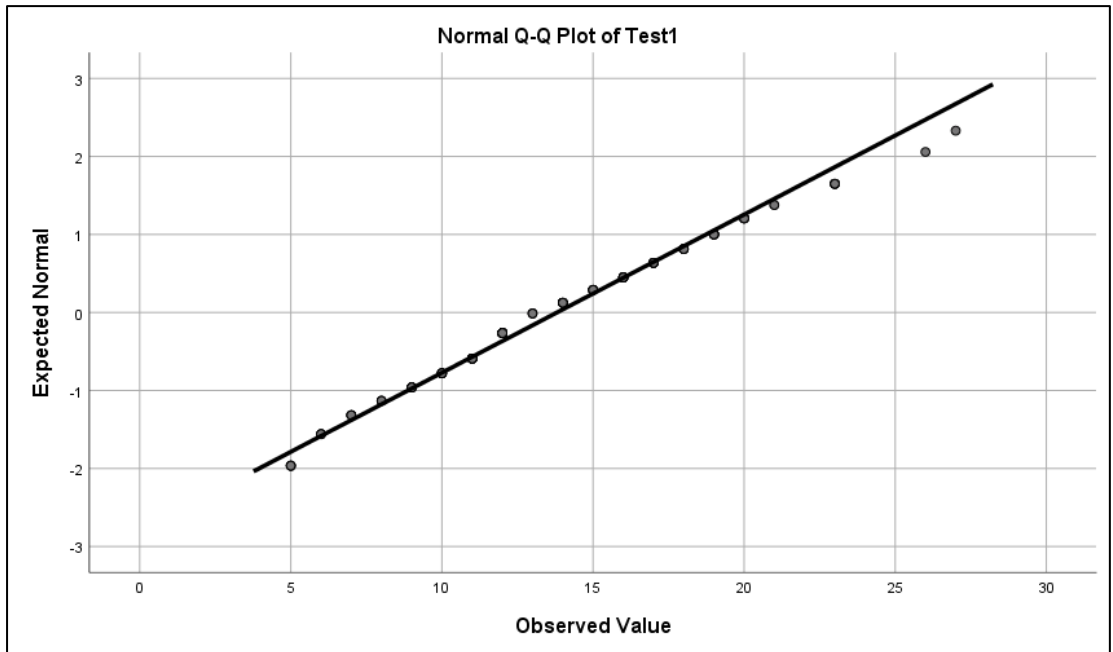


Fig. 1 Q-Q Plot of VFT

The above Q-Q Plot is a test of the distribution of VFT scores against a theoretical normal distribution. The closeness of the plotted points to the line suggests that the distribution of the scores is very close to a normal distribution. Any small discrepancies noted toward the ends are always present and do not necessarily suggest deviance from normality. Therefore, the VFT can thus be used efficiently.

Table 2. An Overview of the VFT Scores of Both Groups

	Groups	N	Mean	Std. Deviation	Std. Error Mean
VFT	Monolingual	50	15.06	4.414	.624
	Bilingual	50	12.56	5.143	.727

The table above shows the results of a t-test applied to data from the VFT, where participants from both groups had to name as many animals as possible in a period limited to 60 seconds. Monolingual participants had a mean score of 15.06 animals, compared to a mean score of 12.56 for bilingual participants. The means difference between the two groups was observed to be 2.5 animals, a sign that

monolinguals had a better performance than bilinguals. Monolinguals had a reported deviation from the means at 4.414, less than bilinguals' deviation from means at 5.143, signifying more consistency in monolinguals' response. The observed standard error by monolinguals was at 0.624, while bilinguals had a measure at 0.727, signifying precision levels related to each groups' perspective means.

Table 16. Independent Samples Test of the VFT

	F	Sig.	t	df	Sig. (2-tailed)	Mean Differenc e	Std. Error Differenc e	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variance s assumed	.88 5	.34 9	2.60 8	98	.011	2.50000	.95856	.5977 7	4.4022 3
Equal variance s not assumed			2.60 8	95.79 5	.011	2.50000	.95856	.5972 3	4.4027 7

The independent samples t-test compared the performance of the monolingual participants to bilingual participants on the VFT. Levene's test indicated that the equal variances assumption was met ($F=0.885$, $p=0.349$), so allowing for the testing of the results under the "equal variances assumed" condition. The independent samples t-test revealed that there was a statistically significant difference between the monolingual and bilingual groups, $t(98)=2.608$, $p=0.011$.

The present study conducted a comprehensive empirical investigation into L1 lexical attrition among Kurdish migrants in the Netherlands. The findings of this study offered evidence of L1 lexical attrition among Kurdish late-bilingual speakers in the Netherlands after the completion of the VFT. The overall results revealed that monolingual subjects have had a superior average of animal names (15.06) compared to bilingual Kurdish migrants in the Netherlands (12.56), with a mean difference of 2.5, interpreted here to be a moderate difference. Many studies by scholars confirm that a score difference of 2 points or more indicates a significant and justified difference in estimating verbal fluency (Gollan et al., 2002; Bialystok et al., 2008; Kavé et al., 2008). The findings reveal better performance by monolingual subjects compared to bilingual ones in terms of lexical retrieval ability. The relative performance by the two groups shows that bilingual speakers experience L1 lexical attrition, thus providing credence to the original hypothesis of this study: *It is expected that participants' performance of the bilingual group will reflect L1 lexical attrition on the VFT.* This hypothesis thus is approved. Therefore, monolingual speakers are seen to have a potential for retrieving lexical items from the mental lexicon with more speed, less effort, and more accuracy compared to their bilingual counterparts. It is worth noting that the results in this study are in line with the earlier mentioned previous studies by Yağmur (1997), Rosselli et al. (2000), Golland et al. (2002), and Cherciov (2011), in that bilinguals suffer from L1 lexical attrition if compared to monolingual counterparts. A plausible explanation for the monolinguals performing better than the bilinguals in the Netherlands might stem from their steady and continuous exposure to their L1, unlike the bilinguals, who regularly interact with an L2, which may influence their L1 attrition, which is also mentioned by Cai (2022). In addition, the findings are in line with the Cherciov (2011) and Schmid's (2011) investigation mentioned in the theoretical background in that L1 attrition refers to a decline of one's lexical access ability due to a dominated L2 environment.

5. Conclusion

The results of this research provide empirical proof of the occurrence of L1 lexical attrition in late-bilingual Kurdish migrants residing in the Netherlands. The

notable disparity in performance on the VFT between monolingual and bilingual participants, where monolinguals generated a higher average number of animal names, implies that extended living in an L2-dominant setting and decreased L1 usage leads to a deterioration in lexical retrieval capabilities. This is consistent with earlier studies which show that bilingual individuals often experience slower and less accurate lexical access due to interlingual competition and reduced exposure to their L1. The findings reinforce the proposition that L1 attrition is evident in quantifiable linguistic decline, especially regarding lexical retrieval, with migrant groups. Future investigations might examine additional linguistic areas and long-term effects to further clarify the processes involved in L1 attrition. These findings enhance the understanding of language maintenance and shift within migrant populations.

6. Recommendations

To reduce L1 lexical attrition, frequent use and active practicing of the Kurdish language should be promoted through speech, reading, and writing, ideally in the family and community settings. The creation of immersive settings such as cultural centres, language clubs, and religious communities can also aid L1 lexical retrieval maintenance through frequent use. Formal education also plays a key role to reduce L1 lexical attrition. Having a strong cultural identity that is associated with the L1 community ensures motivation for the maintenance of lexical terms, for example, that can be aided through celebration of cultural practices such as Newroz and the use of the L1 in the media, including internet communication and social pages. The family's support is also key, as the encouragement of the use of the L1 among the home community offers a natural support for the maintenance of the language. Lastly, the reduction of pressure in society to move solely in the direction of the majority language through awareness-boosting and appreciation of the value of difference in language aids the maintenance of the L1.

7. Suggestions for Further Research

Based on the findings of this study and to further explore the dynamics of L1 lexical attrition among Kurdish bilinguals in the Netherlands (or elsewhere), future research could examine the following domains:

Longitudinal Investigation of L1 Lexical Attrition

Carry out a longitudinal study of the developmental process of L1 lexical attrition among Kurdish migrants in the Netherlands throughout their lifespans. This might help to find out how the attrition takes shape and whether the attrition levels out or increases as contact with an L2 environment increases.

Social and Cultural Practices Effect on Maintenance of L1

Consider social and cultural activities (attending Kurdish festivals, media use, community events) that might reduce L1 lexical attrition. Such an investigation may illustrate how the relationship between being actively involved in cultural activities results in a better maintenance of the L1 and whether social activities are effective in terms of L1 lexical attrition.

Inter-Group Comparative Analysis in Various Migrant Groups

One could compare the L1 lexical attrition of Kurdish migrants in the Netherlands with Arabic or Turkish migrants. This would make clear whether attested attrition patterns are language-dependent or not.

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کالڤوونی هینانه وهی وشه له زمانی یه کهمدا له نیوان کۆچه رانی کوردی عیراقی له هۆلهندا

پوخته:

ئهم توێژینه وهیه به دوا داچوون بۆ دیاردی کالڤوونی هینانه وهی وشهیی له زمانی یه کهمی کۆچه رانی دوو زمانی دهکات، بۆ ئهو کوردانهی، که له هۆلهندا دهژین. توێژینه وهیه که جهخت دهکاته سهر ئه نجامهکانی تاقیکردنه وهی پێوانی زارهکی، ههروا تیشک دهخاته سهر ئهرکی هینانه وهی وشهیی له فهرههنگی هزریدا، که مهیدانیکی سه رهکییه و کاریگه ری ههیه له سهر کالڤوونه وهی زمانی یه کهم له نیوان گروپه کۆچه رهکاندا. ههر بۆیه به راوردکارییهک له بواری توانای هینانه وهی وشهیی له نیوان ۵۰ قسه که ری دوو زمانی کورد، که له کاتی کۆچکردنیاندا ته مه نیان له ۱۷ ساڵ و به ره وژوورتر بووه و بۆ ماوهی زیاتر له ۱۵ ساڵیشه له ولاتی هۆلهندا دهژین، له گهڵ ئاخپوه رانی یهک زمانی، که له هه ری می کوردستانی عیراقدا دهژین، ئه نجامدرا. ئه نجامهکانی به راوردکاری ده ری انخست، که به شداربووانی دوو زمانی پێژه یه کی که متر له وشه یان به بیردێته وه، به به راورد له گهڵ به شداربووانی یهک زمانی، که ئه مه ش دابه زینیکی پوون و ئاشکرا ده دات به ده سه ته وه له بواری توانای هینانه وهی وشهیی، ئه مه ش په یوهندی به کالڤوونه وهی زمانه وه ههیه. ئهم لیکۆلینه وهیه پالپشتیه که بۆ توێژینه وه ده گمه نه کان له سهر کالڤوونه وهی زمانی یه کهم له نیوان کوردانی تاراوگه دا و تیگه یشتنیکی گرنگ پێشکه ش دهکات له باره ی چۆنیه تی په ره سه ندنی گۆرانکارییهکانی زمان له نیوان گروپه کۆچه رهکانی ژینگه ی فره زمانهکاندا.

إضمحلال الاسترجاع المعجمي للغة الأولى بين مهاجري كورد العراق في هولندا

مخلص:

تبحث هذه الدراسة ظاهرة تلاشي الكلمات من اللغة الأولى لمهاجري ثنائيي اللغة من الكورد الذين يعيشون في هولندا. تركز الدراسة على نتائج اختبارات الطلاقة الشفهية، بالإضافة إلى مهمة استرجاع الكلمات المعجمية الذهنية التي هي المنطقة الرئيسية المؤثرة على تلاشي اللغة الأولى بين مجموعات المهاجرين. لذلك، تم إجراء مقارنة من حيث القدرة على المفردات بين 50 متحدثاً ثنائيي اللغة من الكورد الذين كانوا في سن 17 عاماً أو أكثر عند هجرتهم وكانوا يعيشون في هولندا لأكثر من 15 عاماً، ومتحدثي أحاديي اللغة يعيشون في منطقة كردستان العراق. استخدام البحث اختبار أظهرت نتائج المقارنة أن مشاركي ثنائيي اللغة تذكروا كلمات أقل من مشاركي أحاديي اللغة، مما يشير إلى تراجع واضح في القدرة على المفردات المرتبطة باضمحلال اللغة. تقدم هذه الدراسة دعماً للدراسات النادرة حول اضمحلال لغة الأم بين الكورد المهاجرين، وتوفر نظرة مهمة على كيفية تطور التغيرات اللغوية بين المجموعات المهاجرة في بيئات متعددة اللغات.



Appendices

Appendix A: Consent Letter for Participation

Researcher

Minwas Jamal Rasheed

Salahaddin University – Erbil

By signing below, I acknowledge that I have received, reviewed, and understood the information given by the researcher, including the questionnaire and the advertisement letter. I hereby share my voluntary consent to participate in this research study.

Participants name:

Participant's signature:

Date:

Appendix B: Salahaddin University's Official Letter

حكومة إقليم كردستان – العراق
 مجلس الوزراء
 وزارة التعليم العالي والبحث العلمي
 جامعة صلاح الدين – أربيل
 مديرية الدراسات العليا والشؤون العلمية



حكومة إقليم كردستان
 لهنجومهني وەزاران
 وەزارەتی خوێندنی باڵا و توێژینهوهی زانستی
 زانکۆی سه‌ڵاح‌ده‌ین
 بڕێوه‌به‌رایه‌تی خوێندنی باڵا و کاروباری زانستی

Kurdistan Regional Government
Council of Ministers
Ministry of Higher Education and Scientific Research
Salahaddin University – Erbil
Directorate of Postgraduate Studies and Scientific Affairs/
Postgraduate Studies

ژماره : ٩٥٤١
 رێکەوت: ٢٠٢٤/٧/١

بۆ/ کۆلیژی زمان – خوێندنی باڵا
 ب/ وهلام

ئاماژە بە نووسراوتان ژماره ١٢٠٥/٢/٣ له ٢٠٢٤/٧/١، تاييهت به داواکاری (مینواس جمال رشید) قوتابی خوێندنی باڵا/دکتۆرا له کۆلیژه‌که‌تان، به‌مه‌به‌ستی ئەنجامدانی کاری مه‌یدانی توێژینه‌وه‌که‌ی له‌ دهره‌وه‌ی وڵات، پێتان راده‌گه‌یه‌نین په‌سنده‌.

له‌گه‌ڵ رێزدا..

پ.ی.د. شریف مولود شریف
 ی. سه‌روکی زانکۆ بۆ کاروباری زانستی و خوێندنی باڵا

وێنه‌یه‌ک بۆ:
 نووسینگه‌ی به‌رێز سه‌روکی زانکۆ/ له‌گه‌ڵ رێزدا.
 نووسینگه‌ی به‌رێز ی. سه‌روکی زانکۆ بۆ کاروباری زانستی و خوێندنی باڵا / له‌گه‌ڵ رێزدا .
 دۆسه‌ی قوتابی / له‌گه‌ڵ به‌رایه‌یه‌کان.
 ده‌ رکرده .

Appendix C: Translation of Salahaddin University's Official Letter

*Kurdistan Regional Government
Council of Ministers
Ministry of Higher Education and Scientific Research
Salahaddin University – Erbil
Directorate of Postgraduate Studies and Scientific Affairs
Postgraduate Studies*

Number: 9541

Date: 9/7/2024

To: College of Languages – Higher Education

Subject: Response

In reference to your letter No. 3/3/1205 dated January 7, 2024, concerning the application of (Minwas Jamal Rasheed), a postgraduate/doctoral student at your college, to conduct his research work abroad, we would like to inform you that it has been approved.

Yours sincerely...

(signature)

Asst. Prof. Dr. Shareef Maloud Shareef

Assistant to the University President for Scientific and Higher Education Affairs

A copy to:

Office of the University President/yours sincerely

Office of the Assistant of the University President for Scientific and Higher Education Affairs/yours sincerely

Student Archive/yours sincerely

Outgoing Post