The Impact of Second Language Learning Motivation on Vocabulary Acquisition

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Abstract. Second language learning motivation is a key individual difference factor influencing language learning effectiveness. Among these factors, vocabulary, as the cornerstone of language competence, is closely related to the level of motivation during its acquisition process. This article systematically summarizes review studies on second language learning process and research frontiers. First of all, this review summarizes the theoretical development from Gardener's social education model to Dörnyei's second language motivational self-system. This review summarizes the theoretical development from Gardener's social education model to Dörnyei's second language motivational self-system. Furthermore, this review summarizes empirical research in this field, finding that: (1) both integrative and instrumental motivations positively predict vocabulary growth, but motivation driven by ideal second language self-motivation is more closely associated with deep vocabulary acquisition and long-term retention; (2) different motivational types guide learners to adopt differentiated vocabulary learning strategies, such as integrative motivation, which tends to favor contextualization strategies; and (3) in recent years, research perspectives and methods have become increasingly diverse, with a focus on the synergistic effect of classroom teaching interventions (such as cross-language practice) on motivation and vocabulary acquisition. However, this review also reveals three major shortcomings of existing research: a single dimension of vocabulary measurement, a disconnection between theoretical frameworks and measurement tools, and homogeneity of research subjects. Finally, this paper suggests that future research should adopt a multidimensional vocabulary assessment system, strengthen the correspondence between theory and measurement, and also expand into more detailed research on different learner groups, such as adolescents.

Keywords: Second language learning motivation; vocabulary acquisition; social education model; second language motivation self-system; research review.

1. Introduction

Vocabulary knowledge is a core component of second language competence and is widely regarded as the cornerstone of effective communication [1]. However, vocabulary acquisition is a complex and long-term process, heavily influenced by differences of individual learner. Among the many individual differences, motivation has long been considered one of the most critical variables predicting second language learning success. Most language learners have experienced the direct impact of fluctuations in motivation on their learning engagement and outcomes, whether driven by the desire to pass exams, pursue career advancement, or by a genuine love for the target language culture; these driving forces profoundly shape their learning trajectories. Motivation theory has experienced profound evolution over the past few decades, which from an early psychosocial approach focusing on sociocultural context (such as Gardner's classic model) to a dynamic, self-directed approach emphasizing self-awareness and future orientation (such as Dörnyei's L2MSS). At the same time, the shift from simply examining “vocabulary breadth” (vocabulary size) to exploring “vocabulary depth” (vocabulary meaning, collocation, and usage) is increasingly emphasized in vocabulary acquisition research [2]. There is still room for improvement in the intersection and integration of research paradigms though there have been a large number of studies explored the link between motivation and vocabulary acquisition. Furthermore, the emergence of new teaching methods such as “cross-language practice” offers new perspectives on this relationship. As a result, this review aims to evaluate empirical research in this field over the past fifteen years (2010-2025)

systematically, clarifying its theoretical paths, research methods, and core findings, and pointing out the limitations of existing research and future development directions based on this.

2. Theoretical Framework Evolution

2.1. Classical social psychological model:Gardner’s Second Language Learning Motivation Model

Gardner's Second Language Learning Motivation Model examines learning motivation within a socio-cultural background, systematically distinguished the classic types of “integrative motivation” and “instrumental motivation.” Integrative motivation refers to the deep-seated drive of learners to integrate into the language community due to their identification with and yearning for the target language culture; while instrumental motivation focuses more on practical goals, such as learning a language for career development or to pass exams. This model was a kind of groundbreaking in second language motivation research from the late 20th to the early 21st century, providing an important theoretical foundation for understanding the relationship between motivation and language learning outcomes (including vocabulary acquisition).

2.2. Modern Motivation Theory: Dörnyei's Second Language Motivational Self System

Dörnyei integrated self-theories from mainstream psychology and proposed the more explanatory “Language Motivation Self System” (L2MSS), in order to deal with the complex changes in language learning motivation in the context of globalization [3]. This system comprises three core parts, which are: (1) the ideal second language self, which is the image of a learner aspiring to be a proficient second language user; (2) the ought-to-be second language self, reflecting the external expectations that learners feel they need to fulfill; and (3) the second language learning experience that focus on immediate motivational experiences in specific learning situations. The reason why L2MSS has become the mainstream framework for motivation research in the past decade is that it can more accurately measure learners' motivational state and effectively predict their level of engagement and persistence in learning through the synergistic effect of three dimensions [4].

3. Theoretical Framework Evolution

3.1. Research Methodology Overview

Between 2010 and 2025, the methods used to study the relationship between second language motivation and vocabulary acquisition have become increasingly diverse. Early studies mostly employed questionnaires, such as the well-established Second Language Motivation Self-System scale and the Vocabulary Level Test (VLT), to collect data, followed by statistical analysis of the association between motivation and vocabulary performance [5].

As research has explored more, scholars have begun to use more complex statistical tools such as structural equation modeling to examine how multiple factors, including motivation, learning strategies, and anxiety, collectively influence vocabulary learning [6, 7]. In recent years, research methods have become more rigorous, with many experimental studies emerging. For example, by setting up experimental and control groups, studies comparing changes in students' vocabulary abilities after motivational interventions such as “vision enhancement training” have been conducted to verify the effectiveness of the interventions [8].

Additionally, qualitative and mixed-method studies in classroom settings are also being applied more and more. Researchers have explored how teachers utilize specific teaching strategies, such as “cross-linguistic practice,” to stimulate student interest and promote vocabulary acquisition through real-world classroom observations, recording teaching videos and reviewing interviews with teachers, and organizing student focus group discussions [9, 10]. These diverse research methods, like

observing the same thing from different angles, help us gain a more comprehensive and in-depth understanding of the complex relationship collectively between motivation and vocabulary learning.

3.2. Research Perspectives and Findings

3.2.1. Motivation Type and Vocabulary Acquisition Effectiveness

Many studies have shown that different types of motivation have different impacts on various aspects of vocabulary learning. Specifically, the “ideal second language self” represents the learner's ideal image of a language user, and this intrinsic motivation usually drives learners to master vocabulary deeply, for example, accurately understanding word meanings and learning idiomatic collocations. The “ought-to-be second language self,” on the other hand, stems from the pressure to meet external requirements that this extrinsic motivation often drives learners to expand their vocabulary to meet basic needs, such as exams. Papi’s research in English as a foreign language contexts confirms this distinction, which says that: the stronger the learner's ideal second language self, the better they perform on vocabulary depth tests; while the stronger the “ought-to-be second language self,” the closer the correlation with vocabulary breadth test scores [5].

Recent research has further consolidated and deepened this finding. Lee and other researchers used structural equation modeling to find that an ideal second language self not only directly predicts vocabulary knowledge but also indirectly affects vocabulary acquisition by influencing the use of vocabulary learning strategies [6]. Mao's research also shows that learners with a clear and vivid ideal second language self-image perform better in tasks requiring productive vocabulary knowledge [7]. Of particular note is the recent research by Wang and some researchers, which, from the perspective of classroom teaching practice, found that cross-linguistic practices adopted by teachers in vocabulary teaching (such as timely use of students' native language, combining body language and real-life scenarios) can effectively stimulate and maintain students' second language learning motivation, prompting their motivation system to shift from the “ought-to-be second language self” based on external obligations to the “ideal second language self” and “second language learning experience” based on internal ideals and positive learning experiences [9]. In this process, it significantly promotes students' conceptual understanding and deep acquisition of vocabulary.

3.2.2. Motivation and Vocabulary Learning Strategies

Motivation affects not only the results of vocabulary learning but also how learners think about and manage the process. This is clear in the ways they choose to study words. For example, Kim found that learners with strong integrative motivation or a clear ideal L2 self tend to pick up words through real-life contexts—like reading, watching videos, or talking with others [11]. On the other hand, those driven mainly by instrumental reasons or an ought-to L2 self often rely more on memorization, such as using word lists or flashcards.

Later studies have built on these ideas. According to Albalawi, motivated learners also use out-of-class activities—like watching movies or socializing—to learn new words [12]. When this works well, it makes them even more motivated. Le looked further into why this happens. The study showed that learners with a strong ideal L2 self usually feel more confident and enjoy learning more [13]. Because of this, they are also better at planning and tracking their own progress, which helps them keep learning in a positive cycle.

4. Insufficiency and Critique of Existing Research

Despite existing research having made significant progress, this review that is based on a systematic review of the literature from 2010 to 2025 identifies the following three inner issues that urgently need to be addressed:

4.1. The Simplification and One-sidedness of Vocabulary Measurement Tools

Most studies define “vocabulary acquisition” in a simplified way. They might measure vocabulary breadth or depth, but seldom use detailed, multi-dimensional assessment tools together [14]. A common example is that many rely only on receptive vocabulary test scores. This approach largely overlooks productive vocabulary skills—the words learners actually use when they speak or write. This approach, treating vocabulary as a vague, homogeneous construct, obscures the specific mechanisms by which motivation influences different levels of lexical knowledge (e.g., receptive vs. productive, morphological vs. collocational vs. pragmatic), thus limiting the depth and explanatory power of research conclusions. More critically, existing measurement tools often fail to capture the performance of vocabulary knowledge in dynamic, real-time language use. For example, learners with high levels of motivation may have advantages in vocabulary response speed, vocabulary retrieval fluency, and vocabulary use flexibility in complex communicative tasks, but these dimensions are rarely included in quantitative research. In addition, existing research's understanding of the “depth” of vocabulary acquisition is still mostly limited to word meanings and collocations, and insufficient attention is paid to higher-level acquisition of vocabulary's register, pragmatics, and metaphorical meanings. These are precisely the keys to distinguishing language ability and are also areas where high-level motivation may have a significant impact.

4.2. The Disconnection Between Theoretical Framework and Measurement Tools

Some studies, when applying modern motivation theories (such as L2MSS), still rely on traditional and general vocabulary measurement methods. For example, a study might meticulously measure participants' “ideal second language self,” but ultimately use only a total score of “final vocabulary test score” as the dependent variable [9]. This disconnect prevents the research from accurately answering deeper questions such as “how exactly does the ideal second language self promote the development of productive collocation skills” or “what specific impact does the second language learning experience have on academic vocabulary acquisition,” thus weakening the precise guidance of advanced theories for teaching practice. Research on motivation dynamics remains limited. While L2MSS highlights how motivation changes across situations, most studies use single surveys that capture only static relationships. Such designs cannot show how daily shifts in motivation shape learning behaviors—like when students adjust their vocabulary strategies—nor how vocabulary gains or setbacks subsequently reshape their motivation.

Besides, motivation's link to vocabulary growth may not follow straightforward patterns. This connection could be influenced by learners' existing proficiency, their current learning phase, or cultural background. Existing studies have yet to thoroughly examine these potential interactions, leaving theoretical models' applicability and limits incompletely understood.

4.3. Homogeneity of the Research Subject Group and Insufficient Ecological Validity

Most current studies on second language learning focus on university students, creating a narrow view of how people learn. We know much less about younger learners in middle and high school, even though this age group is going through important changes [15]. Teenagers think differently than adults, have different social and emotional needs, and are motivated by different things. They care more about what their friends think, their interest in learning changes often, and they're still learning how to plan and monitor their own progress. Because of these clear differences, applying adult research findings directly to teenage classrooms may not work well and could even lead to misunderstandings about how adolescents really learn new words. These unique characteristics mean that directly generalizing research findings based on adult populations to adolescent learners lacks sufficient scientific basis and may lead to biases in the understanding of the mechanisms of second language vocabulary acquisition in adolescents.

5. Conclusions

This review shows that motivation plays a central role in vocabulary learning, especially when driven by learners' vision of their ideal second language self and their ability to manage their own learning. These factors help learners understand words more deeply, remember them longer, and use them more effectively. Still, research methods in this area need to get better.

Looking ahead, studies should use richer ways to measure vocabulary. Instead of relying on just one type of test, researchers can combine different tools—like vocabulary size tests, depth-of-knowledge measures, and tasks that require speaking or writing. They might even track eye movements to see how learners process words. Another useful approach is to collect data frequently over time. This makes it possible to observe small changes in both vocabulary growth and motivation levels, revealing how they influence each other in real learning processes. Simultaneously, efforts should be made to promote the development of more ecologically valid real-time vocabulary application assessment tasks, such as evaluating the accuracy and appropriateness of vocabulary use in simulated or real communicative scenarios. This will make the measurement of vocabulary acquisition more closely reflect real-world language proficiency.

Second, achieving precise alignment between theoretical constructs and measurement tools. At the outset of the research design, it should be clearly defined which specific aspects of vocabulary (such as the productive use of academic vocabulary) the motivational component under investigation (e.g., the ideal self) is expected to influence, and corresponding, most sensitive, and effective measurement tools should be selected or developed. For example, to examine the impact of motivation on vocabulary application ability, analytical writing or speaking rubrics should be used, rather than total scores. Future research needs to employ more longitudinal designs, diary studies, or smartphone-based instantaneous assessments to capture the complex, non-linear interaction between motivation and vocabulary acquisition. Research should focus on exploring the mediating mechanisms (such as attention, engagement, and strategy use) and moderating variables (such as personality, self-efficacy, and instructional interventions) by which motivation influences vocabulary acquisition, thereby constructing and testing more refined and explanatory theoretical models. For example, it could investigate how different types of instructional feedback moderate the impact of the ideal second language self on vocabulary retention.

Future studies should include more diverse groups of learners and study them in real classroom settings. Researchers especially need long-term studies that follow teenage learners over time or compare different age groups. This would help us understand how their motivation works and how it affects the way they learn vocabulary. When studying teenagers, researchers should work within actual school environments. They could use teaching experiments or classroom-based research to see whether motivational approaches—like allowing students to use their home languages in class—actually help learning. This makes sure the findings are useful for real education. Researchers should also look at learners from various countries and educational systems. Comparing across cultures can show which findings apply everywhere and which are specific to certain groups. Beyond traditional classrooms, studies are needed in digital spaces too—like online learning forums, language apps, and virtual reality environments. The current researchers need to see how motivation works together with technology to affect vocabulary learning. Doing this well requires teamwork. Researchers, technology developers, and teachers should collaborate to create studies that show how technology can best support motivated vocabulary learning.

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