

German as a Second Language as a Means of Communication: Cognitive and Functional Perspectives

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Abstract

This study explores how learners acquire communicative competence in German as a second language (L2) in the context of globalization. Using a mixed-methods approach—interviews, classroom observations, and proficiency tests—it integrates cognitive and functional linguistic theories to analyze language development. Cognitive aspects include memory, language transfer, and metalinguistic awareness, while functional perspectives focus on pragmatics and real-world language use. Results show that intrinsic motivation, exposure to authentic input, and intercultural experiences enhance language acquisition. Learners progress by reducing first-language interference and gaining fluency through contextual practice. The study emphasizes the need to combine cognitive strategies with functional applications in language teaching, highlighting German's role in global communication.

Keywords: German L2; SLA; communicative competence; intercultural communication

Abstrak

Studi ini mengeksplorasi bagaimana pembelajar memperoleh kompetensi komunikatif dalam bahasa Jerman sebagai bahasa kedua (L2) dalam konteks globalisasi. Dengan pendekatan metode campuran—wawancara, observasi kelas, dan tes kemampuan bahasa—penelitian ini menggabungkan teori linguistik kognitif dan fungsional untuk menganalisis perkembangan bahasa. Aspek kognitif mencakup memori, transfer bahasa, dan kesadaran metabahasa, sementara perspektif fungsional berfokus pada pragmatik dan penggunaan bahasa dalam situasi nyata. Hasil menunjukkan bahwa motivasi intrinsik, paparan terhadap materi otentik, dan pengalaman antarbudaya meningkatkan perolehan bahasa. Pembelajar berkembang dengan mengurangi pengaruh bahasa pertama dan mencapai kelancaran melalui praktik kontekstual. Studi ini menekankan pentingnya menggabungkan strategi kognitif dengan aplikasi fungsional dalam pengajaran bahasa, serta menyoroti peran bahasa Jerman sebagai sarana komunikasi global.

Kata Kunci: Bahasa Jerman sebagai bahasa kedua; pemerolehan bahasa kedua; kompetensi komunikatif; komunikasi antarbudaya

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Introduction

Globalization has fundamentally transformed the linguistic landscape, positioning language as a critical tool for communication across diverse cultural, economic, and social domains (Crystal, 2003). Within this context, German has emerged as a significant second language (L2), not only due to its status as one of Europe's most widely spoken languages

but also as a gateway to accessing academic, cultural, and economic opportunities (Ammon, 2001). Despite this importance, studies on second language acquisition (SLA) have predominantly focused on English, leaving a gap in understanding the cognitive and functional dynamics of learning other influential languages like German. This article seeks to address this gap by exploring the development of communicative competencies in German as an L2, combining cognitive and functional linguistic perspectives to provide a comprehensive analysis of language learning in a globalized world.

The acquisition of an L2 is a multifaceted process influenced by cognitive, social, and contextual factors. Krashen's Input Hypothesis (1985) posits that learners acquire language most effectively when exposed to comprehensible input slightly beyond their current proficiency level ($i+1$). This highlights the importance of meaningful and contextually relevant exposure, which enables learners to intuitively grasp grammatical structures and expand their linguistic repertoire. However, input alone is insufficient for developing communicative competencies. Swain's Output Hypothesis (1995) argues that language production (output) is essential for learners to test their understanding of linguistic rules and receive feedback that refines their accuracy and fluency.

While Krashen and Swain emphasize the linguistic dimensions of SLA, Vygotsky's Sociocultural Theory (1978) underscores the role of social interaction and cultural tools in mediating language learning. According to Vygotsky, language is internalized through collaborative activities, where learners engage with more proficient speakers or peers in culturally meaningful contexts. This aligns with research on German as an L2, where opportunities to practice language in authentic settings—such as study abroad programs or digital exchanges—are crucial for fostering both linguistic and pragmatic skills (Helbig & Buscha, 2001).

From a cognitive perspective, the process of acquiring an L2 involves complex mental operations, including memory, transfer, and metalinguistic awareness. Baddeley's Working Memory Model (1986) provides a framework for understanding how learners process and store linguistic input. For German, a language known for its intricate grammar and word order, efficient working memory is critical for managing case declensions, gendered nouns, and verb placement. Additionally, Selinker's Interlanguage Theory (1972) sheds light on the evolving linguistic systems learners construct as they transition toward target language proficiency. This interlanguage is shaped by positive transfer (facilitated by similarities between L1 and L2) and negative transfer (interference caused by structural differences). English-speaking learners of German, for example, often struggle with the case system and grammatical gender, which have no direct equivalents in English (Helbig & Buscha, 2001). To navigate these challenges, learners rely on metalinguistic awareness, the ability to reflect on and analyze language as a system (Bialystok, 1991). High levels of metalinguistic awareness enable learners to decode complex syntactic patterns and develop strategies for overcoming interference from their L1. This cognitive dimension is particularly important for German, where precision in grammar and syntax directly impacts communicative clarity.

While cognitive theories explain how language is acquired, functional linguistic theories focus on how it is used to achieve communicative goals. Halliday's Systemic Functional Linguistics (1978) views language as a tool for constructing meaning within specific social contexts. For learners of German, functional competencies involve not only mastering grammatical rules but also understanding how language choices convey politeness, formality, and intent. Similarly, Speech Act Theory (Austin, 1962; Searle, 1969) explores how language performs actions, such as making requests, giving commands, or expressing opinions. Pragmatic competence is crucial for learners to navigate intercultural communication, where differences in norms and expectations can lead to misunderstandings. For instance, German's preference for directness in professional

settings contrasts with the indirect communication styles of some other cultures, requiring learners to adapt their pragmatic skills accordingly.

As linguistic and cultural boundaries blur in the globalized world, learners must develop not only linguistic proficiency but also intercultural competence. Byram's Intercultural Communication Theory (1997) emphasizes the importance of understanding cultural norms, values, and practices to achieve effective communication. For learners of German, intercultural competence involves navigating pragmatic conventions such as formal and informal address (Sie vs. du), idiomatic expressions, and culturally specific references. The hybrid communicative contexts created by globalization further complicate this process. Canagarajah's *Multilingualism in Globalization Theory* (2006) highlights the need for flexible linguistic repertoires to adapt to fluid, multilingual environments. This underscores the importance of integrating intercultural sensitivity with linguistic skills, particularly for German learners operating in diverse professional and academic settings.

Despite the extensive body of research on SLA, studies have predominantly focused on English as the global lingua franca, leaving a significant gap in understanding how learners acquire other influential languages like German. Existing research often treats language acquisition as a monolithic process, neglecting the interplay between cognitive mechanisms and functional language use in specific linguistic and cultural contexts. Furthermore, while studies on intercultural communication emphasize cultural adaptation, they rarely address how learners of German navigate the intersection of linguistic and cultural demands in real-world scenarios.

This study addresses these gaps by integrating cognitive and functional perspectives to analyze how learners acquire and use German as an L2. It investigates the cognitive processes that facilitate or hinder acquisition and examines how learners pragmatically adapt German to meet the demands of intercultural communication. By doing so, this article contributes to a more comprehensive understanding of SLA, situating German within the broader context of global linguistic dynamics. The research seeks to delve into the interplay between globalization and digital platforms in shaping the acquisition of German as a second language (L2). In the context of an increasingly interconnected world, globalization has amplified the demand for multilingualism, particularly in languages like German, which holds a pivotal role in Europe and beyond. This inquiry explores how global economic, cultural, and social dynamics influence the motivations, strategies, and outcomes of learners acquiring German as an L2. It considers whether the forces of globalization enhance accessibility and exposure to the language or introduce challenges such as linguistic homogenization and cultural dilution.

Moreover, with the rapid advancement of technology, digital platforms have emerged as transformative tools for language learning. This study examines how platforms such as language learning apps, online courses, virtual exchanges, and social media contribute to the process of acquiring German as an L2. It investigates whether these platforms effectively support learners by providing immersive experiences, authentic language input, and opportunities for interaction, or if they fall short in addressing critical areas such as cultural competence and pragmatic fluency. The inquiry also addresses whether digital tools bridge or widen the gap between learners in different socio-economic contexts, thereby shaping who has access to quality language education. Through these two questions, the research aims to uncover the extent to which globalization and digital platforms collectively influence the learning of German as a second language. It investigates how these factors interact to transform language acquisition practices, redefine learner profiles, and impact pedagogical approaches. By addressing these dynamics, the study contributes to a deeper understanding of the opportunities and challenges learners face in navigating the complexities of acquiring German in the 21st century.

Method

This study employs a mixed-methods approach to comprehensively address the two research questions: (1) How is the learning of German as a second language influenced by globalization? and (2) How do digital platforms impact the development of German as a second language? By integrating qualitative and quantitative methods, the study provides a holistic understanding of both macro-level phenomena, such as globalization, and micro-level practices, such as the use of digital tools for language learning..

The research adopts an exploratory sequential mixed-methods design (Creswell & Plano Clark, 2017). The study begins with qualitative data collection to explore learners' experiences, perceptions, and attitudes, which is then followed by quantitative data collection to validate and generalize findings. This design is particularly suitable for understanding complex and interrelated phenomena such as globalization and digital language learning.

The study is structured in two phases:

1. Phase 1: Addressing Globalization and Language Learning
Focuses on how macro-level globalization trends influence motivations, access, and strategies for learning German as an L2.
2. Phase 2: Examining Digital Platforms
Investigates how learners utilize digital tools and platforms to acquire German as a second language, including their effectiveness and limitations.

The study is descriptive-explanatory in nature. The descriptive aspect examines the current landscape of German language learning in the context of globalization and digitalization, while the explanatory aspect seeks to uncover underlying patterns, relationships, and implications of these influences. This aligns with constructivist epistemology (Lincoln & Guba, 1985), which considers language learning a dynamic process shaped by individual, cultural, and technological factors. The subjects of this study include:

1. Adult Learners of German as an L2
A purposive sample of 50 learners from diverse linguistic and cultural backgrounds, currently studying at intermediate (B1-B2) levels based on the Common European Framework of Reference for Languages (CEFR). These learners are selected to provide insights into both traditional and digital learning practices influenced by globalization.
2. Language Instructors
Five experienced instructors of German participate to provide professional perspectives on teaching strategies, globalization's influence on curriculum design, and the role of digital platforms in pedagogy.
The objects of research are:
 - a. The influence of globalization on access to and motivations for learning German.
 - b. The effectiveness and limitations of digital platforms such as apps (e.g., Duolingo, Babbel), online courses, and virtual exchanges in supporting language acquisition.

To comprehensively address the research questions, this study employs a combination of qualitative and quantitative data collection techniques. These methods are carefully selected to capture the multifaceted influences of globalization and digital platforms on the learning of German as a second language (L2). Each technique is supported by specific instruments that ensure the collection of reliable and valid data, tailored to the study's objectives. Semi-structured interviews serve as the primary qualitative data collection method, offering a rich understanding of learners' experiences, motivations, and challenges in learning German in a globalized and digital context. The interview process includes discussions with 20 learners and 5 instructors, focusing on their perceptions of globalization's impact on access to and motivations for learning German.

Learners are also asked to reflect on their use of digital platforms, detailing how these tools have supported or hindered their progress. The interviews are guided by a phenomenological approach (Van Manen, 1990), aiming to uncover the lived experiences of learners and instructors in navigating the interplay between globalization and digitalization in language learning.

The instrument for the interviews is a semi-structured interview guide, which includes open-ended questions designed to encourage detailed responses while maintaining flexibility to explore emerging themes. Sample questions include: "How has global connectivity influenced your decision to learn German?" and "Can you describe your experience using digital platforms for learning German?" To complement the qualitative insights, surveys are employed to collect quantitative data on the use of digital platforms for learning German. The survey instrument, a structured questionnaire, consists of Likert-scale items designed to measure learners' engagement with digital tools, the frequency of their usage, perceived effectiveness, and the challenges they face. The questionnaire also includes demographic questions to explore correlations between variables such as age, linguistic background, and digital engagement.

The survey provides numerical data that allows for the analysis of trends and relationships, such as how frequently learners use specific digital platforms (e.g., Duolingo, Babbel) and how these tools impact their language proficiency. The design of the survey is informed by SLA frameworks, ensuring relevance to the research questions. Classroom observations are conducted to gain insights into the integration of globalization-related content and digital tools within teaching practices. These observations involve five German language classes at the intermediate level, focusing on how instructors incorporate global themes, cultural discussions, and digital resources into their pedagogy. Observations also document the interactional patterns between instructors and learners, paying close attention to feedback mechanisms and the use of digital tools during lessons.

An observation checklist is used to structure the data collection process, ensuring consistency across different classrooms. This checklist includes criteria such as the frequency of digital tool usage, the nature of tasks assigned through these tools, and the incorporation of intercultural content related to globalization. The study also involves an analysis of popular digital platforms used for learning German, such as Duolingo, Babbel, and online language exchange platforms. This analysis focuses on the design, content, and interactivity of these platforms, evaluating their capacity to provide meaningful language input, opportunities for practice, and intercultural exposure. The rubric for analyzing these platforms is informed by media ecology theory (McLuhan, 1964), assessing factors such as usability, linguistic quality, and the depth of cultural content. This technique allows the study to critically evaluate whether digital platforms meet the needs of learners in acquiring communicative competence and adapting to intercultural communication demands.

To measure the impact of globalization and digital platforms on language outcomes, learners' proficiency in German is assessed through standardized tests aligned with the Common European Framework of Reference for Languages (CEFR). These tests evaluate grammar, vocabulary, listening, and speaking skills. In addition to formal assessments, learners are asked to complete written tasks and participate in oral interviews designed to elicit their use of German in real-world contexts. The written and oral samples are analyzed using criteria informed by interlanguage theory (Selinker, 1972) and functional linguistics (Halliday, 1978). This analysis identifies patterns in learners' grammatical accuracy, syntactic complexity, and pragmatic competence, providing insights into how globalization and digital platforms shape their linguistic development.

Results and Discussion

The research findings address the two research questions in detail, providing insights into the influence of globalization and digital platforms on learning German as a second language (L2). The results are based on data collected through surveys, interviews, classroom observations, and proficiency tests, presenting a comprehensive view of the learners' experiences and outcomes.

Globalization has profoundly reshaped the way languages are learned and used, including German as a second language (L2). As economies, cultures, and societies become increasingly interconnected, German has gained prominence as a key language in global contexts, particularly in Europe. This research question explores how globalization influences learners' motivations, access to resources, and opportunities for acquiring German as an L2, as well as the challenges they face.

Table 1. Globalization impact survey results

Themes	Findings	Supporting Data
Impact of Globalization on Motivation	Globalization increased motivation among learners, with 72% reporting career and cultural integration as primary drivers.	Survey: 72% motivation linked to career/culture
Accessibility to German Learning Resources	75% of learners reported increased access to German learning resources through global online platforms.	Survey: 75% increased resource access
Opportunities for Language Exchange	Global connectivity facilitated language exchanges with native speakers through virtual platforms.	Survey and Interviews: Frequent use of language exchange apps like Tandem
Challenges of Linguistic Globalization	Concerns about the dominance of English diminishing the perceived need for learning German in non-European contexts.	Interviews: Non-European learners citing lower institutional support for German

From the results of the Impact of Globalization on Motivation research, it was found that: Globalization significantly increased motivation among learners, with 72% reporting that career advancement and cultural integration were the primary drivers. Learners viewed German as a critical skill for accessing opportunities in multinational corporations, academic exchanges, and cultural networks in German-speaking countries. A survey revealed that 72% of learners linked their motivation to globalization-driven opportunities such as employment in international companies and studying abroad. Interviews confirmed these findings, with learners frequently mentioning the professional and cultural relevance of German in global contexts.

From the results of this research, data was also obtained that Accessibility to German Learning Resources, namely: Globalization has expanded access to resources for learning German. Approximately 75% of learners reported benefiting from global online platforms, international media, and virtual language exchange programs, which have made learning German more accessible than ever. Survey responses indicated that learners rely heavily on resources such as Goethe-Institut's online courses, YouTube tutorials, and other globally accessible tools. Observations in classrooms showed instructors using online

resources to incorporate global themes into lessons, further enriching the learning experience.

From the results of the survey that was conducted, Opportunities for Language Exchange found that: Global connectivity has created new opportunities for learners to practice German with native speakers through virtual platforms. Language exchange applications, such as Tandem and HelloTalk, have become popular tools for real-time communication and cultural interaction. Interviews revealed that learners actively use these platforms for conversational practice, often discussing topics related to global issues. This finding was supported by survey data indicating frequent use of language exchange apps for immersive language practice.

Not only that, the survey results also found Challenges of Linguistic Globalization, namely: While globalization has brought numerous advantages, it has also posed challenges, particularly the dominance of English as the global lingua franca. This trend has reduced the perceived need for learning other languages, including German, especially in non-European contexts. Interviews highlighted concerns among learners, particularly those outside Europe, about limited institutional support for Germany. Survey responses corroborated this finding, with learners mentioning how English often overshadows the importance of German in their educational and professional environments.

The second question focuses on how digital platforms affect the development of German as a second language (L2). From the survey results related to Frequency of Digital Platform Usage, it was found that: Learners reported using digital platforms for language learning an average of 4 times per week. Platforms like Duolingo and Babbel were the most frequently used, providing learners with interactive and engaging language practice opportunities. Survey data showed consistent usage patterns among learners, with a preference for platforms that offered gamified lessons and structured exercises. Interviews revealed that learners favored these platforms for their convenience and accessibility, especially for daily vocabulary and grammar practice.

Regarding the Perceived Effectiveness of Digital Platforms, the things found were: Digital platforms were perceived as effective for specific aspects of language learning, particularly vocabulary acquisition and listening skills. However, their effectiveness was limited for mastering complex grammatical structures and cultural knowledge. Survey results indicated that 65% of learners found these platforms highly effective for vocabulary acquisition but less helpful for advanced grammar. Interviews echoed this sentiment, with learners stating that cultural competence and conversational fluency were inadequately addressed by most platforms.

Not only that, the Impact of Digital Tools on Language Skills obtained from the survey results is as follows: Digital platforms significantly enhanced listening comprehension and vocabulary proficiency but showed limited impact on speaking and cultural adaptation. Learners often struggle to translate their digital learning experiences into practical, real-world communication skills. Results from proficiency tests demonstrated notable gains in listening and vocabulary proficiency among learners who extensively used digital platforms. However, speaking assessments and pragmatic tasks highlighted gaps in conversational fluency and the ability to navigate cultural nuances.

From the points above, the Challenges with Digital Platforms that language learners can experience are: Despite their benefits, digital platforms faced several challenges, including a lack of advanced content and limited opportunities for interactive speaking practice. Many learners expressed a desire for more immersive and context-rich features,

such as live interactions with native speakers or virtual reality environments. Survey responses revealed that 55% of learners cited the absence of advanced content as a significant limitation, while 47% highlighted insufficient speaking practice opportunities. Interviews further elaborated on these challenges, with learners expressing frustration over the repetitive and basic nature of many platform exercises.

Table 2. Digital Platforms Impact

Themes	Findings	Supporting Data
Frequency of Digital Platform Usage	Learners used digital platforms an average of 4 times per week, with Duolingo and Babbel being the most popular choices.	Survey: 4 days/week digital platform use
Perceived Effectiveness of Digital Platforms	65% of learners found digital platforms effective for vocabulary acquisition but less so for grammar and cultural knowledge.	Survey: 65% effective for vocabulary
Impact of Digital Tools on Language Skills	Digital tools significantly enhanced listening and vocabulary skills but showed limited impact on speaking and cultural adaptation.	Proficiency Test: Significant listening/vocabulary gains
Challenges with Digital Platforms	Common challenges included lack of advanced content (55%) and limited opportunities for interactive speaking practice (47%).	Survey: 55% advanced content lacking; 47%

Conclusion

The findings from this research provide a comprehensive understanding of how globalization and digital platforms influence the learning of German as a second language (L2). The conclusions derived from the two research questions are as follows:

1. The Influence of Globalization on Learning German as an L2

Globalization has had a transformative impact on the motivations, access, and opportunities for learning German. The study reveals that:

1. **Motivational Drivers:** Globalization has heightened learners' interest in German due to its association with career advancement and cultural integration. Learners are motivated by aspirations to engage in global job markets, academic exchanges, and cultural participation.
2. **Increased Accessibility:** Global connectivity has significantly expanded access to German learning resources through online platforms, international media, and virtual exchanges. These resources have made high-quality and authentic materials widely available.
3. **Opportunities for Immersion:** Virtual language exchanges and global communication platforms have facilitated direct interactions with native speakers, fostering deeper linguistic and cultural learning.
4. **Challenges of Linguistic Homogenization:** Despite these advantages, the dominance of English as the global lingua franca poses challenges. It often reduces the perceived necessity of learning German, particularly outside Europe.

In summary, globalization serves as both an enabler and a challenge for German language learning, offering significant opportunities while also presenting barriers due to linguistic homogenization.

Digital platforms play a pivotal role in supporting German language acquisition but are characterized by both strengths and limitations:

1. Strengths: Digital tools are highly effective for vocabulary acquisition and listening comprehension. Their accessibility and engaging features make them a valuable resource for learners who seek convenience and structured practice.
2. Limitations: These platforms show limited impact on developing speaking proficiency, mastering complex grammatical structures, and fostering cultural understanding. Learners face challenges due to the lack of advanced content and inadequate opportunities for real-world, interactive language use.
3. Challenges: The absence of immersive experiences, such as live interactions or context-rich activities, constrains learners' ability to translate digital learning into practical communication skills.

While digital platforms have become indispensable in modern language learning, they must evolve to address learners' broader linguistic and cultural needs, particularly in areas like conversational fluency and intercultural competence.

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