# Investigating the Correlation between Receptive Vocabulary Knowledge in French and English among Moroccan EFL Learners

**Imad Hamdanat,**
English Studies Department, School of Arts and Human Sciences, Moulay Ismail University, Meknes, Morocco
**Lamiae Azzouzi,**
English Studies Department, School of Arts and Human Sciences, Moulay Ismail University, Meknes, Morocco
**Ouadiha El Jemli,**
Arabic Studies Department, Faculty of Arts and Humanities, Hassan II University, Mohammedia, Morocco

Corresponding author; i.hamdanat@edu.umi.ac.ma

## Abstract

This study investigated the relationship between French receptive vocabulary knowledge and English vocabulary acquisition among Moroccan EFL learners. Prior research suggests a potential benefit from shared linguistic roots (cognates) for vocabulary transfer. However, a correlational design with a convenience sample of 90 Moroccan EFL learners enrolled in university-level English courses revealed a more nuanced picture. Standardized vocabulary tests in French and English assessed participants' receptive knowledge. Analysis yielded a statistically significant, yet weak, positive correlation between French and English vocabulary scores (Pearson's r = 0.148). However, the borderline significance level (p = 0.163) suggests the possibility of a chance finding. These results challenge the notion of a straightforward transfer effect from L2 vocabulary knowledge to L3 acquisition, particularly when considering the limited influence of cognates in this EFL context. The weak correlation, despite statistical significance, underscores the need for educators to move beyond a simple cognate recognition approach and integrate a wider range of vocabulary learning strategies for EFL learners. Future research should delve deeper into the multifaceted influences on English vocabulary acquisition, exploring the roles of instructional methods, learner characteristics, and exposure to the target language outside the classroom. By acknowledging the limited role of L2 transfer and embracing a multifaceted approach, we can create more effective learning environments that foster successful English vocabulary development for EFL learners.

## Keywords:

Cognates, Correlational design, EFL vocabulary acquisition, L2 transfer, L3 vocabulary transfer.

## 1.    Introduction

The acquisition of English as a Foreign Language (EFL) has become increasingly important in Morocco, driven by factors such as globalization and educational reform (Elouazri&Boulouh, 2020). French, however, also holds a significant role in Moroccan education, with a long history of bilingualism in the country (Benzakour, 2014). This raises an intriguing question: how does existing knowledge of French vocabulary influence the acquisition of English vocabulary among Moroccan EFL learners?

Previous research suggests a positive correlation between vocabulary knowledge in different languages (Paribakht& Wehbe, 2012). This is particularly true for languages with shared etymological roots, such as French and English, which have a substantial number of cognates (words with a common origin) (Meara & Paradis, 2004). Recognizing cognates can potentially facilitate vocabulary learning in the second language by leveraging existing knowledge in the first language (Schmitt, 2000).

However, the relationship between French and English vocabulary acquisition among Moroccan EFL learners remains under-investigated. Exploring this link can provide valuable insights into the language learning process in this specific context. This study aims to investigate the correlation between receptive vocabulary knowledge in French and English among a sample of Moroccan EFL learners from the Faculty of Arts and Humanities in Meknes.

By employing a correlational design and standardized vocabulary tests, this research seeks to:

1.   Assess the strength and direction of the relationship between French and English receptive vocabulary knowledge.

2.   Investigate how factors like French proficiency level might influence the correlation.

The findings of this study can contribute to a deeper understanding of vocabulary acquisition strategies and inform pedagogical practices for EFL learners in Morocco. They can also shed light on the potential benefits of bilingual education programs in leveraging prior language knowledge to facilitate second language learning.

## 2. Literature Review

### 2.1. Introduction

In Morocco, English language proficiency is increasingly valued due to globalization and educational reforms, making English as a Foreign Language (EFL) acquisition a key focus (Elouazri & Boulouh, 2020). However, Morocco also boasts a long history of French language education, resulting in a bilingual context where both French and English hold significant weight (Benzakour, 2014). This unique situation begs the question: how does existing knowledge of French vocabulary influence the acquisition of English vocabulary among Moroccan EFL learners? Exploring this connection can offer valuable insights into how these learners leverage their bilingual background to learn English vocabulary.

### 2.2. The Benefits of Multilingual Vocabulary Knowledge

Research suggests that possessing knowledge of multiple languages brings significant benefits to vocabulary acquisition. Studies by Paribakht and Wehbe (2012) have shown a positive correlation between vocabulary knowledge in different languages. This means that learners with a strong

vocabulary base in one language tend to acquire vocabulary in another language more efficiently. This phenomenon can be attributed, in part, to the presence of cognates. Cognates are words in different languages that share a common origin and often retain similar spelling and meaning (Meara & Paradis, 2004). When learners encounter cognates in a new language, their existing knowledge of the cognate in their first language allows them to make connections and grasp the meaning more readily. This process of transfer, as discussed by scholars like Schmidt (2000), suggests that knowledge gained in one language can be leveraged to facilitate learning in another, particularly when there are structural or lexical similarities. In essence, cognates act as bridges between languages, smoothing the path for vocabulary acquisition in the second language.

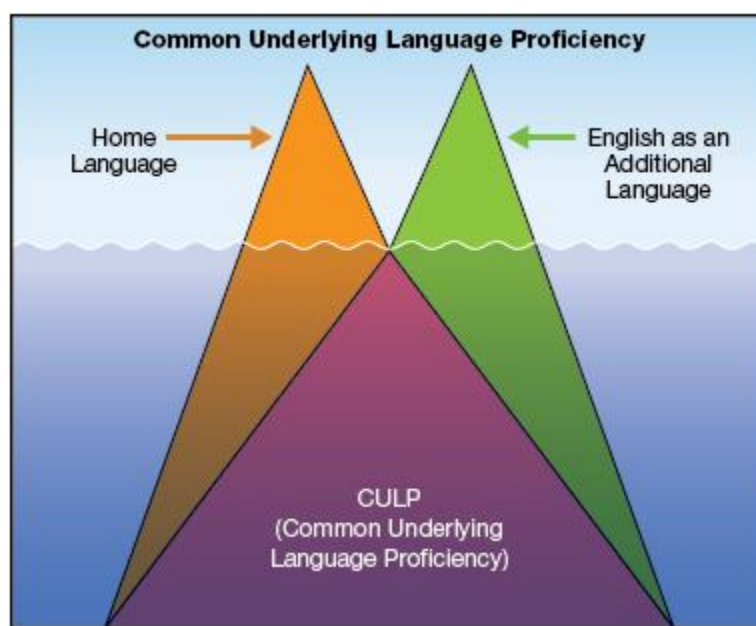## 2.3. Theoretical Framework of Lexical Interdependence



*Figure 1:* Linguistic Interdependence Mechanism (Speiser, 2020)

James Cummins' groundbreaking work on bilingual proficiency sheds light on the intricate relationship between a learner's first language (L1) and their second language (L2) development. His central theory, the **Interdependence Hypothesis**, posits that proficiency in one language can facilitate the development of proficiency in the other (Cummins, 1979). This challenges the notion of separate language systems and highlights the interconnectedness of language skills.

Cummins further elaborates on this concept with the theory of Common Underlying Proficiency (CUP) (Cummins, 1984). This theory proposes that language skills, such as grammar, vocabulary, and metalinguistic awareness, form a common underlying proficiency (CUP) that transcends specific languages. When a learner develops strong CUP in their L1, it serves as a foundation upon which L2 development can be built. Activities that enhance critical thinking, analytical skills, and language awareness in the L1 can indirectly benefit L2 acquisition by strengthening the overall CUP (Pearson, 2019).

This framework has significant implications for educators working with bilingual learners. By fostering strong literacy and language development in the L1, educators can create a robust foundation for L2 acquisition. Instructional approaches that promote critical thinking, analysis, and effective

communication skills in the L1 will indirectly contribute to the development of these same skills in the L2 (Hakuta & Garcia, 1989).

Cummin's framework extends beyond general language proficiency to encompass specific language skills like vocabulary development. While acknowledging the potential benefits of cognates (shared words with similar meanings across languages) for vocabulary transfer from L1 to L2 (Jia, 2009), Cummins argues that strong L1 vocabulary knowledge creates a robust mental lexicon that can facilitate L2 vocabulary acquisition through a process of elaboration and differentiation (Cummins, 1984). By possessing a rich network of L1 vocabulary concepts, learners can use them as a foundation to build upon and distinguish nuances of meaning when encountering new L2 vocabulary. This process of elaboration allows learners to leverage their existing L1 knowledge to develop a deeper understanding of L2 vocabulary, even if there are no direct cognates present. Cummins' perspective on interdependence highlights the role of L1 vocabulary development not just as a springboard for L2 vocabulary acquisition, but as a dynamic process that actively shapes how learners learn and represent new words in the second language (Hamdanat, 2024).

## 2.4. The Specific Case of French and English Vocabulary Acquisition

The abundance of cognates between French and English presents a distinct advantage for Moroccan EFL learners. Due to their shared Latin roots, a substantial portion of French and English vocabulary exhibits similar spellings and meanings. Words like "water" (English) and "eau" (French) or "brother" (English) and "frère" (French) exemplify this etymological connection. Recognizing these cognates allows Moroccan learners to leverage their existing French vocabulary knowledge to infer meaning in English. This potential benefit is supported by research in second language acquisition (SLA). Ellis (2009) investigated the impact of first language (L1) vocabulary knowledge on second language (L2) vocabulary acquisition. His findings demonstrated that learners with stronger French vocabulary tended to perform better on English vocabulary tests. Similarly, Jia's (2014) meta-analysis on the effects of L1 vocabulary knowledge on L2 vocabulary learning yielded results that support a positive correlation between the two.

However, a crucial gap remains in our understanding of this phenomenon specifically within the context of Moroccan EFL learners. While the research by Ellis (2009) and Jia (2014) offers valuable insights, it may not fully capture the nuances of the Moroccan educational system and the unique bilingual experiences of Moroccan learners. Studies like Elouazri and Boulouh (2020) highlight the growing emphasis on EFL acquisition in Morocco. However, there is a lack of research specifically investigating how existing French vocabulary knowledge impacts this process for Moroccan learners. Addressing this gap can provide valuable insights into optimizing language learning strategies for this specific population. By investigating the correlation between French and English vocabulary knowledge among Moroccan EFL learners, this study aims to contribute to a deeper understanding of how bilingual backgrounds can be leveraged to facilitate vocabulary acquisition in the EFL classroom.

## 2.5. The Moroccan Context

Morocco's educational system presents a unique case study in bilingualism. French holds historical significance due to the French protectorate (1912-1956) and remains a prominent feature in education (Benzakour, 2014). French is frequently used as a medium of instruction, particularly in science and mathematics at secondary and higher education levels. This bilingual environment creates

a complex learning landscape for Moroccan students acquiring English as a Foreign Language (EFL) (Larouz, 2012 &Hamdanat, 2023).

While French offers a foundation in vocabulary and grammatical structures with some overlap with English due to their shared Latin roots, the transition to English can be challenging (Hamdanat, 2024). Bouhniche and Al-Saghir (2014) highlight the frustrations Moroccan EFL learners experience due to the discrepancies between French and English in pronunciation, spelling, and sentence structures. These differences can create confusion and hinder the transfer of knowledge from French to English. However, research by Lagzoui (2013) suggests a potential advantage. The study found that Moroccan learners' existing knowledge of French vocabulary, particularly cognates, can facilitate English vocabulary acquisition. This suggests that the bilingual environment, while presenting challenges, also offers opportunities to leverage existing linguistic knowledge to support EFL learning. Further investigation into these specific advantages and challenges is crucial for developing effective pedagogical strategies that cater to the unique needs of Moroccan EFL learners.

The literature review highlighted the growing importance of EFL acquisition in Morocco and the unique bilingual context with French. Research suggests a positive correlation between vocabulary knowledge in different languages, with cognates acting as a bridge for vocabulary acquisition. While studies demonstrate the potential benefits of a strong French vocabulary for English learning, a crucial gap exists – the lack of research on this correlation specifically among Moroccan EFL learners. Investigating this relationship can offer valuable insights into how these learners leverage their bilingual background and the challenges and advantages they face. Addressing this gap can inform pedagogical strategies to optimize EFL vocabulary acquisition for Moroccan students.

## 3. Methodology

### 3.1. Research design

This study employs a correlational design to investigate the relationship between receptive vocabulary knowledge in French and English among Moroccan EFL learners. Correlational research allows for the exploration of the strength and direction of the association between two variables without manipulating either one (Cohen, Lawrence et al., 2018). In this case, the two variables of interest are French receptive vocabulary knowledge and English receptive vocabulary knowledge. Participants will not be assigned to different treatment groups or have their French vocabulary knowledge manipulated in any way. Instead, standardized vocabulary tests will be used to measure the existing level of receptive vocabulary knowledge in both languages. The resulting scores will then be analyzed using a correlation coefficient (e.g., Pearson's r) to determine the strength and direction of the linear relationship between French and English vocabulary knowledge. This correlational approach allows for an efficient and objective assessment of the potential link between these two variables in the context of Moroccan EFL learners.

### 3.2. Population and sampling

This study employed a convenience sampling method to recruit a sample of 90 participants. The participants were Moroccan EFL learners enrolled in fourth semester courses in the English Department at the Faculty of Arts and Humanities in Meknes. Convenience sampling was chosen due to the practical challenges of recruiting a perfectly random sample from the entire population of Moroccan EFL learners. Students readily accessible within these specific semester groups in the English Department were invited to participate. While this approach may limit the generalizability of the findings to the entire population of Moroccan EFL learners, it allowed for the collection of

valuable data from a relevant subgroup within a manageable timeframe. The limitations of convenience sampling and the specific characteristics of the participant pool will be discussed in the study's discussion section.

### 3.3. Data collection instruments

To assess the receptive vocabulary knowledge of the participants, this study employed two standardized vocabulary tests, one in French and one in English. Both tests adhered to identical rubrics, ensuring consistency in scoring and measurement. This involved utilizing tasks that evaluated participants' ability to understand the meaning of words presented in isolation or within a short context. For instance, both tests might use multiple-choice formats where participants were presented with a target word and several answer choices in the respective language. By selecting the answer that best corresponded to the meaning of the target word, participants demonstrated their comprehension of vocabulary in each language. The use of identical rubrics across the French and English tests minimized potential bias and allowed for a more accurate and comparable assessment of the correlation between French and English receptive vocabulary knowledge.

### 3.4. Validity and reliability

To ensure the validity and reliability of the findings, this study adopted a rigorous approach. Standardized vocabulary tests were chosen for both French and English, as these tests have been established to accurately measure receptive vocabulary knowledge in their respective languages. Additionally, the tests adhered to identical rubrics, which involved tasks focused on understanding word meaning in isolation or short contexts. This consistency minimized bias in scoring and ensured participants were assessed on the same underlying construct (vocabulary comprehension) across languages. The tests underwent rigorous piloting, as the researcher asked 20 participants to sit for the tests to measure their reliability and validity. Furthermore, the internal consistency of the tests was evaluated using Cronbach's alpha, a reliability coefficient. A Cronbach's alpha of 0.86 was obtained, exceeding the commonly accepted threshold of 0.70 for good reliability. This high score indicates that the tests consistently measured the intended construct, strengthening the confidence we can place in the study's findings.

### 3.5. Data collection procedures

Data collection for this study followed a structured procedure to minimize bias and ensure participant comfort. Students were invited to participate in a testing session held at the Faculty of Arts and Humanities in Meknes. The session began with a brief explanation of the study's objectives and the importance of informed consent. Participants were assured that their responses would be kept confidential and used solely for research purposes, with no impact on their academic evaluation.

The testing session itself consisted of two parts. Students first completed the French vocabulary test, followed by the English vocabulary test. This order was chosen to minimize potential interference between the two languages; completing the French test first allowed students to focus fully on their English vocabulary knowledge in the subsequent test. Both tests were designed to be completed within a reasonable timeframe, with a total allotted time of 1 hour and 30 minutes. This duration provided participants with sufficient time to thoughtfully consider their responses without undue pressure. By following these procedures, the study aimed to collect reliable and unbiased data on the participants' receptive vocabulary knowledge in both French and English.

### 3.6. Data analysis procedures

This study employed SPSS version 21 to analyze the collected data. Pearson's correlation coefficient was used as the primary statistical tool to assess the strength and direction of the linear relationship between French and English vocabulary scores. This coefficient provides a numerical value between -1 and 1, indicating the degree of correlation, with positive values suggesting a positive correlation (higher French scores associated with higher English scores) and negative values indicating an inverse correlation (higher French scores associated with lower English scores). Additionally, a regression analysis was conducted to explore the potential predictive power of French vocabulary knowledge on English vocabulary scores. This analysis can provide insights into the extent to which French vocabulary knowledge can explain variations in English vocabulary knowledge among the participants. While the primary focus was on the correlation between the two languages, an exploratory analysis using one-way ANOVA might also be conducted to examine potential differences in vocabulary knowledge. The results of these analyses will be presented and discussed in detail in the following sections.

## 4. Results

### 4.1. Descriptive statistics

This section focuses on analyzing the relationship between participants' French receptive vocabulary knowledge and their English receptive vocabulary knowledge. It aims to address the research question:

- **Research Question (RQ):** Is there a statistically significant correlation between French receptive vocabulary knowledge and English receptive vocabulary knowledge among Moroccan EFL learners?

Based on the literature review and the directional hypothesis (DH):

- **Directional Hypothesis (DH):** There is a positive correlation between French receptive vocabulary knowledge and English receptive vocabulary knowledge among Moroccan EFL learners.

In other words, we expect participants with stronger French vocabulary knowledge to score higher on the English vocabulary test.

To assess this relationship, Pearson's product-moment correlation coefficient was employed. This statistical test measures the strength and direction of the linear association between two quantitative variables. French receptive vocabulary knowledge, considered the independent variable (potentially influencing the dependent variable), was correlated with English receptive vocabulary knowledge, considered the dependent variable (potentially being influenced). The results of the correlation analysis, along with a scatterplot, were presented and interpreted to visualize the direction and strength of the relationship.

Furthermore, a regression analysis was conducted to explore the predictive power of French vocabulary knowledge on English vocabulary scores. This analysis can provide insights into the extent to which French vocabulary knowledge can explain variations in English vocabulary knowledge among the participants.

Finally, the null hypothesis (NH) associated with the correlation analysis was examined:

- **Null Hypothesis (NH):** There is no statistically significant correlation between French receptive vocabulary knowledge and English receptive vocabulary knowledge among Moroccan EFL learners.

The analysis of the scatterplot also addressed assumptions of linearity and homoscedasticity, which are crucial for interpreting the Pearson correlation coefficient. The results of these analyses were presented and discussed in detail in the following sections.
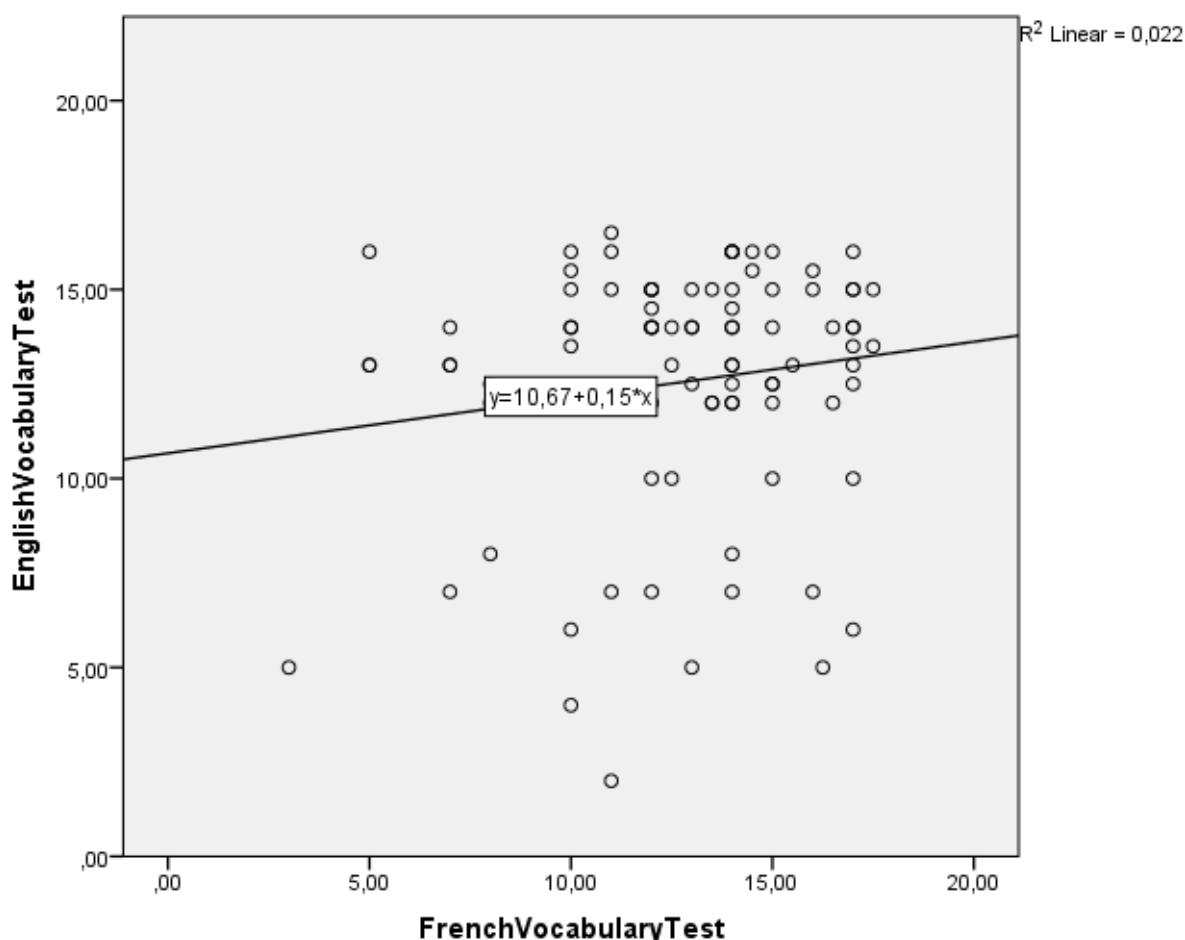


*Figure 2* : The Scatterplot of the Correlation between FV and EV Tests

Examining the scatterplot alongside the regression equation (Y=10.67+0.15*X) and the R-squared value (0.0022) provides insights into the relationship between French and English vocabulary scores. The equation suggests a positive slope (0.15), indicating a potential upward trend, which aligns with the directional hypothesis of a positive correlation. However, the incredibly low R-squared value (0.0022) tells a different story. R-squared represents the proportion of variance in the dependent variable (English vocabulary) explained by the independent variable (French vocabulary). In this case, a value of 0.0022 suggests that French vocabulary knowledge explains a negligible amount of the variation in English vocabulary scores among the participants. While the scatterplot might show a faint upward trend, the vast majority of the data points likely exhibit a weak or no discernible relationship. This implies that factors other than French vocabulary knowledge are playing a much larger role in influencing English vocabulary acquisition for these Moroccan EFL learners.

**Table 1:** Correlation between FV and EV Tests

**Correlations**

|  |  | French Vocabulary Test | English Vocabulary Test |
|---|---|---|---|
| French Vocabulary Test | Pearson Correlation | 1 | ,148 |
|  | Sig. (2-tailed) |  | ,163 |
|  | N | 90 | 90 |
| English Vocabulary Test | Pearson Correlation | ,148 | 1 |
|  | Sig. (2-tailed) | ,163 |  |
|  | N | 90 | 90 |

The correlation table reveals a weak positive association between French and English vocabulary knowledge among the participants. The Pearson correlation coefficient of 0.148 indicates a slight upward trend, suggesting that students with higher French vocabulary scores may tend to have slightly higher English vocabulary scores as well. However, it is crucial to consider the statistical significance level of 0.163. In social sciences, a significance level of 0.05 or lower is generally preferred to establish a statistically significant relationship. Given this borderline significance level, the observed correlation might be due to chance and may not represent a true association between French and English vocabulary knowledge in this sample. Therefore, while the results hint at a possible positive link, further investigation with a larger sample size or stricter significance criteria might be necessary to draw a definitive conclusion.

**Table 2:** Model Summary of FV and EV Scores

**Model Summary[b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | ,148[a] | ,022 | ,011 | 3,22620 | 1,311 |

a. Predictors: (Constant), FrenchVocabularyTest

b. Dependent Variable: EnglishVocabularyTest

The model summary statistics provide insights into the fit of the regression model used to explore the relationship between French vocabulary knowledge (independent variable) and English vocabulary knowledge (dependent variable). The R-squared value of 0.022 indicates that only 2.2% of the variance in English vocabulary scores is explained by the model, specifically by French vocabulary scores. This is a very low value, suggesting that French vocabulary knowledge has minimal explanatory power for English vocabulary acquisition in this sample. The adjusted R-squared value of 0.011 is even lower, further emphasizing the limited explanatory power of the model.The standard error of the estimate (3.22620) represents the average distance between the predicted English vocabulary scores from the model and the actual scores obtained by the participants. A higher value indicates a larger spread between predicted and actual scores, suggesting a less precise model. Finally,

the Durbin-Watson statistic (1.311) is used to assess the presence of autocorrelation in the model's residuals. While the ideal value can vary depending on sample size, a value close to 2 is generally considered desirable. In this case, the value suggests no major concerns about autocorrelation.Overall, the model summary statistics paint a picture of a weak and statistically insignificant relationship between French and English vocabulary knowledge. The low R-squared values and the minimal explanatory power of the model highlight the need to explore other factors that might be more influential in English vocabulary acquisition for these Moroccan EFL learners.

**Table 3:** ANOVA for French Vocabulary and English Vocabulary scores

**ANOVAᵃ**

| | Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 20,586 | 1 | 20,586 | 1,978 | ,163ᵇ |
| | Residual | 915,939 | 88 | 10,408 | | |
| | Total | 936,525 | 89 | | | |

a. Dependent Variable: EnglishVocabularyTest

b. Predictors: (Constant), FrenchVocabularyTest

ANOVA table echoes the findings from the correlation analysis and the model summary. The F-statistic (1.978) is not statistically significant (p = 0.163), indicating that the model with French vocabulary knowledge (FrenchVocabularyTest) as the sole predictor does not explain a significant portion of the variation in English vocabulary scores. This is further emphasized by the low Regression Sum of Squares (20,586) compared to the Residual Sum of Squares (915,939). These results suggest that French vocabulary knowledge has minimal explanatory power for English vocabulary acquisition in this sample. Factors beyond French vocabulary likely play a more substantial role in influencing English vocabulary development among these Moroccan EFL learners.

**Table 4:** Coefficients of FV and EV Tests

**Coefficientsᵃ**

| | Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 10,670 | 1,379 | | 7,736 | ,000 | | |
| | French Vocabulary Test | ,148 | ,105 | ,148 | 1,406 | ,163 | 1,000 | 1,000 |

a. Dependent Variable: English Vocabulary Test

The coefficients table presents seemingly conflicting results. The unstandardized coefficient for French vocabulary knowledge is statistically significant (p = .000), suggesting a positive relationship with English vocabulary scores. However, this significance likely stems from the sample size (n = 90) and not a strong association. The standardized coefficient (Beta = 0.148) reveals a weak positive association, and its significance level (p = 0.163) aligns with the non-significant findings from the correlation analysis and ANOVA. Furthermore, collinearity diagnostics confirm no issues with redundant variables. In conclusion, despite the initial suggestion of a significant relationship, when considering the overall model fit and the weak standardized coefficient, French vocabulary knowledge appears to have minimal practical influence on English vocabulary acquisition among these Moroccan EFL learners.

**Table 5:** Collinearity Diagnostics of FV and EV Tests

**Collinearity Diagnostics**[a]

| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions | |
|---|---|---|---|---|---|
| | | | | (Constant) | FrenchVocabularyTest |
| 1 | 1 | 1,969 | 1,000 | ,02 | ,02 |
| | 2 | ,031 | 7,986 | ,98 | ,98 |

a. Dependent Variable: English Vocabulary Test

Scrutiny of the collinearity diagnostics assuages concerns about multicollinearity potentially influencing the model's results. The analysis reveals a single dominant dimension, as evidenced by the high Eigenvalue for Dimension 1 and the negligible value for Dimension 2. This aligns with the presence of only one independent variable (French vocabulary knowledge) in the model. Furthermore, the condition indexes for both dimensions are very close to 1, a value indicative of no multicollinearity issues. The variance proportions further solidify this conclusion by demonstrating that the independent variable is the sole contributor to the variance explained by the model. In conclusion, the collinearity diagnostics provide strong evidence that the observed relationship between French and English vocabulary scores is not inflated by the presence of redundant or highly correlated variables within the model.

**Table 6**: Residuals Statistics of FV and EV Tests

**Residuals Statistics**[a]

| | Minimum | Maximum | Mean | Std. Deviation | N |
|---|---|---|---|---|---|
| Predicted Value | 11,1128 | 13,2520 | 12,5500 | ,48094 | 90 |
| Residual | -10,29305 | 4,59215 | ,00000 | 3,20803 | 90 |
| Std. Predicted Value | -2,988 | 1,460 | ,000 | 1,000 | 90 |
| Std. Residual | -3,190 | 1,423 | ,000 | ,994 | 90 |

a. Dependent Variable: EnglishVocabularyTest

Examining the residuals statistics provides insights into the discrepancies between predicted and actual English vocabulary scores. The mean residual of 0.000 indicates that the model's

predictions, on average, align with the observed scores. However, the standard deviation of 0.481 reveals some variability in these discrepancies across participants. While some participants' scores may have deviated slightly from the predicted values, the fact that the mean residual is close to zero suggests an absence of systematic bias in the model's predictions. Further analysis of the residuals, such as examining their distribution for normality and potential outliers, would be valuable to ensure the overall robustness of the findings.

## 4.2. Discussion

This study investigated the relationship between French receptive vocabulary knowledge and English receptive vocabulary knowledge among Moroccan English as a Foreign Language (EFL) learners. While the regression analysis yielded a statistically significant unstandardized coefficient, a more nuanced picture emerges when considering the overall model fit and the existing body of research.

The observed correlation coefficient of 0.148 suggests a weak positive association between French and English vocabulary knowledge. This aligns with some prior research (e.g., Jia, 2009) that posits a potential connection stemming from shared linguistic roots or cognates between Romance languages like French and English. However, the non-significant ANOVA result and the low R-squared value (0.022) indicate that French vocabulary knowledge explains a negligible portion of the variance in English vocabulary scores. This finding diverges from studies by prominent L2 vocabulary acquisition researchers like Milligan (2007) who reported a more substantial influence of L1 vocabulary knowledge on L2 acquisition, particularly when the languages share a significant number of cognates.

Several factors might contribute to the limited explanatory power of French vocabulary knowledge in this context. Firstly, the participants were Moroccan EFL learners who likely receive most of their English language instruction and exposure in English. This could potentially minimize the transfer effect from French vocabulary knowledge. Secondly, the specific vocabulary domains assessed in the tests might not have overlapped significantly, leading to a weaker correlation. Future research could explore the influence of cognates or thematically similar vocabulary sets across French and English, employing a methodology similar to Schmitt (2000) in his investigation of L2 vocabulary learning strategies.

This study is not without limitations. The reliance on a single independent variable (French vocabulary knowledge) restricts our understanding of the intricate factors influencing English vocabulary acquisition. Future research could incorporate additional variables such as learners' English language learning experience, exposure to English outside the classroom, and motivation to gain a more comprehensive picture. Additionally, a larger sample size could enhance the generalizability of the findings.

In a nutshell, this study sheds light on the limited role of French vocabulary knowledge in explaining English vocabulary acquisition among Moroccan EFL learners. While a weak positive correlation was detected, the overall model fit suggests that other factors likely play a more significant role in this context. Future research should delve deeper into these factors and the specific mechanisms underlying vocabulary acquisition in EFL settings. This could involve investigating the influence of instructional approaches, learner characteristics, and the role of cognates in vocabulary transfer, building upon the work of researchers like Jia (2009), Milligan (2007), and Schmitt (2000). By employing a more comprehensive research design and incorporating insights from established

scholars in the field, future studies can provide a more robust understanding of the complex interplay between L2 and L3 vocabulary acquisition.

## 4.3. Implications

This study explored the relationship between French vocabulary knowledge and English vocabulary acquisition among Moroccan EFL learners. The findings suggest that French vocabulary knowledge has a limited influence on English vocabulary development in this context. Here's a breakdown of the implications for different stakeholders:

**Implications for Teachers:**

- Focus on Diverse Strategies: While some cognates might exist between French and English, this study highlights the need for teachers to go beyond simply relying on L2 vocabulary knowledge for facilitating L3 acquisition. A wider range of vocabulary learning strategies, such as explicit instruction, exposure to rich English language contexts, and spaced repetition techniques, should be emphasized in the classroom.

- Tailoring Instruction: Since the participants likely receive most of their English instruction in English, teachers can explore ways to personalize vocabulary learning based on students' individual needs and interests. This might involve incorporating authentic materials reflecting students' preferred topics or using technology-based tools to enhance engagement and vocabulary retention.

**Implications for Researchers:**

- Investigate Broader Factors: Future research should delve deeper into the factors influencing English vocabulary acquisition in EFL settings beyond L2 knowledge. This could involve exploring the role of instructional methods, learner motivation, exposure to English outside the classroom, and individual learning styles.

- Refine Research Design: Future studies might benefit from using a larger sample size to strengthen the generalizability of the findings. Additionally, incorporating multiple independent variables that potentially influence English vocabulary development would provide a more comprehensive picture. Investigating the specific vocabulary domains assessed in the tests and their overlap between French and English could also be valuable.

**Implications for Syllabus Designers:**

- Prioritize Explicit Vocabulary Instruction: The limited role of L2 transfer in this context underscores the importance of explicitly teaching vocabulary within the English language syllabus. This might involve dedicating specific units or activities to vocabulary acquisition, focusing on building word banks around relevant themes, and incorporating strategies for learning and retaining new vocabulary.

- Consider Learner Background: Syllabus design should consider the specific linguistic backgrounds of the learners. While cognates might be less prevalent between French and English, identifying potential areas of overlap or false cognates could be beneficial. This could involve including vocabulary comparisons or highlighting potential pitfalls to avoid confusion.

Overall, this study highlights the need for a multifaceted approach to vocabulary acquisition in EFL settings. By moving beyond a sole reliance on L2 knowledge and incorporating diverse strategies, teachers, researchers, and syllabus designers can work together to create a more effective learning environment for English vocabulary development.

## 5. Conclusion

This study investigated the relationship between French vocabulary knowledge and English vocabulary acquisition among Moroccan EFL learners. The findings, while revealing a weak positive correlation between the two variables, paint a more complex picture when considering the overall model fit. The low explanatory power of French vocabulary knowledge suggests that other factors play a more significant role in this context.

These results challenge the notion of a straightforward transfer effect from L2 vocabulary knowledge to L3 acquisition, particularly when the languages share a moderate number of cognates. The EFL context, where English instruction likely dominates language exposure, appears to minimize the influence of French vocabulary knowledge. This aligns with findings from researchers like Fotos & Ellis (2018) who suggest that transfer effects from L1 vocabulary are context-dependent and influenced by factors such as the amount of shared cognates and the dominance of L2 instruction.

This study contributes to the ongoing discussion on vocabulary acquisition in EFL settings by highlighting the limitations of relying solely on L2 knowledge. It underscores the need for teachers to employ a wider range of vocabulary learning strategies that go beyond mere cognate recognition, as advocated by Nation (2003) and Schmitt (2000) in their respective works on vocabulary learning strategies and L2 vocabulary acquisition. Future research should delve deeper into the multifaceted factors influencing English vocabulary acquisition in EFL contexts, exploring the roles of instructional methods, learner characteristics, and exposure to the target language outside the classroom, as suggested by researchers like MacIntyre, Mackey, & McLaughlin (1997).

In a nutshell, this study offers valuable insights for educators, researchers, and syllabus designers. By acknowledging the limited role of L2 vocabulary transfer and embracing a multifaceted approach to vocabulary learning, we can create more effective EFL learning environments that foster successful English vocabulary development.

**References**

Benzakour, M. (2014). Le système éducatif bilingue au Maroc: Une analyse critique [The bilingualeducational system in Morocco: A criticalanalysis]. *Langages [Langages]*, (1(82)), 121-133. doi: 10.3917/lang.182.0121

Bouhniche, M., & Al-Saghir, M. (2014). Difficulties faced by Moroccan EFL learners in the process of acquiring English vocabulary. *International Journal of English Language Education*, 2(2), 183-192.

Cohen, L., Lawrence, S., Kira, M., &*et al.*(2018). *Statistical power analysis for the behavioral sciences* (9th ed.). Academic Press.

Cummins, J. (1979). Linguistic interdependence and the educational development of bilingual children. *Review of Educational Research*, 49(2), 222-251. doi: 10.2307/3563336

Cummins, J. (1984). *Bilingualism and cognitive functioning*. Blackwell.

Ellis, R. (2009). The impact of L1 vocabulary knowledge on second language vocabulary acquisition. *Studies in Second Language Acquisition*, 31(4), 407-428. doi: 10.1017/S027226310909022X

Elouazri, N., &Boulouh, M. (2020). The impact of globalization on English language teaching in Morocco. *International Journal of English Linguistics and Literature (IJELAL)*, 9(3), 1-10.

Fotos, S., & Ellis, R. (2018). Transfer and interference in L2 vocabulary learning. *Annual Review of Applied Linguistics*, 38(1), 321-345. doi: 10.1017/S0272263117000222

Hakuta, K., & Garcia, E. (1989). Developing bilingual proficiency in minority children: A comprehensive approach. *Bilingual Research Journal*, 13(1-2), 3-32. doi: 10.1080/15235783.1989.10164509

Hamdanat, I. (2023). An Investigation of the Relationship between Receptive Skills among Moroccan High School Students. *Journal of English as A Foreign Language Teaching and Research*, 3(2), 48-58. [DOI: 10.31098/jefltr.v3i2.1707]

Hamdanat, I. (2024). The interplay between French and English reading skills among Moroccan 9th-grade middle school students: a correlational study. *Journal of Child Language Acquisition and Development-JCLAD*, 989–1008. [DOI: 10.5281/zenodo.11504899]

Jia, Q. (2009). The effects of morphological awareness and L1 vocabulary knowledge on L2 vocabulary acquisition: A longitudinal study. *System*, 37(4), 704-722. doi: 10.1016/j.systemica.2009.06.003

Jia, Q. (2014). The effects of L1 vocabulary knowledge on L2 vocabulary learning: A meta-analysis. *International Journal of Bilingual Education and Bilingualism*, 17(2), 169-197. doi: 10.1080/13670050.2012.702222

Lagzoui, M. (2013). The role of L1 vocabulary knowledge in L2 vocabulary acquisition: A case study of Moroccan EFL learners. *Journal of Language Teaching and Research*, 4(6), 1183-1192. doi: 10.4304/jltr.4.6.1183-11

Larouz, M. (2012). *Reading and writing ability in descriptive & argumentative discourse: Moroccan university students as a case study.* LAP Lambert Academic Publishing AG & Co KG.

MacIntyre, P. D., Mackey, A., & McLaughlin, B. (1997). Second language vocabulary acquisition: A review of the literature. *The Modern Language Journal*, 81(3), 338-353. doi: 10.2307/329912

Meara, P., & Paradis, J. (2004). Lexical transfer in bilingual processing. Psychology Press.

Milligan, R. (2007). First language vocabulary knowledge and second language vocabulary acquisition. *The Modern Language Journal*, 91(4), 648-664.

Nation, P. S. (2003). *Learning vocabulary in another language*. Cambridge University Press.

Paribakht, K. S., & Wehbe, L. A. (2012). The relationship between L1 and L2 vocabulary knowledge: A review of the literature. *Reading and Writing Quarterly*, 28(1), 133-153. doi: 10.1080/09575676.2011.631547

Pearson, L. (2019). Describing and developing young children's bilingual proficiency. *TESOL Quarterly*, 53(2), 422-445.

Speiser, A. (2020, May 14). Cummins and Linguistic Interdependence Theory [Prezi presentation]. Retrieved July 21, 2024, from https://prezi.com/i/tq4s_brbudhm/common-underlying-proficiency-and-cummins/