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Building Confident Communicators: Global Trends and Challenges in Willingness to Communicate among Foreign Students Learning English

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Abstract. Willingness to Communicate (WTC) has become a critical construct in second and foreign language learning, particularly among international students studying in multilingual academic environments where communication determines academic participation and social integration. Despite growing scholarship, existing studies remain fragmented across psychological, pedagogical and technological perspectives. This study aims to synthesise contemporary WTC research trends and strategic directions through a dual-analytical design integrating bibliometric performance analysis and SWOT synthesis. Using Scopus-indexed publications from 2021-2025, 193 articles were identified through PRISMA procedures, from which the top ten most-cited studies were analysed in depth. Bibliometric mapping identified dominant thematic developments, while SWOT analysis examined strengths, weaknesses, opportunities and threats within the field. Findings indicate that recent WTC research is strongly shaped by

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affective variables such as enjoyment, self-efficacy, grit and teacher immediacy, alongside increasing emphasis on blended and informal digital learning environments. However, reliance on self-report designs and a cultural focus remains a key limitation. The study contributes a strategic, integrative framework linking bibliometric evidence to pedagogical implications, offering guidance for researchers, educators, and policymakers. The findings support Sustainable Development Goal 4 by emphasising inclusive and communication-centred language education.

Keywords: Willingness to Communicate; English as a Foreign Language; Foreign Students; Communication Anxiety; Classroom Interaction

1. Introduction

Willingness to Communicate (WTC) has emerged as a central construct in second and foreign language acquisition, referring to learners' readiness to initiate communication in the target language when given the opportunity. Initially, WTC was conceptualized as a trait-like predisposition, but it is now widely understood as a dynamic and situational phenomenon shaped by psychological, social and contextual factors (Cheng & Xu, 2022). For foreign students who learn English in international or multilingual academic environments, WTC plays a pivotal role in determining language development, academic participation, intercultural adjustment and social integration (Wei & Xu, 2022). In increasingly globalised higher education settings, foreign students' ability and willingness to communicate have become a critical indicator of learning success and well-being as English has become the primary medium of instruction and interaction (Alshammari, 2025).

From a theoretical perspective, WTC has evolved from a trait-oriented construct into a dynamic, situational model shaped by interactions among individual, contextual and social variables. The pyramid model of Willingness to Communicate, proposed by MacIntyre et al. (1998), conceptualizes communication readiness as the outcome of layered influences, ranging from enduring personality traits to immediate classroom conditions. Subsequent research has extended this framework by incorporating affective variables, positive psychology perspectives and sociocultural influences that emphasize learner agency and interactional environments (Wei & Xu, 2022). These theoretical developments position WTC as a multidimensional construct requiring integrative analytical approaches capable of synthesizing diverse research strands.

The importance of WTC among foreign students extends beyond linguistic competence to encompass academic engagement, classroom interaction and intercultural communication. Students who demonstrate high WTC are more likely to participate actively in discussions. They seek clarification, collaborate with peers and engage meaningfully in academic tasks (Salbaş & Ekmekci, 2025). Research has consistently shown that effective and motivational variables, such as enjoyment, self-efficacy, and confidence, significantly predict learners'

communication behavior (Liu et al., 2025). Moreover, informal digital learning environments and extramural English exposure further enhance learners' communication confidence and readiness to use English in authentic contexts (Zhang & Liu, 2025). As such, WTC is increasingly viewed as a cornerstone of sustainable language development and global communicative competence.

Although a substantial body of empirical research has examined psychological, pedagogical and technological determinants of WTC, existing studies remain fragmented across disciplinary perspectives. Many investigations focus on isolated predictors such as anxiety, enjoyment or instructional strategies without offering a holistic understanding of how research trends evolve over time. Recent reviews and bibliometric studies have begun mapping publication patterns and thematic developments (Ma et al., 2023), yet these analyses primarily emphasize quantitative trends rather than strategic interpretation of research strengths, limitations and future directions.

Despite its recognized importance, foreign students often face significant challenges that hinder their willingness to communicate in English. Communication anxiety, fear of negative evaluation, limited linguistic proficiency and lack of self-confidence remain persistent barriers for students to speak. This is specifically in multicultural classrooms where students may feel linguistically and culturally marginalized (Yunus et al., 2023). Teacher-related factors such as limited immediacy, rigid instructional styles and insufficient opportunities for interaction, can further suppress learners' willingness to communicate (Jelínková et al., 2024).

In addition, students may feel discouraged from participating and speaking openly in high power distance cultures, particularly within teacher-centered instructional approaches (Wang & McLaughlin, 2025). It is also important to note that, while digital platforms offer new opportunities for informal communication, unequal access and algorithm-driven exposure also introduce new forms of communicative inequality (Alshammari, 2025). These challenges underscore the need for pedagogically informed and culturally responsive approaches to fostering WTC among foreign English language learners.

Existing reviews rarely connect citation-based influence with pedagogical and theoretical implications that can guide future research and educational practice. Addressing this gap, the present study adopts a dual-analytical framework combining bibliometric performance analysis with SWOT synthesis to examine influential WTC scholarship and identify emerging research trajectories. This study aims to provide a strategic synthesis of contemporary research on Willingness to Communicate (WTC) among international English learners by integrating bibliometric performance analysis with a SWOT analysis.

Specifically, the study addresses the following research questions:

1. What are the dominant research trends in WTC studies published between 2021 and 2025?

2. Which theoretical and pedagogical factors characterise influential WTC research?
3. What strengths, weaknesses, opportunities and threats emerge from highly cited WTC studies?

2. Methodology

This study adopts a mixed analytical research design that integrates bibliometric performance analysis with a qualitative SWOT analysis to examine influential scholarship on Willingness to Communicate (WTC) among English learners from abroad. The bibliometric component is employed to identify the most impactful and foundational studies in the field, while the SWOT analysis is used to synthesize strategic insights from the selected literature. Similar dual-analytical frameworks have been increasingly employed to map research trends and derive strategic implications in education and social sciences (Chew et al., 2025).

The bibliometric analysis focuses on document-level performance and identifies the top 10 most-cited journal articles on WTC in second- and foreign-language learning contexts. Citation data serves as indicators of scholarly influence, research visibility and conceptual contribution. Bibliometric mapping methods allow for visualization of thematic clusters, collaboration networks and emerging research fronts (Zhang, Xie, & Xu, 2025; Lu et al., 2025). The selection process prioritizes peer-reviewed journal articles indexed in major academic databases and published between 2021 and 2025 to ensure contemporary relevance. The top ten most cited articles are then screened for their thematic alignment with the psychological, pedagogical and digital dimensions of WTC that emphasize conceptual and methodological rigor (Irwanto, 2025; Verdugo Arcos et al., 2025).

Following the bibliometric phase, a qualitative SWOT analytical framework is applied to the selected corpus of studies. Each article is systematically reviewed to extract evidence related to strengths, weaknesses, opportunities and threats within the WTC research domain. The SWOT framework, widely adopted for strategic evaluation in education and institutional analysis, enables the identification of both internal research competencies and external environmental challenges (Phadermrod et al., 2025). Strengths refer to conceptual contributions, theoretical integration and methodological robustness. Weaknesses capture methodological limitations, contextual constraints, and research gaps. Opportunities reflect emerging pedagogical, technological and policy-oriented directions. By contrast, threats highlight structural, digital and institutional challenges affecting WTC development.

The integration of bibliometric performance analysis with SWOT-based thematic synthesis enables a comprehensive evaluation of both the intellectual structure and strategic trajectory of WTC research. This dual-analytical approach has been shown to provide a balanced, systematic overview of influential trends, dominant frameworks and future research directions. It offers a strategic lens for advancing theory, pedagogy and policy in language education.

The inclusion criteria for the bibliometric analysis (Table 1) were designed to ensure the retrieval of high-quality, relevant and contemporary research on Willingness to Communicate (WTC) in English language learning. The Scopus database was selected as the primary source due to its comprehensive coverage of peer-reviewed international journals. Citation counts were retrieved from Scopus on 17 January 2026. The time frame was restricted to publications from 2021 to 2025 to capture recent theoretical and empirical developments. The search was conducted using the TITLE-ABS-KEY field with the keywords “willingness to communicate” AND “English” to ensure thematic relevance. Only journal articles published in English and available as open-access sources were included to ensure accessibility and scholarly rigor.

Table 1: Inclusion criteria for bibliometric analysis

Scopus database	ALL
Time period	2021 to 2025
Search field	TITLE-ABS-KEY
Search keywords	“Willingness to communicate” AND “English”
Document Types	Article
Language	English
Open Access	All Open Access

The PRISMA flowchart (Figure 1) illustrates the systematic process for identifying and selecting studies for the bibliometric-SWOT analysis. A total of 634 records were initially retrieved from the Scopus database. After applying the publication time frame (2021-2025), 221 records were excluded. The remaining 413 records were screened by document type, resulting in the removal of 52 non-research articles. Subsequently, 361 full-text articles were assessed for eligibility. Of these, 168 articles were excluded due to language and open-access criteria. Finally, 193 studies met all inclusion requirements and were retained for analysis.

Study selection involved a two-stage screening procedure. Automatic database filtering was first applied based on publication year, document type and language criteria. Subsequently, manual screening of titles and abstracts was conducted to ensure thematic relevance to Willingness to Communicate research. This combined semi-automatic and manual procedure enhanced transparency and methodological reliability.

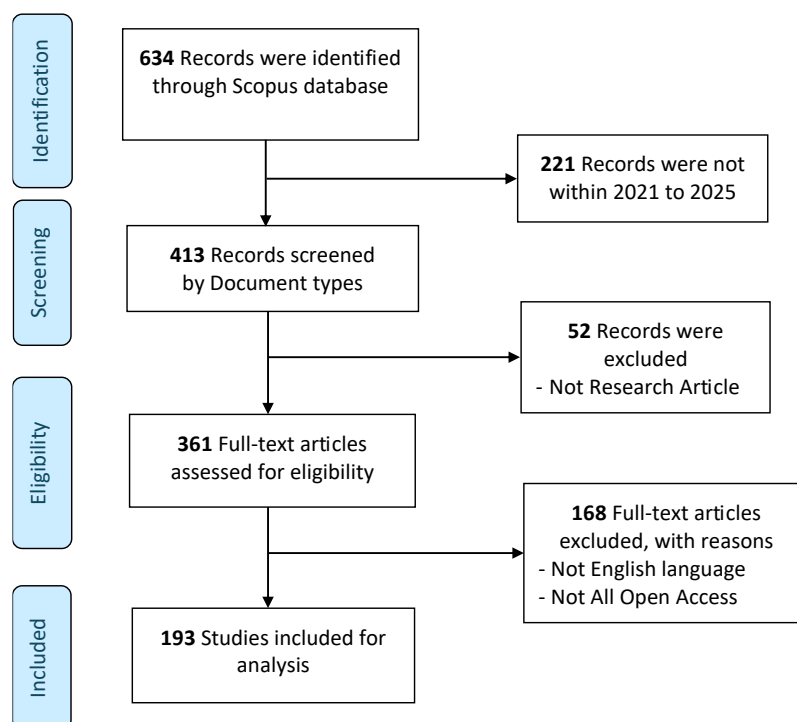


Figure 1: PRISMA flowchart

3. Results and Findings

3.1 Top Ten Most Cited Articles Qualitative Findings

The findings of this study are derived from a bibliometric analysis of the top 10 most-cited documents on Willingness to Communicate (WTC) in English language learning published between 2021 and 2025. The selection of ten articles was based on citation ranking to enable in-depth qualitative synthesis while maintaining analytical feasibility. Citation counts were used as indicators of scholarly influence, although limitations such as citation lag and self-citation bias are acknowledged.

As shown in Table 2, Lee (2022) is the most influential study, with 218 citations. This highlights the pivotal roles of grit and classroom enjoyment in shaping EFL learners' communication readiness. This is followed by Hu and Wang (2023) with 118 citations, whose work underscores the importance of teachers' immediacy behaviors in fostering students' WTC and academic engagement. Guo et al. (2023), with 110 citations, provide empirical evidence that blended learning-based scaffolding enhances learners' self-efficacy and willingness to communicate.

Table 2: Top ten most cited documents

No.	Author(s)	Title	No. of Citations
1.	Lee (2022)	The role of grit and classroom enjoyment in EFL learners' willingness to communicate	218
2.	Hu & Wang (2023)	The predicting role of EFL teachers' immediacy behaviors in students' willingness to communicate and academic engagement	118
3.	Guo et al. (2023)	The impact of blended learning-based scaffolding techniques on learners' self-efficacy and willingness to communicate	110
4.	MacIntyre & Wang (2021)	Willingness to communicate in the L2 about meaningful photos: Application of the pyramid model of WTC	89
5.	Liu et al. (2021)	Using games to promote English as a foreign language learners' willingness to communicate: Potential effects and teachers' attitude in focus	68
6.	Lee & Lu (2023)	L2 motivational self-system and willingness to communicate in the classroom and extramural digital contexts	66
7.	Lee & Taylor (2024)	Positive psychology constructs and extramural English as predictors of primary school students' willingness to communicate	56
8.	Chen et al. (2021)	Sustainable development of EFL/ESL learners' willingness to communicate: the effects of teachers and teaching styles	50
9.	Zadorozhnyy & Lee (2025)	Informal digital learning of English and willingness to communicate in a second language: Self-efficacy beliefs as a mediator	48
10.	Lee et al. (2024)	Foreign Language Enjoyment as a mediator between Informal Digital Learning of English and willingness to communicate: a sample of Hong Kong EFL secondary students	47

Theoretical grounding is strongly represented by MacIntyre and Wang (2021), whose application of the pyramid model of WTC (89 citations) reinforces the dynamic and situational nature of communication behavior. Pedagogical innovation is evident in Liu et al. (2021), who demonstrate the positive effects of game-based learning on learners' WTC and teacher attitudes (68 citations). Motivation-oriented perspectives are further advanced by Lee and Lu (2023), who examine the role of the L2 motivational self-system across classroom and digital contexts (66 citations).

More recent studies reflect an increasing focus on positive psychology and informal digital learning. Lee and Taylor (2024) highlight the predictive power of enjoyment and extramural English exposure among primary learners (56 citations), while Chen et al. (2021) frame WTC development within a sustainability and teaching-style perspective (50 citations). Zadorozhnyy and Lee (2025) and Lee et al. (2024) further extend the field by modelling self-efficacy and enjoyment as mediators between informal digital learning and WTC (48 and 47 citations respectively). Collectively, these highly cited studies indicate a clear research trend towards affective, motivational, pedagogical and digital determinants of WTC. This trend confirms the construct's centrality in contemporary English language education.

The overlay visualization generated by VOSviewer reveals a clear temporal progression in Willingness to Communicate (WTC) research between 2021 and 2025. Earlier studies have primarily focused on classroom-based psychological and pedagogical variables such as teaching styles, motivation and communication anxiety (Chen et al., 2021; MacIntyre & Wang, 2021). In contrast, more recent publications highlight informal digital learning, self-efficacy, enjoyment and extramural English exposure as dominant themes (Lee & Lu, 2023; Lee et al., 2024; Zadorozhnyy & Lee, 2025). This trend reflects a shift towards learner-centered, affectively driven, and technology-enhanced communication models in contemporary English language education.

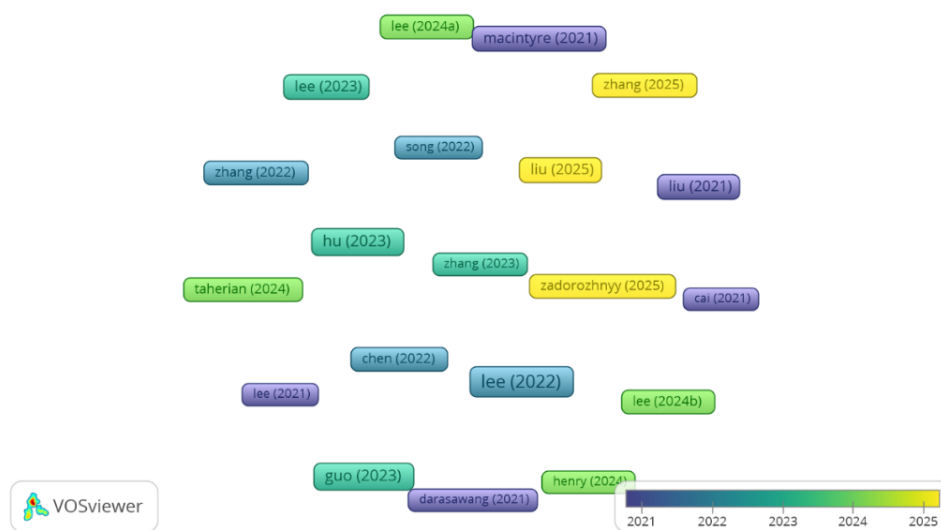


Figure 2: Overlay visualization (VOSviewer)

3.2 SWOT Analysis

The SWOT approach enables a structured examination of the field's internal strengths and weaknesses as well as external opportunities and threats influencing the development of WTC theory, pedagogy and policy. By integrating evidence from high-impact studies, this analysis offers a forward-looking perspective on the current position of WTC research in English language education. It also outlines its future trajectory with particular attention to foreign learners in multilingual and digitally mediated learning environments.

Table 3: SWOT analysis of Top-Cited WTC Studies (2021-2025)

No.	Author(s) & Year	Focus of Study	Strengths	Weaknesses	Opportunities	Threats
1	Lee (2022)	Examines the role of grit and classroom enjoyment in predicting WTC	Integrates affective psychology into WTC; strong modelling	Cross-sectional; self-report bias	Longitudinal grit-WTC modelling; SEL integration	Cultural bias in grit construct
2	Hu & Wang (2023)	Investigates teacher immediacy behaviours on WTC and engagement	Strong pedagogical relevance; large dataset	No learner psychological mediators	Teacher training frameworks	Teacher-centred bias
3	Guo et al. (2023)	Impact of blended learning scaffolding on self-efficacy and WTC	Experimental design; CALL integration	Short intervention duration	AI-based scaffolding tools	Digital divide
4	MacIntyre & Wang (2021)	Applies pyramid model of WTC using photo-based tasks	Strong theoretical validation	Small sample	VR-based WTC simulations	Complexity of real-time WTC measurement
5	Liu et al. (2021)	Effects of game-based learning on WTC and teacher attitudes	Innovative pedagogy; teacher perspective	Short-term intervention	RPG-based language learning models	Classroom management challenges
6	Lee & Lu (2023)	L2 motivational self-system and WTC in classroom & digital contexts	Dual-context modelling	Self-report only	AI conversational platforms	Platform dependency
7	Lee & Taylor (2024)	Positive psychology and extramural English as predictors of WTC	Early-age focus; developmental value	No parental variable	Home-based literacy models	Screen-time risks
8	Chen et al. (2021)	Teaching styles and sustainable WTC development	Policy-aligned; sustainability framing	Broad teaching-style categories	Sustainable pedagogy models	Teacher resistance

No.	Author(s) & Year	Focus of Study	Strengths	Weaknesses	Opportunities	Threats
9	Zadorozhnyy & Lee (2025)	Self-efficacy as mediator between informal digital learning and WTC	Advanced modelling; contemporary relevance	Platform-specific behaviour	AI conversation agents	Digital misinformation
10	Lee et al. (2024)	Enjoyment as mediator between digital learning and WTC	Emotion-based modelling	Activity type not differentiated	Enjoyment-driven EdTech design	Addictive platform risks

3.2.1 Strengths

1. Strong Theoretical Foundations and Model Integration

A key strength of WTC research lies in its solid theoretical grounding. This grounding draws in particular on MacIntyre's pyramid model of WTC and Dörnyei's L2 Motivational Self System. These frameworks enable researchers to conceptualize WTC as a dynamic construct shaped by both situational and enduring psychological factors. MacIntyre and Wang (2021) demonstrate the situational variability of WTC through meaningful task-based communication. By contrast, Lee and Lu (2023) extend motivational modelling into digital and extramural contexts. The integration of positive psychology constructs, such as enjoyment and grit, further strengthens the field's explanatory power (Lee, 2022; Lee & Taylor, 2024), thereby enhancing its conceptual maturity.

2. Integration of Positive Psychology and Affective Variables

Recent WTC studies increasingly foreground affective and emotional dimensions of language learning. This shift moves beyond purely cognitive perspectives. Classroom enjoyment, grit, self-efficacy and motivation have emerged as powerful predictors of learners' willingness to initiate communication (Lee, 2022; Zadorozhnyy & Lee, 2025). Lee et al. (2024) further demonstrate that enjoyment mediates the relationship between informal digital learning and WTC where it highlights the centrality of emotion in communication readiness. This affective turn aligns WTC research with broader developments in positive psychology and social-emotional learning, it strengthens the relevance of WTC for holistic language education.

3. Expansion into Digital and Informal Learning Contexts

Another major strength is the expansion of WTC research beyond formal classrooms into informal and digital learning environments. Studies by Lee and Lu (2023), Zadorozhnyy and Lee (2025) and Lee et al. (2024) illustrate how digital exposure, online interaction and informal language practices significantly shape learners' communication confidence. This shift reflects contemporary realities of language use and increases ecological validity. The incorporation of CALL and blended learning contexts also supports pedagogical innovation. This is

evidenced by Guo et al. (2023) who demonstrate how digital scaffolding enhances learners' self-efficacy and WTC.

3.2.2 Weaknesses

1. Methodological Reliance on Self-Report and Cross-Sectional Designs

Despite conceptual sophistication, WTC research remains constrained by methodological limitations. These include the dominance of self-report questionnaires and cross-sectional research designs. Most studies measure WTC through learners' perceived communication intentions rather than observable communicative behavior (Lee & Lu, 2023; Lee et al., 2024). While MacIntyre and Wang (2021) employ task-based qualitative methods, such approaches remain rare. This methodological homogeneity limits the field's capacity to capture real-time communication dynamics and weakens causal inference regarding psychological and pedagogical predictors of WTC.

2. Cultural and Contextual Concentration

A second weakness concerns the heavy concentration of WTC studies within East Asian and Chinese EFL contexts. Research by Hu and Wang (2023), Guo et al. (2023), Lee and Lu (2023), and Lee et al. (2024) predominantly samples learners from China, Taiwan, and Hong Kong. While these contexts offer valuable insights, the lack of broader cross-cultural validation limits the generalisability of findings. Cultural norms regarding classroom interaction, teacher authority, and communication anxiety may shape WTC differently across regions, necessitating a more diverse international sampling.

3. Limited Longitudinal and Developmental Perspectives

Most WTC studies adopt short-term or cross-sectional designs, offering only snapshot views of learners' communication readiness. For instance, game-based and blended learning interventions tend to measure immediate effects rather than long-term development (Liu et al., 2021; Guo et al., 2023). Although Lee and Taylor (2024) extend WTC research into primary education, longitudinal tracking of communication development remains limited. As WTC is a dynamic construct influenced by evolving motivation, identity and proficiency, the absence of developmental trajectories represents a significant research gap.

3.2.3 Opportunities

1. AI, Digital Communication Agents, and Immersive Technologies

Emerging digital technologies offer significant opportunities to advance WTC research and pedagogy. AI-powered conversational agents, virtual reality simulations and immersive communication platforms can create low-anxiety environments for language practice. These environments may enhance learners' communication confidence. Zadorozhnyy and Lee (2025) and Lee et al. (2024) demonstrate strong links between informal digital learning, self-efficacy, enjoyment and WTC. These links provide a foundation for designing intelligent communication systems. Such tools could enable personalized scaffolding, adaptive feedback and real-time interaction, expanding WTC research into intelligent CALL ecosystems.

2. Game-Based, Narrative, and Experiential Pedagogies

Game-based learning and experiential pedagogies offer promising intervention pathways for fostering WTC. Liu et al. (2021) demonstrate that games increase learners' motivation and willingness to communicate while Guo et al. (2023) show that blended scaffolding enhances self-efficacy and communication confidence. Narrative-driven role-playing, task-based simulations and experiential learning environments could further operationalise MacIntyre's situational WTC model (MacIntyre & Wang, 2021). These approaches align with contemporary learner-centred pedagogy and provide fertile ground for innovative WTC intervention research.

3. Early-Age and Lifelong Communication Development

The extension of WTC research into primary education and lifelong learning contexts represents another important opportunity. Lee and Taylor (2024) highlight the predictive role of positive psychology and extramural English exposure among young learners; their findings indicate that WTC can be nurtured from early schooling. Chen et al. (2021) further frame WTC development within sustainability education, emphasizing long-term communicative competence. These perspectives support policy-aligned models of lifelong communication development and position WTC as a core competency for global citizenship and 21st-century education.

3.2.4 Threats

1. Digital Divide and Algorithmic Exposure Bias

The increasing reliance on digital learning environments introduces structural threats to equal access and to algorithmic mediation. While informal digital learning is associated with higher WTC (Lee & Lu, 2023; Zadorozhnyy & Lee, 2025), learners from disadvantaged backgrounds may lack access to high-quality platforms and connectivity. Furthermore, algorithm-driven content exposure may privilege entertainment-oriented input over pedagogically rich interaction which could influence learners' communication practices in unintended ways. These risks highlight the need for critical digital literacy and equitable technology policies.

2. Over-Commercialization of Educational Technology

The rapid growth of EdTech and language learning platforms raises concerns about the commercialization of communication pedagogy. Although enjoyment-driven digital environments benefit WTC (Lee et al., 2024), they may prioritize engagement metrics and user retention over communicative depth and linguistic accuracy. Gamified platforms may also promote surface-level interaction rather than sustaining communicative competence. Without pedagogical regulation and quality assurance, commercial pressures may distort the educational integrity of WTC-oriented digital tools.

3. Curriculum Rigidity and Teacher Resistance

Finally, institutional constraints pose a significant threat to the classroom implementation of WTC-enhancing pedagogies. Game-based learning, blended scaffolding and informal digital integration often challenge traditional curriculum structures and assessment regimes (Liu et al., 2021; Chen et al., 2021). Teacher

resistance to pedagogical change, limited professional development and exam-oriented systems may hinder the adoption of innovative communication practices. Without systemic support, WTC research risks remaining theoretically robust but practically marginalized.

4. Discussion

The combined bibliometric and SWOT analyses provide a comprehensive overview of contemporary research trends and strategic directions in Willingness to Communicate (WTC) among foreign learners of English. The performance analysis reveals that the most influential studies are dominated by effective, motivational, pedagogical and digital determinants of communication behavior. According to Lee (2022), the most highly cited study, classroom enjoyment and grit are powerful predictors of WTC, which underscores the increasing role of positive psychology in language education. Similarly, Hu and Wang (2023) and Chen et al. (2021) highlight the central role of teachers' immediacy behaviors and instructional styles in shaping sustainable communication engagement. These findings reinforce the pedagogical importance of emotionally supportive and interaction-oriented learning environments.

At the same time, the prominence of studies on blended learning, game-based learning and informal digital learning reflects a clear shift towards the development of technology-enhanced communication. Guo et al. (2023) and Liu et al. (2021) demonstrate that scaffolded digital environments and game-based pedagogies significantly enhance learners' self-efficacy and willingness to communicate. More recent studies further extend this trajectory by modelling self-efficacy and enjoyment as mediators between informal digital learning and WTC (Zadorozhnyy & Lee, 2025; Lee et al., 2024). These studies indicate that emotional engagement is central to communication readiness in digital contexts.

However, the SWOT analysis also reveals critical limitations within the field. Methodological reliance on self-report instruments and cross-sectional designs constrains causal inference and behavioral validation (MacIntyre & Wang, 2021; Lee & Lu, 2023). Moreover, the concentration of studies within East Asian EFL contexts limits cross-cultural generalizability (Hu & Wang, 2023; Lee et al., 2024). These weaknesses highlight the need for longitudinal, experimental and observational research across more diverse learner populations. Overall, the findings suggest that WTC research is evolving towards learner-centered, affectively grounded and digitally supported models of communication development. Future research should integrate innovative pedagogies, intelligent learning technologies and sustainability-oriented frameworks to foster lifelong communicative competence among foreign English learners.

4.1 Implications for Educational Practice and Pedagogy

The findings of this bibliometric-SWOT analysis carry important implications for English language pedagogy among foreign learners. First, affective and motivational variables, such as enjoyment, self-efficacy, grit and teacher immediacy, have a strong influence on WTC. This suggests that communication development should be positioned as an emotional and psychological process

rather than merely a linguistic one (Han, 2025). Language classrooms should therefore prioritize emotionally supportive, low-anxiety and interaction-rich environments that encourage learners to take communicative risks.

Second, the increasing prominence of informal digital learning and blended scaffolding suggests that communication development should extend beyond formal classrooms. Teachers should integrate digital speaking platforms, collaborative online tasks and informal communication spaces to provide learners with authentic and continuous language exposure (Varhata et al., 2025). Game-based learning and experiential pedagogies can further strengthen learners' confidence and engagement (Røe et al., 2022).

Finally, teacher training programs should emphasize immediacy behaviors, interactive instructional styles and digital pedagogy readiness (Riapina, 2021; Han, 2025). By aligning classroom practices with effective, technological and learner-centered principles, institutions can cultivate sustainable communication competence and support foreign students' academic integration and intercultural adjustment.

4.2 Implications for Research and Policy Development

From a research perspective, this study highlights the need for more methodologically diverse and developmentally oriented investigations of Willingness to Communicate. The dominance of self-report and cross-sectional designs in highly cited studies (Ma et al., 2023) indicates an urgent need for longitudinal, experimental and behavioral research that captures real-time communication processes. Future studies should also expand beyond East Asian EFL contexts to examine WTC across diverse cultural, institutional and linguistic environments.

The growing influence of informal digital learning, positive psychology and technology-enhanced communication presents opportunities for interdisciplinary research that integrates CALL, educational psychology and learning analytics (Han, 2025). AI-powered communication agents, immersive simulations and adaptive scaffolding systems offer promising directions for personalized WTC development (Derakhshan & Lalli, 2025).

From a policy perspective, education authorities should recognize WTC as a core 21st-century competency essential for global citizenship, employability and intercultural engagement. Curriculum frameworks should explicitly integrate communication-oriented assessment, digital interaction models and socio-emotional learning components (Ouyang et al., 2023). Strategic investment in digital infrastructure and teacher professional development will be critical to ensuring equitable access and sustainable implementation of WTC-oriented pedagogies across international education systems.

5. Conclusion

This study provides a strategic synthesis of contemporary research on Willingness to Communicate (WTC) among foreign learners of English through an integrated

bibliometric performance analysis and SWOT analytical approach. The findings demonstrate that recent WTC scholarship is strongly shaped by effective, motivational, pedagogical and digital determinants of communication behavior. Highly cited studies consistently highlight the central role of enjoyment, self-efficacy, grit, teacher immediacy and informal digital learning in fostering learners' readiness to use English in authentic academic and social contexts. These results confirm that WTC is not merely a linguistic disposition, but a dynamic construct influenced by emotional engagement, learning environments and technological affordances.

At the same time, the SWOT analysis reveals important methodological and contextual limitations. This includes the dominance of self-report measures, cross-sectional designs and culturally concentrated samples. While the field has made significant conceptual and pedagogical advances, greater attention is required to longitudinal development, behavioral validation and cross-cultural generalizability. The growing prominence of digital learning, game-based pedagogy, and positive psychology also signals a shift towards learner-centered, sustainability-oriented models of communication development.

Despite its contributions, several limitations should be acknowledged. First, citation counts were used as indicators of scholarly influence, potentially disadvantaging recently published studies. Second, restricting analysis to open-access articles may exclude influential subscription-based research. Third, the 2021–2025 timeframe prioritizes contemporary developments but limits historical comparison. Future studies may integrate broader datasets and longitudinal bibliometric analysis.

Overall, this study positions WTC as a core competency for foreign students navigating globalized English-medium education. By aligning research, pedagogy and policy with emotionally supportive, technologically enriched and culturally responsive communication practices, institutions can promote inclusive and sustainable language learning. In this regard, the study directly supports Sustainable Development Goal 4 (Quality Education) by advancing equitable access to high-quality, inclusive and lifelong learning opportunities through effective communication development.

Conflict of Interest

The authors declare no conflict of interest.

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