

Doctoral Dissertation Synopsis

**Vocabulary Attrition and Retention:
A Multiple Case Study of Hungarian, Moroccan, and
French Speakers of English as a Second Language**

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Abstract

This action research investigates second language (L2) vocabulary attrition and retention among Hungarian, Moroccan, and French speakers of English as a Second Language within a longitudinal, panel-type design. Eleven university students with varied multilingual backgrounds participated in an online Academic English course followed by a 40-week disuse period. Vocabulary instruction was delivered through a blended pedagogical approach incorporating diversified teaching frameworks, with instruction delivered online in either weekly or intensive format depending on participant group. Some participants received periodic input during the disuse period, while others received no reinforcement. The study focused on personal, sociolinguistic, linguistic, and input factors observed to lead to second language vocabulary attrition and retention.

Findings revealed that learners with larger vocabulary size and higher motivation retained more vocabulary over time. Instructional support during the disuse period effectively reactivated dormant vocabulary, while the absence of support led to noticeable attrition, particularly among low-frequency items and collocations. Sentence production tasks and contextualized vocabulary use proved most beneficial for retention.

Implications for language pedagogy include integrating spaced repetition, active recall, and task-based recycling strategies into L2 instruction. The study also highlights the advantages and limitations of online instruction for diverse learner groups and reinforces the value of practitioner-led, iterative action research in second language acquisition.

Keywords:

L2 vocabulary, attrition and retention, language pedagogy, multilingualism.

Introduction

While extensive studies have been conducted on first and second language acquisition, studies of language attrition only surfaced as a recognized field of study in 1980 as the University of Pennsylvania held the first exclusively attrition-themed conference (Weltens & Cohen, 1989). Language attrition can be defined as the “loss of language as a result of contact with majority languages, loss of language by communities, or loss of language by individuals in both pathological and nonpathological settings” (Bardovi-Harlig & Stringer, 2010, p. 2). This means that language may be deeply deteriorated on account of the mere acquisition and shift to a second language.

In an era marked by globalization and growing multilingual communication, studying attrition is critical for linguistic research, especially as there remains a scarcity of investigations focusing on populations such as Hungarian, Moroccan, and French speakers of English as a Second Language (ESL). Such populations represent diverse backgrounds and can yield rich comparative result analyses. This underrepresentation may stem from language policy priorities, the logistical challenges of conducting longitudinal research in these specific regions, or the institutional focus on other aspects of language education.

Vocabulary as a specialized area of linguistic research has received considerable focus due to its importance as a core component of language that provides an array of cultural, social, cognitive, pedagogic, and technological insights, and owing to its practicality as a quantifiable component that can be studied through available resources such as corpora, lexical databases, software tools, and standardized assessment.

The current study is no exception and deliberately explores vocabulary, especially since the phenomenon of second language vocabulary attrition among advanced learners remains underexplored in comparative studies involving distinct linguistic and cultural backgrounds.

To address this gap, the present dissertation examines the retention and attrition of academic vocabulary among Hungarian, Moroccan, and French speakers of English as a Second Language (ESL) over a prolonged time to provide some insights into the complexity of language learning and its pedagogical implications.

The choice of Hungarian, Moroccan, and French populations is deliberate, as it includes diverse sociolinguistic environments in which English is learned and used, and as the researcher has knowledge and access to the spoken languages of these populations.

This dissertation therefore addresses these understudied populations together with the lack of comparative studies (Schmid et al., 2004) as another gap in attrition research, shedding light on academic vocabulary in particular to build on the previous findings highlighting the vulnerability of the lexicon to attrition (Schmid, 2006; Weltens & Grendel, 1993).

The dissertation responds to the call for more comparative studies in the field (Schmid et al., 2004; Bardovi-Harlig & Stringer, 2010) and aims to provide insights into the personal, sociolinguistic, linguistic, and input factors influencing second language vocabulary maintenance and attrition, hoping to contribute to the development of more contextually sensitive pedagogical strategies that can be implemented among diverse learner populations. It was guided by the following qualitative inquiries:

1. How do intrinsic, extrinsic, and linguistic factors influence L2 vocabulary attrition and retention among the studied participants?
2. How does the studied participants' vocabulary attrition relate to established theories of second language attrition?
3. How does the studied participants' experience of vocabulary attrition/ retention inform pedagogical practices?

Methodology

The study adopted a longitudinal, multiple-case action research design to investigate second language (L2) vocabulary attrition and retention among Hungarian, Moroccan, and French university students learning English. The research addressed the underrepresentation of comparative L2 attrition studies in these contexts, particularly in light of post-COVID digital learning environments.

Drawing on established theoretical frameworks, including the Regression Hypothesis, Dormant Language Hypothesis, and Retrieval Failure Hypothesis, the study explored how personal, sociolinguistic, linguistic, and input factors influenced vocabulary retention and loss. The research was also informed by prior empirical work emphasizing the vulnerability of lexical knowledge to attrition and the necessity of studying vocabulary production rather than mere recognition (Weltens & Grendel, 1993; Nation, 2011; Bardovi-Harlig & Stringer, 2010).

The study was structured as a panel-type longitudinal case study, focusing on repeated observation of the same participants over time to capture lexical changes. It incorporated both qualitative and supportive quantitative methods, with a primary focus on rich, context-sensitive data. This approach facilitated an in-depth analysis of individual learner experiences across varying sociocultural settings.

Originally envisioned as a quasi-experimental pre/post-test study with control and experimental groups, the research design was redesigned due to participant attrition and logistical constraints intensified by the pandemic. Ultimately, 11 participants (4 Hungarian, 7 Moroccan/French) completed the study. The research was conducted in two phases: a pilot with Hungarian participants and a main phase with Moroccan and French participants.

The core of the study was an online Academic English course emphasizing vocabulary instruction. Participants were introduced to a list of 101 academic and high-frequency vocabulary items over identical instructional durations (12 hours total), though delivered in varying session formats (8 weekly 90-minute sessions vs. 4 intensive 180-minute sessions). The course also incorporated skills development and vocabulary learning strategies. After instruction, a 40-week disuse period was imposed to examine attrition patterns, with occasional reinforcement for some learners.

Instruction was informed by multiple teaching frameworks and integrated all four language skills to ensure contextualized learning. Vocabulary retention was assessed through pre- and post-vocabulary tests, along with participant observation, self-evaluations, and feedback.

Given the small sample size and reflective nature of the project, an action research framework was adopted, enabling the researcher to iteratively design, deliver, observe, and refine the instructional approach. This cyclic process aligned with the spiral model of action research (Kemmis & McTaggart, 2005), offering valuable insights into instructional effectiveness and learner engagement over time.

While the dual role of instructor-researcher may have raised questions of bias, it allowed for direct control over input variables and the practical application of pedagogical theory. Trustworthiness was ensured through peer review, and contextual grounding in relevant literature.

Results

1. Influence of Intrinsic, Extrinsic, and Linguistic Factors

The findings indicated that vocabulary attrition and retention were the result of complex interactions among personal, sociolinguistic, and linguistic variables. Intrinsic factors such as vocabulary size, motivation, attitudes toward English, and the use of varied learning strategies were found to be pivotal.

Learners with a larger vocabulary size and those who employed diverse, contextually embedded strategies (e.g., mnemonic devices, contextual guessing, and multimedia tools) demonstrated better retention. However, motivation and positive attitudes were not sufficient to prevent attrition in the absence of consistent instructional reinforcement during disuse periods.

Extrinsic factors, particularly instructional input, significantly shaped outcomes. Frequent and meaningful exposure to English during disuse periods emerged as a critical factor in promoting long-term retention.

Linguistic factors such as the distance between L1 and L2, vocabulary frequency, and lexical complexity also impacted retention. High-frequency and less semantically complex words were better retained, whereas collocations and low-frequency, domain-specific terms exhibited higher rates of attrition, especially in the absence of continued exposure.

2. Alignment with Theories of L2 Attrition

Participants in the study demonstrated patterns that reflected several well-established theoretical frameworks. Those who received continued instructional support showed a reactivation of previously learned vocabulary, consistent with the Dormant Language Hypothesis (Andersen, 1982; Lambert, 1982). Participants tended to forget more recently acquired vocabulary first, aligning with the Regression Hypothesis (Cohen, 1975). Their retention of simpler lexical items over more complex ones illustrated patterns predicted by Markedness Theory (Håkansson, 1995),

Finally, only participants who received sustained support maintained long-term retention, suggesting that a certain level of proficiency, described by the Critical Threshold Hypothesis (Neisser, 1984), was necessary to avoid attrition

3. Pedagogical Implications

Instruction should aim to build both depth and breadth of vocabulary through diverse, learner-centered strategies that include both receptive and productive use.

Spaced repetition and active recall are recommended to support long-term retention. Fostering learner motivation through supportive environments and linking learning to personal goals is essential.

Instructional programs are advised to account for learners' linguistic backgrounds, and to address potential areas of difficulty early in the learning process. Curriculum design is recommended to include structured, CEFR-aligned vocabulary progression, with attention to recycling and integrating vocabulary across skills.

Learners need support during disuse periods, such as holidays or academic breaks, to prevent vocabulary attrition.

Vocabulary retention can be optimized through a combination of individual engagement, consistent instructional reinforcement, and contextually rich, adaptive teaching methodologies.

Conclusion

The study examined second language (L2) vocabulary attrition and retention among Hungarian, Moroccan, and French speakers of English, emphasizing the complex interplay of intrinsic, extrinsic, and linguistic factors. The research aimed to assess how these factors interact to influence vocabulary outcomes, to test the relevance of established attrition theories in diverse learner contexts, and to derive pedagogically relevant insights.

Findings revealed that vocabulary retention was influenced by variables such as vocabulary size, motivation, learning strategies, multilingual background, language status, L1–L2 distance, and vocabulary type. Learners with broader vocabulary sizes and access to instructional reinforcement during disuse periods exhibited greater retention. Conversely, low-frequency, specialized vocabulary (particularly collocations and multi-word chunks) was more susceptible to attrition, especially in the absence of continued input. Instructional support during disuse periods was crucial in reactivating dormant vocabulary.

Diversified teaching methods with digital integration and skill-based approaches enhanced retention, particularly when learners actively engaged in sentence production and contextualized vocabulary use. The importance of spaced repetition, recycling, and personalization in vocabulary instruction was underscored.

The study contributes to the theoretical landscape by validating existing models while questioning assumptions, such as the diminished role of motivation in attrition. It also illustrates how instructional pacing and engagement strategies impact retention, especially across different formats and disuse periods. The findings indicate that sustaining vocabulary knowledge requires ongoing interaction and reinforcement, not merely initial acquisition.

Despite its insights, the study acknowledges limitations, most notably the small sample size and its limited generalizability. Participant engagement over an extended period proved challenging, and the focus on specific national groups limits applicability across broader populations. These constraints highlight the need for future research involving more diverse demographics, including learners from varying age groups, educational settings, and professional domains.

Suggested areas for further exploration include the role of affective variables such as emotional engagement, language anxiety, and identity, as well as the integration of neurolinguistic tools and adaptive technologies in understanding and supporting vocabulary retention. The impact

of emerging digital learning platforms offers ground for investigating new forms of instruction and learner interaction.

The study's action research design, involving iterative cycles of planning, implementation, observation, and reflection, proved instrumental in aligning instructional interventions with research goals. The dual role of researcher and instructor, though demanding, allowed for real-time pedagogical responsiveness while maintaining research integrity. This dynamic methodology bridged theory and practice, offering a model for reflective, adaptable instruction.

Insights from the study extend beyond the specific findings on attrition: they also reveal broader principles about effective online learning. Effective online instruction required intentional design rather than replication of face-to-face formats.

Ultimately, the study affirms that L2 vocabulary retention is a dynamic, ongoing process shaped by usage, context, and reinforcement. Language learning, therefore, should not be seen as a finite achievement but as a sustained journey. The research concludes that what is retained, lost, or reactivated in vocabulary is a reflection not only of learner habits but also of the instructional and social environments that surround them.

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