

Original Research

Received 15 April 2026

Revised 20 May 2026

Accepted 24 June 2026

Natural Resources for Human Health 2026, Vol. 6 (5s): 690–706

KEYWORDS:

willingness to communicate;
Business English; Saudi Arabia;
foreign language anxiety; boredom;
mental toughness; resilience; ESP;
structural equation modeling

Willingness to Communicate in Business English: Testing MacIntyre's L2 WTC Pyramid Model Through Anxiety, Boredom, Mental Toughness, and Resilience

¹Abdul-Wasea Abdul-Ghani Saif Al-Mekhlafi, ²Muneef Abdulwasea Abdulghani Almekhlafi, ³Sayed M. Ismail

¹Faculty of Business Administration, Prince Sattam bin Abdulaziz University, Al-Kharj, Saudi, Email: a.almekhlafi@psau.edu.sa | ORCID: 0000-0002-4145-6384

²Software College, Northeastern University Shenyang, Liaoning, China, 110169
Email: meinaifu@mails.neu.edu.cn ORCID: 0009-0000-3357-1940

³Prince Sattam bin Abdulaziz University, College of Science and Humanities, Department of English language and literature. Alkharj, Saudi Arabia. , a.ismail@psau.edu.sa <https://orcid.org/0000-0002-6698-006X>,
Corresponding author: meinaifu@mails.neu.edu.cn

ABSTRACT: Willingness to communicate (WTC) is widely recognized as a proximal driver of second language use, yet Business English programs often struggle to translate classroom competence into spontaneous participation in professional genres such as meetings, presentations, negotiations, and problem-solving talk. Building on MacIntyre, Clément, Dörnyei, and Noels' L2 willingness-to-communicate (L2 WTC) pyramid, this article develops a context-sensitive model for Saudi business administration colleges that connects two inhibiting achievement emotions (anxiety and boredom) with two adaptive psychological resources (mental toughness and resilience) (MacIntyre et al., 1998; MacIntyre, 2007; Dudley-Evans & St John, 1998; Nickerson, 2005).

Anxiety and boredom are posited to constrain Business English willingness to communicate (WTC) both directly and indirectly through two situated antecedents in the pyramid: state communicative self-confidence and desire to communicate with specific interlocutors. Conversely, mental toughness and resilience are conceptualized as adaptive resources that consolidate self-confidence, sustain engagement under evaluative pressure or monotony, and attenuate the detrimental influence of anxiety and boredom on communicative intention (Horwitz et al., 1986; Pekrun, 2006; Li et al., 2021; Clough et al., 2002; Smith et al., 2008).

The article is structured as a theory-driven research paper and delineates an empirical design for testing these relationships in a multi-site survey of undergraduate business administration students enrolled in Business English courses in Saudi Arabia (target N = 500–700). Measures are adapted to authentic Business English scenarios and analyzed via confirmatory factor analysis, structural equation modeling, and latent interaction techniques. The proposed contribution is an integrated account of affective barriers and endurance-oriented resources within the WTC pyramid, alongside pedagogical implications for designing Business English classrooms in which communication becomes both instrumentally worthwhile and psychologically manageable.

1. INTRODUCTION

Business English has become a high-stakes competence in business administration colleges in Saudi Arabia. Students are expected to participate in case discussions, project meetings, presentations, internships, and, subsequently, multilingual workplaces where English functions as a principal medium of professional interaction. A recurrent asymmetry is nevertheless

observed: learners may display robust receptive command of business lexis and genre conventions while remaining hesitant to speak when communicative opportunities arise. This discrepancy cannot be explained by linguistic knowledge alone; it also reflects volition—whether learners are prepared, in a specific moment and with particular interlocutors, to assume the interpersonal risk associated with speaking in English (Alrashidi & Phan, 2015; Karim & Jamshed, 2023).

The construct of willingness to communicate (WTC) captures this readiness. In first-language communication research, WTC was conceptualized as a relatively stable disposition, but MacIntyre and colleagues reconceptualized L2 WTC as a situated intention (MacIntyre et al., 1998). In their model, the decision to speak is shaped by layered influences, ranging from distal social and individual context to proximal psychological states. The model is commonly depicted as a pyramid: more enduring influences form the base and shape more immediate antecedents near the top, culminating in WTC and, ultimately, communication behavior.

Two developments render a renewed, context-sensitive test of the pyramid especially timely for Business English in Saudi Arabia. First, Business English is an English for Specific Purposes (ESP) context with distinctive discourse demands. Learners are not merely conversing; they are enacting professional competence in genres such as persuasive pitching, data-informed reporting, the management of disagreement, and the negotiation of roles within teams. Such tasks are frequently public and evaluative, heightening face concerns and sensitivity to peer judgment. Second, research in language education increasingly recognizes emotion as a central mechanism through which classroom conditions shape engagement and learning. Foreign language anxiety has long been treated as a key inhibitor of participation, and classroom boredom has recently emerged as a consequential achievement emotion in L2 contexts. Business English courses—particularly when organized around predictable templates and repeated rehearsal of formulaic interactions—can create conditions conducive to boredom. Whereas anxiety increases the perceived cost of speaking (threat and risk), boredom diminishes the perceived benefit of speaking (value and interest), potentially producing silence through distinct pathways (Dudley-Evans & St John, 1998; Horwitz et al., 1986; Pekrun, 2006; Li et al., 2021).

At the same time, applied linguistics has begun to incorporate positive psychology and self-regulation constructs to explain persistence in demanding L2 tasks. Mental toughness and resilience, well-established in performance and educational psychology, offer a complementary perspective on communicative readiness. Mental toughness, often described through the 4Cs (control, commitment, challenge, confidence), captures how individuals regulate pressure and sustain goal-directed behavior. Resilience captures adaptive recovery: the capacity to bounce back after setbacks and re-engage. Although these constructs are often discussed in sport and high-performance settings, their logic fits Business English classrooms where learners must speak under time pressure, public scrutiny, and grading (Fredrickson, 2001; Clough et al., 2002; Connor & Davidson, 2003; Smith et al., 2008; Gucciardi, 2017).

This article therefore proposes an integrated model for Saudi business administration colleges that tests MacIntyre's L2 WTC pyramid through four focal variables: anxiety, boredom, mental toughness, and resilience. The guiding premise is that Business English WTC is shaped by an interplay between affective barriers (anxiety and boredom) and psychological resources (mental toughness and resilience), operating through the pyramid's situated antecedents—state communicative self-confidence and desire to communicate with specific interlocutors. Testable hypotheses and an empirical design suitable for structural equation modeling are articulated (MacIntyre et al., 1998; MacIntyre, 2007).

The paper's contribution is both theoretical and practical. Theoretically, it refines the pyramid for an ESP ecology by distinguishing threat-based and value-based inhibition and by introducing endurance-oriented resources as moderators. Practically, it offers actionable implications for Business English pedagogy: how task design, assessment practices, and classroom climate can reduce affective friction and build communication resilience, aligning classroom participation with employability goals (Hutchinson & Waters, 1987; Dudley-Evans & St John, 1998; Pekrun, 2006).

2. BUSINESS ENGLISH IN SAUDI BUSINESS ADMINISTRATION COLLEGES

Business English is typically situated within English for Specific Purposes (ESP) (Hutchinson & Waters, 1987; Dudley-Evans & St John, 1998), where language teaching is guided by the communicative needs of specific communities and genres. In business administration colleges, those needs include not only general communicative competence but domain-relevant practices such as explaining charts, presenting recommendations, negotiating disagreement, managing turn-taking, and participating in meetings and teamwork. ESP scholarship emphasizes that these practices are inseparable from audience,

purpose, and institutional norms; learners must master not only lexical and grammatical resources but also pragmatic and rhetorical choices that index professionalism.

In Saudi higher education, Business English is prominent because business administration is a major pathway to employment and because national development agendas emphasize global engagement, entrepreneurship, and diversified economic growth. Many programs include preparatory-year English courses followed by discipline-linked ESP modules, and students may encounter English-medium materials in management, accounting, marketing, and entrepreneurship. Needs analyses and program evaluations in Saudi business-related contexts often highlight a gap between expected and achieved speaking performance. Students commonly report that speaking is both important and difficult, particularly for public presentation, meeting participation, and spontaneous interaction (Alrashidi & Phan, 2015; Karim & Jamshed, 2023).

From a WTC perspective, this gap can be reframed. Silence does not necessarily indicate low motivation or lack of knowledge; it can reflect a situational decision under uncertainty. Business English tasks intensify that uncertainty because they are often public and consequential. Presentations and role-plays are performed in front of peers, speaking may be graded, and peer evaluation can be explicit or implicit. Moreover, Business English is relational: many tasks are group-based, and willingness to speak depends on interlocutor dynamics, perceived peer support, and trust (MacIntyre, 2007; Karim & Jamshed, 2023; Bawazir, 2019).

These features make Business English an informative context for testing the L2 WTC pyramid. The pyramid predicts that situated antecedents—momentary self-confidence and desire to communicate with specific people—should be strong proximal predictors of WTC. In Business English classes, these antecedents are shaped by task authenticity, assessment intensity, and peer climate. Saudi programs also vary in instructional arrangements and participation norms across institutions, adding ecological complexity that can be captured through multi-site sampling (MacIntyre et al., 1998; Cao & Philp, 2006; Kang, 2005).

Finally, Business English courses can inadvertently produce boredom when instruction relies heavily on repeated templates (for example, the same presentation structure week after week) or on decontextualized language drills labeled as 'business'. When tasks are repetitive or feel disconnected from real professional decision-making, learners may disengage even if they value English instrumentally. Understanding how boredom and anxiety jointly influence WTC, and how endurance resources may buffer these influences, can therefore help Business English programs design more effective participation pathways (Pekrun, 2006; Li et al., 2021; Pawlak et al., 2020).

Saudi business administration colleges also operate within diverse instructional and participation norms. In some classrooms, participation is strongly shaped by assessment culture: students may calculate the risk of speaking errors against perceived grading consequences, especially in oral assessment regimes where criteria are not transparent. Peer dynamics matter as well. Group work can support participation when peers are supportive, but it can also inhibit participation when groups develop stable hierarchies in which a few students dominate English talk. These dynamics can be intensified by proficiency gaps within cohorts (Horwitz et al., 1986; Cao & Philp, 2006; Peng & Woodrow, 2010).

Another contextual consideration is that many students arrive at university after schooling experiences that emphasized written accuracy and examination performance more than spontaneous oral interaction. University Business English classes may therefore be the first sustained context in which learners must speak English publicly and frequently. This transition can elevate anxiety and make early participation experiences especially formative for later self-confidence. A WTC model that highlights situated self-confidence and interlocutor-specific desire is therefore particularly appropriate for this transition phase (Alrashidi & Phan, 2015; Dörnyei & Ryan, 2015).

3. MACINTYRE'S L2 WTC PYRAMID AND SITUATED ANTECEDENTS

MacIntyre and colleagues reconceptualized willingness to communicate as a volitional process (MacIntyre et al., 1998; MacIntyre, 2007): a decision to speak that is influenced by both stable predispositions and momentary conditions. The L2 WTC pyramid is typically presented as six layers. At the top is L2 communication behavior, the observable act of speaking. Immediately beneath is WTC as a behavioral intention: the learner's readiness to initiate communication at a particular time with specific interlocutors. WTC is thus a proximal predictor of actual use.

Layer IV of the pyramid contains two situated antecedents that translate broader influences into momentary intention. State communicative self-confidence refers to a momentary belief that one can communicate successfully and that doing so will not entail unacceptable social risk. This construct combines perceived competence with low situational anxiety. Desire to

communicate with a specific person captures interpersonal orientation: learners may be willing to speak with supportive peers and reluctant with critical peers, high-status interlocutors, or unfamiliar classmates (MacIntyre et al., 1998; MacIntyre, 2007).

Lower layers include motivational propensities (e.g., interpersonal motivation, intergroup motivation), more enduring affective-cognitive factors (e.g., perceived communicative competence, general anxiety), and broad social and individual contexts (e.g., intergroup climate, personality). The pyramid's core claim is that communication decisions are best explained by linking these layers rather than by isolating a single predictor (MacIntyre et al., 1998).

For Business English contexts, three features of the pyramid are particularly useful. First, it distinguishes stable and situational influences. A learner may be highly motivated by career goals and still show low WTC during a graded meeting simulation. Second, it foregrounds mechanisms: anxiety can reduce WTC directly, but also indirectly by eroding self-confidence. Third, it makes interlocutor specificity central, which aligns with the group-based nature of Business English tasks (MacIntyre, 2007; MacIntyre et al., 1998).

Recent WTC research also emphasizes variability and context sensitivity. Dynamic systems perspectives note that WTC can fluctuate minute-by-minute as tasks unfold and as peer interaction evolves. Ecological perspectives highlight that digital platforms and multimodal participation can reshape what counts as communication. These developments encourage precision in specifying which variables are salient in a given context and how they operate across timescales (Kang, 2005; Cao, 2011; Cao & Philp, 2006).

The L2 WTC pyramid serves as the organizing framework; the analysis concentrates on four theoretically proximal and pedagogically tractable constructs: anxiety and boredom as affective constraints, and mental toughness and resilience as coping resources. The model posits that these variables shape WTC primarily through the situated antecedents of state self-confidence and interlocutor-specific desire to communicate. Figures 1 and 2 depict the proposed positioning and pathways (MacIntyre et al., 1998; Horwitz et al., 1986; Pekrun, 2006; Clough et al., 2002).

Importantly, treating WTC as situated implies that measurement must be aligned with realistic communicative moments. Generic willingness items may miss the fact that learners can be willing to speak in small groups but not in whole-class settings, or willing to speak when prepared but not when surprised. Business English adds further specificity: learners may be comfortable using rehearsed language in presentations but reluctant to improvise during questions, or they may avoid disagreement even when they can explain data. Scenario-based WTC measures therefore provide a better match to the pyramid's logic (Cao & Philp, 2006; Peng & Woodrow, 2010).

Current debates in the WTC literature also underscore the need to consider temporality. WTC can be influenced by micro-level events (a peer's response, a teacher's facial expression, a difficult question), and it can also be influenced by macro-level narratives (professional identity, employability expectations). The pyramid can accommodate these dynamics when researchers clearly specify which layer a variable occupies and how it connects to the next layer. The present model does this by concentrating on achievement emotions and coping resources that plausibly translate into the situated antecedents during Business English tasks (Kang, 2005; Cao, 2011).

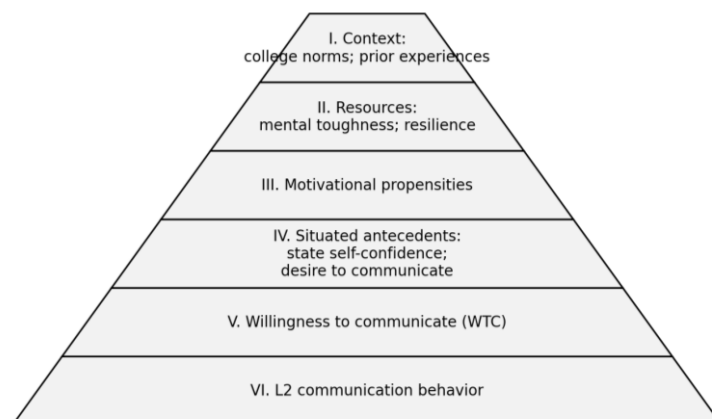


Figure 1. Positioning focal constructs within MacIntyre et al.'s (1998) L2 WTC pyramid (Business English).

4. ANXIETY AS A THREAT-BASED BARRIER TO BUSINESS ENGLISH WTC

Foreign language anxiety has been one of the most widely studied negative emotions in applied linguistics. It is commonly conceptualized as a situation-specific form of apprehension that arises from self-perceptions, beliefs, and classroom practices. Classic accounts highlight three interrelated components (Horwitz et al., 1986): communication apprehension, fear of negative evaluation, and test anxiety. Anxiety is not simply nervousness; it is a patterned response to perceived threat, often involving self-focused attention and avoidance tendencies.

In oral tasks, anxiety can be triggered by time pressure, public visibility, uncertainty about vocabulary, and concern for face. In Business English, these triggers are often amplified. Presentations are public performances. Meeting simulations require spontaneous contributions and rapid turn-taking. Negotiation role-plays require managing disagreement and interpersonal stance. Because these tasks resemble professional interactions, errors can be interpreted not only as linguistic mistakes but as signs of incompetence, increasing evaluative threat (Horwitz et al., 1986; MacIntyre & Gardner, 1991; Horwitz, 2010).

Within the WTC pyramid, anxiety can be integrated in two complementary ways. As a momentary state, anxiety can directly suppress WTC by raising the perceived cost of speaking; silence becomes a risk-management strategy. As a mechanism, anxiety also undermines state communicative self-confidence. When learners anticipate negative evaluation, they are less likely to believe they can communicate successfully and safely in the moment, reducing WTC indirectly (MacIntyre et al., 1998; MacIntyre, 2007).

Empirical research across contexts often finds negative relationships between L2 speaking anxiety and WTC (e.g., MacIntyre & Gardner, 1991; Dewaele & MacIntyre, 2014), but the magnitude of the effect varies with proficiency, classroom climate, and measurement choices. In Saudi university contexts, studies have documented moderate to high levels of foreign language anxiety and have highlighted sources such as limited prior speaking practice, fear of negative evaluation, and teacher-centered interaction patterns. These findings motivate treating anxiety as a central inhibitor in a Saudi Business English model.

In the proposed model, anxiety is specified as a proximal inhibitor of WTC with both direct effects and indirect effects via state communicative self-confidence and desire to communicate. It is further posited that anxiety is partly conditioned by coping resources: learners higher in mental toughness and resilience may appraise evaluative tasks as challenges rather than threats and may recover more rapidly following errors, thereby weakening the anxiety–WTC association (MacIntyre et al., 1998; Dewaele & MacIntyre, 2014).

Anxiety in Business English can also be shaped by the perceived legitimacy of one's voice in the business domain. Some students may feel that limited English reduces their right to lead discussion, challenge peers, or present confidently, even when their business content knowledge is strong. This is particularly relevant for tasks that require stance and persuasion rather than factual reporting. Consequently, anxiety may be strongest not only for 'speaking English' but for speaking with authority in English (Norton, 2013; Hyland, 2006).

Pedagogically, this implies that anxiety reduction is not achieved by reassurance alone. Students need repeated experiences of successful participation under manageable difficulty, clear norms that errors are part of professional communication, and explicit instruction in interactional repair. These practices directly support the pyramid's situated antecedent of state communicative self-confidence, which is the key mechanism through which anxiety is expected to influence WTC (Alrabai, 2015; Horwitz, 2010).

5. BOREDOM AS A VALUE-BASED INHIBITOR OF PARTICIPATION

Boredom has long been studied in educational psychology, but only recently has it been examined systematically in L2 learning. In achievement emotion theory, particularly control–value theory, boredom is conceptualized as a negative, low-arousal emotion arising when learners perceive low value in an activity and/or experience an unfavorable balance between challenge and control. Boredom is characterized by attentional drift, time drag, and a desire to escape. It is distinct from the absence of enjoyment: learners can feel bored even when tasks are easy and even when they understand the material (Pekrun, 2006; Pekrun et al., 2010; Tze et al., 2016).

In language classrooms, boredom is often linked to repetitive routines, limited autonomy, slow pace, and tasks that feel disconnected from learners' goals. Recent L2 research has conceptualized foreign language learning boredom as multidimensional and has developed validated scales that capture sources (Li et al., 2021) such as task repetitiveness, low

perceived value, teacher behavior, and classroom management. Across studies, boredom is associated with reduced engagement, weaker strategy use, and lower achievement.

Boredom is theoretically relevant to WTC because it changes the benefit side of the communication decision. Whereas anxiety amplifies perceived costs by making speaking feel risky, boredom reduces perceived benefits by making speaking feel pointless. In a bored state, learners may not avoid participation because they fear evaluation but because they see no meaningful reason to contribute. This distinction matters for intervention. Anxiety-oriented strategies (e.g., reassurance, error tolerance) may not address boredom if the task remains low-value or repetitive (Pekrun, 2006; MacIntyre, 2007).

Business English courses can be susceptible to boredom when professional genres are taught as static templates rather than as purposeful problem-solving. If case discussions become predictable and if role-plays are scripted and detached from authentic decision-making, learners may disengage even if they value English for careers. Boredom can also interact with anxiety: monotonous preparation may reduce effort, leaving learners less prepared and more anxious when asked to perform publicly (Pawlak et al., 2020; Dudley-Evans & St John, 1998).

In the proposed model, boredom is specified as a proximal inhibitor of WTC, operating alongside anxiety but through partly distinct mechanisms. Boredom is expected to predict lower WTC both directly and indirectly via diminished desire to communicate and reduced state self-confidence. Mental toughness and resilience are further expected to be negatively associated with boredom, given their links to commitment, challenge appraisal, and persistence under monotonous conditions (MacIntyre et al., 1998; Li et al., 2021).

Measurement also matters. Boredom is often episodic and can vary by lesson segment. A course-level boredom measure captures general tendencies across several weeks, but researchers should recognize that boredom can spike during particular activities (long teacher talk, repetitive drilling) and drop during others (debates, simulations). Future research can therefore build on the present model by adding experience-sampling methods that capture boredom and WTC within lessons (Kruk, 2022; Pawlak et al., 2020).

From an instructional perspective, boredom reduction is not simply entertainment. Control–value theory suggests that boredom drops when learners experience meaningful value and an appropriate challenge-control balance. In Business English, this balance can be improved by increasing authentic decision-making, adding time pressure that is manageable (to raise arousal), and using roles and information gaps that make communication necessary (Pekrun, 2006; Deci & Ryan, 2000; Long, 2015).

6. MENTAL TOUGHNESS AND RESILIENCE AS COPING RESOURCES

Whereas anxiety and boredom highlight why learners withdraw from speaking, mental toughness and resilience highlight why some learners persist and re-engage. Mental toughness is commonly defined as a constellation of psychological characteristics that enable individuals to cope with pressure, remain committed to goals, and maintain performance in demanding contexts. The influential 4Cs model conceptualizes mental toughness (Clough et al., 2002) in terms of control (regulating emotions and feeling able to influence outcomes), commitment (persistence toward goals), challenge (viewing difficulty as an opportunity), and confidence (belief in one's abilities and interpersonal effectiveness). Although mental toughness has been studied primarily in sport and performance settings, its logic maps well onto academic speaking tasks that are public and evaluative.

Resilience is closely related but conceptually distinct (Connor & Davidson, 2003; Smith et al., 2008). Contemporary perspectives treat resilience as adaptive functioning in the face of adversity and as a process involving personal resources and supportive contexts. In academic settings, resilience is reflected in the ability to recover after negative feedback, to rebound from poor performance, and to sustain effort when progress is slow.

Integrating these constructs into the WTC pyramid is plausible for two reasons. First, both mental toughness and resilience shape appraisal. Control–value theory emphasizes that emotions arise from appraisals of control and value. Learners high in mental toughness and resilience may perceive greater control in speaking tasks and sustain task value under pressure or monotony, reducing anxiety and boredom. Second, both constructs shape state self-confidence. Momentary communicative self-confidence does not arise in isolation; it is built on self-regulation, coping, and past experiences. Resilient learners may treat setbacks as temporary and remain willing to speak (Pekrun, 2006; Clough et al., 2002; Smith et al., 2008).

In Business English classrooms, mental toughness may be expressed as volunteering for demanding speaking roles, handling follow-up questions during presentations, and persisting through communication breakdowns in negotiations. Resilience may

be expressed as revising a presentation after a weak rehearsal, re-entering discussion after an awkward pause, or using corrective feedback as guidance rather than as a verdict (Clough et al., 2002; Gucciardi, 2017).

Importantly, integrating these resources does not imply that participation is solely an individual responsibility. The pyramid explicitly recognizes social context: task design, peer norms, and assessment practices can cultivate or undermine resources. In the present model, mental toughness and resilience are treated as relatively stable tendencies that can still be developed through pedagogy and support (MacIntyre et al., 1998; Cao, 2011).

Accordingly, mental toughness and resilience are hypothesized to positively predict WTC and the situated antecedents, and to buffer the negative effects of anxiety and boredom on communicative intention (Clough et al., 2002; Smith et al., 2008; MacIntyre et al., 1998).

A key theoretical advantage of including mental toughness and resilience is that they bridge individual difference research with classroom intervention. Unlike some personality traits, the components of mental toughness and resilience can be approached as skills and routines: goal-setting, reappraisal of challenge, attention control, and constructive response to feedback. Business English instructors can embed these routines into task cycles without turning language classes into therapy. For example, brief pre-task planning can include a coping prompt ("If I get stuck, I will ask for clarification"), and post-task reflection can include a recovery prompt ("What will I do differently next time?") (Dörnyei, 2005; Gucciardi, 2017; Jones et al., 2007).

At the program level, resource-oriented support aligns with employability and professional identity aims. Employers often value communication under pressure and the ability to recover after setbacks. Thus, integrating resilience-oriented practices in Business English instruction can be framed as professional skill development, which may increase perceived task value and, indirectly, reduce boredom (Nickerson, 2005; Louhiala-Salminen & Kankaanranta, 2012).

7. CONCEPTUAL MODEL AND HYPOTHESES

Figure 1 positions the focal constructs within the WTC pyramid for a Business English context. Anxiety and boredom are conceptualized as proximal achievement emotions at the situational level, although they are shaped by longer-term experiences. Mental toughness and resilience are conceptualized as mid-level coping resources that influence appraisal and self-regulation across tasks, thereby shaping the two situated antecedents: state communicative self-confidence and desire to communicate with specific peers (MacIntyre et al., 1998; Horwitz et al., 1986; Pekrun, 2006).

Figure 2 presents the proposed structural model. The model specifies three types of pathways. First, direct effects from anxiety, boredom, mental toughness, and resilience to WTC represent the possibility that emotions and resources shape communicative intention beyond the mediators. Second, mediation pathways specify that the predictors operate through state communicative self-confidence and desire to communicate. Third, moderation pathways specify buffering effects: mental toughness and resilience weaken anxiety–WTC and boredom–WTC links (MacIntyre et al., 1998).

To improve interpretability in an ESP context, two covariates will be included: self-perceived Business English proficiency and prior English exposure (e.g., schooling background, frequent English use online, or time abroad). These covariates are included because proficiency and exposure can influence both self-confidence and emotional experience (Dörnyei, 2005; Dörnyei & Ryan, 2015).

H1: Anxiety will negatively predict Business English WTC.

H2: Boredom will negatively predict Business English WTC.

H3: Mental toughness will positively predict Business English WTC.

H4: Resilience will positively predict Business English WTC.

H5: State communicative self-confidence will positively predict WTC.

H6: Desire to communicate with specific peers will positively predict WTC.

H7: Anxiety will negatively predict state self-confidence and desire to communicate.

H8: Boredom will negatively predict state self-confidence and desire to communicate.

H9: Mental toughness and resilience will positively predict state self-confidence and desire to communicate.

H10: State self-confidence and desire to communicate will mediate the effects of anxiety, boredom, mental toughness, and resilience on WTC.

H11: Mental toughness will buffer the negative effects of anxiety and boredom on WTC.

H12: Resilience will buffer the negative effects of anxiety and boredom on WTC.

Table 2 summarizes these hypotheses and the expected directions.

Table 2. Summary of hypotheses and theoretical rationale.

Hypothesis	Path (predictor → outcome)	Expected direction	Pyramid rationale
H1	Anxiety → WTC	Negative	Threat appraisal increases perceived cost of speaking
H2	Boredom → WTC	Negative	Low value reduces perceived benefit of participation
H3	Mental toughness → WTC	Positive	Self-regulation under pressure supports intention
H4	Resilience → WTC	Positive	Recovery after setbacks supports re-engagement
H5	State self-confidence → WTC	Positive	Situated antecedent closest to intention in pyramid
H6	Desire to communicate → WTC	Positive	Interlocutor-specific orientation shapes intention
H7	Anxiety → Situated antecedents	Negative	Anxiety erodes state self-confidence and desire
H8	Boredom → Situated antecedents	Negative	Disengagement reduces self-confidence and approach
H9	Resources → Situated antecedents	Positive	Resources support control and commitment in tasks
H10	Situated antecedents mediate predictors → WTC	Indirect	Mechanism specified in pyramid layers
H11	Mental toughness moderates anxiety/boredom → WTC	Buffering	Resources weaken translation of emotion into avoidance
H12	Resilience moderates anxiety/boredom → WTC	Buffering	Recovery capacity reduces emotion-to-intention impact

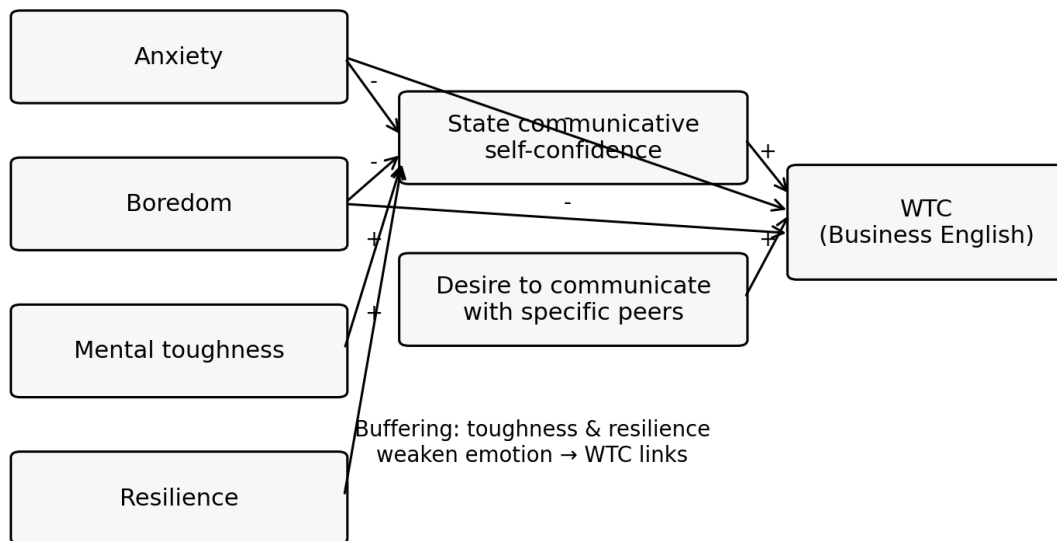


Figure 2. Proposed structural model linking anxiety, boredom, mental toughness, and resilience to Business English WTC.

Two additional points clarify the model's theoretical coherence. First, the model treats anxiety and boredom as conceptually distinct emotions, not as a single 'negative affect' factor. This distinction allows more precise pedagogical interpretation: threat-based barriers and value-based barriers require different interventions. Second, the model treats mental toughness and resilience as related but distinct resources. Mental toughness emphasizes performance under pressure and challenge orientation, whereas resilience emphasizes recovery and adaptive persistence. Estimating them simultaneously allows examination of whether they contribute unique variance to WTC and whether they differentially buffer anxiety versus boredom (Pekrun, 2006; Clough et al., 2002; Smith et al., 2008).

Finally, while the model focuses on four focal variables for parsimony, it is compatible with broader WTC correlates. Variables such as L2 enjoyment, motivation, and perceived competence are not denied; instead, they are treated as potential extensions or controls in future work once the core affect-resource pathways are established (Dewaele & MacIntyre, 2014; Dörnyei & Ushioda, 2011).

8. METHOD

8.1 Design and setting

The proposed study is a cross-sectional, multi-site quantitative investigation situated in Business English courses within Saudi business administration colleges. A cross-sectional design is appropriate for an initial test of the integrated model because it supports simultaneous estimation of direct, indirect, and interaction pathways among emotions, resources, and WTC. While longitudinal and experience-sampling methods provide finer-grained evidence for temporal dynamics, a well-powered survey can establish the nomological network and identify which pathways warrant subsequent temporal study.

To enhance generalizability within the Saudi higher-education context, the sampling strategy targets at least three universities that differ in region and institutional type. Within each site, the focus is on undergraduate business administration students enrolled in Business English or business-oriented ESP modules, including preparatory-year courses that emphasize business communication. Course levels will be documented (foundation, intermediate, advanced) to capture variation in task demands and assessment intensity.

Business English is operationalized as communication in academic and workplace-simulated tasks such as discussing cases, participating in meeting simulations, presenting project updates, handling questions, and negotiating solutions. Because WTC is sensitive to task type and assessment context, a brief course profile will document dominant speaking activities (presentation, discussion, role-play, or mixed), class size, and whether speaking performance is graded.

8.2 Participants and sampling

The target population is undergraduate business administration students enrolled in Business English or business-oriented ESP courses in Saudi universities. Participants will be recruited through intact classes with coordination from instructors and program administrators. To protect voluntariness, recruitment messages will emphasize that participation is optional, that responses are confidential, and that no academic penalties or benefits are attached.

For structural equation modeling with latent interaction terms, sample size requirements depend on model complexity and indicator reliability. Following common recommendations for SEM in applied linguistics and education, the study targets a minimum of 500 participants, with an aspirational target of 700 to support multi-group analyses (e.g., by gender or course level) and to provide stable estimates of interaction effects. Demographic variables will include age, gender, academic level, and self-reported GPA band.

Prior English exposure will be measured through items capturing schooling background, time spent abroad, and frequency of English use in media and social contexts. Because WTC is intertwined with perceived proficiency, participants will complete a short self-assessment of Business English proficiency (speaking, listening, and business vocabulary) and, where available, will report their most recent English course grade.

8.3 Measures

All constructs will be measured using established scales where possible, with conservative adaptation to Business English situations. Adaptations focus on (a) embedding prompts in business-administration tasks, (b) ensuring cultural and institutional appropriateness, and (c) preserving construct definitions (Dörnyei & Ryan, 2015).

8.3.1 Willingness to communicate in Business English

WTC will be measured with a scenario-based instrument adapted from widely used L2 WTC measures. Scenarios will reflect business-administration tasks such as asking a question during a case discussion, volunteering to summarize a group decision, making a suggestion in a meeting simulation, presenting a project update, negotiating disagreement politely, and responding to follow-up questions. To align with the pyramid's situational emphasis, scenarios will specify interlocutors (classmates, instructor, unfamiliar peers) and settings (small group versus whole class). A short pilot will confirm that scenarios are recognizable and cover a meaningful range of difficulty (McCroskey & Baer, 1985; Yashima, 2002; Peng & Woodrow, 2010).

8.3.2 Situated antecedents

State communicative self-confidence will be operationalized through items assessing perceived ability and low anxiety in the moment of speaking, including confidence in expressing ideas clearly, handling questions, and recovering after an error. Desire to communicate with specific peers will be measured through items that differentiate willingness to speak with supportive classmates, high-proficiency peers, unfamiliar peers, and authority figures. Because teamwork is central in business administration, additional items will address willingness to speak during group work and peer-led discussions (MacIntyre et al., 1998; MacIntyre, 2007).

8.3.3 Anxiety

Anxiety will be measured using a speaking-focused adaptation of the Foreign Language Classroom Anxiety Scale. Items will target fear of negative evaluation, apprehension about speaking without preparation, worry about making mistakes in front of peers, and test-related pressure in oral assessment. A subset of items will explicitly reference presentations and meeting simulations to capture performance-related anxiety (Horwitz et al., 1986; Alrabai, 2014).

8.3.4 Boredom

Boredom will be measured using a Business English adaptation of a validated foreign language learning boredom scale grounded in control-value theory. Items will represent boredom sources salient in Business English: task repetitiveness, low perceived value (activities feel disconnected from real business communication), slow pace or class-management sources, and reduced autonomy. Participants will respond with reference to their current Business English course over the previous four weeks to balance recall and representativeness (Li et al., 2021; Pekrun, 2006).

8.3.5 Mental toughness and resilience

Mental toughness will be measured with a short-form MTQ aligned with the 4Cs structure (control, commitment, challenge, confidence). Resilience will be measured using a brief resilience scale that assesses bounce-back capacity after stress. To respect construct validity, items will not be rewritten as language items; instead, Business English examples will anchor interpretation (Clough et al., 2002; Dagnall et al., 2019; Smith et al., 2008).

8.3.6 Adaptation and validity safeguards

Because several scales were developed outside ESP contexts, adaptation will follow a conservative procedure. Items will be reviewed by applied linguists and Business English instructors for authenticity and clarity. Where Arabic support is needed for instructions, a forward–back translation procedure will be used. Piloting will check comprehension, response distributions, and survey timing.

Construct validity will be evaluated through confirmatory factor analysis for each scale and for the full measurement model. Reliability will be reported using omega coefficients. Where sample sizes permit, measurement invariance across gender and course level will be examined to support meaningful comparisons.

Table 1 summarizes construct definitions and measurement sources.

Table 1. Constructs, operational definitions, and measurement sources.

Construct	Operational definition (Business English)	Primary measure/source	Adaptation notes
WTC (outcome)	Readiness to initiate Business English communication in specified scenarios	Scenario-based L2 WTC items (adapted from L2 WTC research)	Scenarios tailored to meetings, presentations, negotiations; interlocutor specified
State self-confidence	Momentary confidence in expressing ideas and managing interaction without unacceptable social risk	State self-confidence items aligned with WTC pyramid	Anchored to recent course tasks; includes handling questions and self-repair
Desire to communicate	Willingness to engage particular peers/instructor in Business English interaction	Interlocutor-specific desire items used in WTC research	Targets supportive peers, unfamiliar peers, authority figure (instructor)
Anxiety	Speaking-related apprehension and fear of negative evaluation in Business English tasks	FLCAS speaking-focused adaptation (Horwitz et al., 1986)	Items contextualized to presentations and meeting talk; balanced direct and indirect phrasing
Boredom	Low-arousal disengagement during Business English tasks due to low value/low autonomy/repetition	Foreign language learning boredom scale (Li et al., 2021) adapted	Focus on repetitiveness, perceived relevance, pace; 4-week reference window
Mental toughness	Control, commitment, challenge, and confidence under communicative pressure	MTQ short form (Clough et al., 2002) / MTQ-18 evidence (Dagnall et al., 2019)	General items; Business English anchoring via instructions and examples

Resilience	Capacity to recover from setbacks and re-engage after stress or poor performance	Brief Resilience Scale (Smith et al., 2008) or CD-RISC short form (Connor & Davidson, 2003)	General items; Business English anchoring via instructions
------------	--	---	--

8.4 Procedure

After institutional ethics approval, instructors of targeted Business English classes will be contacted to obtain permission for recruitment and online distribution. Participants will receive an information sheet describing the study purpose, confidentiality, and their right to withdraw, and they will provide electronic consent before beginning the questionnaire. The survey will be administered online using a secure platform and will take approximately 15–20 minutes.

To minimize evaluation concerns, instructors will not have access to individual responses. Item blocks will be ordered to anchor responses in Business English communication: WTC scenarios first, followed by situated antecedents, emotions, resources, and demographic/covariate questions. Data screening will check missingness patterns and indicators of careless responding.

8.5 Data analysis plan

Analyses will proceed in two stages: measurement validation and structural model testing. First, confirmatory factor analysis will evaluate the factor structures of each scale and the full measurement model. For boredom, the theorized multi-factor structure will be compared with a higher-order structure to determine whether a global boredom factor is defensible. Model fit will be evaluated using multiple indices (CFI, TLI, RMSEA, SRMR). Convergent and discriminant validity will be examined via factor loadings and interfactor correlations, and reliability will be reported using omega.

Second, structural equation modeling will test the hypothesized direct and indirect pathways. Anxiety, boredom, mental toughness, and resilience will predict WTC directly and indirectly via state communicative self-confidence and desire to communicate. Self-perceived proficiency and prior exposure will be included as covariates. Indirect effects will be evaluated using bootstrapped confidence intervals.

Moderation hypotheses will be tested using latent interaction modeling (e.g., anxiety $\times$ mental toughness; boredom $\times$ resilience). Significant interactions will be probed using simple slopes and presented graphically with predicted WTC values.

8.6 Ethical considerations

Participation will be voluntary and confidential. Surveys will be anonymous unless participants opt in to follow-up contact, in which case contact details will be stored separately from survey data. Instructors will not access individual responses, and participation will not affect grades. Because emotions such as anxiety can be sensitive, debriefing information will normalize varied experiences and, where available, point to campus support services.

8.7 Transparency and reporting

To strengthen credibility and replicability, the study will document all analysis decisions, including item selection for adapted measures, exclusion criteria for careless responding, and model modification decisions if needed. Results will be interpreted in terms of effect sizes and practical significance, not only statistical significance. Where institutional policies permit, anonymized syntax and output summaries will be archived to support cumulative research in WTC and ESP contexts.

9. DISCUSSION

This article proposes a focused extension of MacIntyre's L2 WTC pyramid for Business English in Saudi business administration colleges by integrating two negative achievement emotions (anxiety and boredom) with two psychological resources (mental toughness and resilience). The theoretical value of this integration lies in its mechanism-first logic. Rather than assembling a long list of correlates, the model specifies where selected constructs belong in the pyramid and how they operate through proximal antecedents (MacIntyre et al., 1998; MacIntyre, 2007; Dewaele & MacIntyre, 2014).

9.1 Two routes to silence: threat and low value

The model distinguishes between two qualitatively different routes to reduced participation. Anxiety represents a high-cost route. When speaking is appraised as socially risky, learners protect themselves through silence, especially in public and graded

tasks. Boredom represents a low-benefit route. When tasks feel repetitive, slow, or disconnected from professional purpose, the perceived payoff of participation drops and attention withdraws. In practice, these routes can co-occur within the same course: learners may disengage during low-value routines and then experience heightened anxiety when asked to perform publicly with insufficient preparation (Horwitz et al., 1986; Pekrun, 2006; Li et al., 2021).

Treating anxiety and boredom as distinct has practical consequences. Anxiety-oriented interventions focus on psychological safety, transparent assessment, and graded exposure to speaking challenges. Boredom-oriented interventions focus on authenticity, autonomy, and principled variety. A WTC lens helps instructors diagnose which route is salient in a given lesson: Is the student silent because the task feels threatening, or because the task feels empty? (Alrabai, 2015; Pekrun, 2006; Deci & Ryan, 2000).

9.2 Resources and buffering: why some learners speak anyway

Integrating mental toughness and resilience supports a resource-oriented account of participation. These constructs capture self-regulation under pressure and recovery after setbacks. If mental toughness and resilience predict the situated antecedents, they provide a plausible mechanism: resources stabilize state self-confidence and interpersonal orientation when tasks are evaluative or when motivation is tested by monotony. If buffering effects are observed, they indicate that students differ in vulnerability to negative emotions: some learners can experience anxiety or boredom without translating them into avoidance (Clough et al., 2002; Smith et al., 2008; Gucciardi, 2017).

This framing avoids placing all responsibility on learners. The pyramid recognizes that classroom climates and assessment practices shape both emotions and resources. However, identifying resources as moderators can help programs design supports for more vulnerable students and can motivate explicit instruction in coping routines (goal-setting, reflective debriefing, and adaptive self-talk) as part of Business English curricula (MacIntyre et al., 1998; Cao, 2011).

9.3 Contributions to WTC research in ESP

Testing the model in Business English adds an ESP dimension to WTC theory. Business communication requires performance in recognizable genres and involves peer dynamics typical of teamwork. If the situated antecedents remain strong predictors of WTC in these genres, the pyramid's core claim is strengthened in an applied professional ecology. If boredom shows unique effects beyond anxiety, WTC research gains a clearer account of how value appraisals influence communicative intention alongside threat appraisals (Dudley-Evans & St John, 1998; Bhatia, 1993; Nickerson, 2005; Louhiala-Salminen & Kankaanranta, 2012).

Methodologically, scenario-based WTC measurement aligned with Business English tasks can improve ecological validity and provide instructors with interpretable outputs. Similarly, adapting boredom measures to business tasks can differentiate boredom driven by repetitiveness from boredom driven by perceived irrelevance (Cao & Philp, 2006; Kang, 2005; Peng & Woodrow, 2010).

Finally, the model suggests a shift in how participation is discussed in Business English programs: from a moral expectation to a diagnostic question about which layer of the system is constraining communication. That shift enables constructive, evidence-informed interventions rather than blaming students for silence.

9.4 Limits and research agenda

The primary limitation is that cross-sectional data cannot fully adjudicate causal direction. Emotions, self-confidence, and WTC likely influence each other reciprocally, and WTC can fluctuate rapidly within tasks. Accordingly, the proposed study should be treated as an initial mapping of plausible pathways and effect sizes. Future work should use experience sampling to capture within-person dynamics and should evaluate targeted interventions that address boredom (value and autonomy), anxiety (psychological safety and graded exposure), and coping resources (resilience-building routines) (Kang, 2005; Cao, 2011).

From a practical standpoint, the model also encourages alignment between curricular rhetoric and classroom experience. If Business English courses are framed as employability preparation but tasks are experienced as low-value repetition, boredom becomes a predictable outcome and WTC suffers. Conversely, when tasks mirror real decision-making and when assessment rewards interactional competence, perceived value rises and communication becomes more likely. In this sense, WTC can serve as a diagnostic indicator for ESP program quality: it captures whether course design successfully converts motivation and knowledge into situated intention to speak (Pekrun, 2006; Li et al., 2021).

10. PEDAGOGICAL IMPLICATIONS FOR BUSINESS ENGLISH

Because the WTC pyramid locates communicative intention in a layered system, pedagogical implications should target multiple layers rather than relying on exhortation. The proposed model yields concrete implications for Business English instructors and program designers (MacIntyre et al., 1998; Ellis, 2003; Long, 2015).

First, counter boredom by designing tasks for value and autonomy. Replace scripted dialogues with decision-rich simulations where students must solve authentic business problems and where each member holds information necessary for the group's decision. Link tasks to recognizable industries and allow limited choice of roles or topics. Rotate among meeting talk, short pitches, and collaborative problem-solving to maintain novelty while retaining a coherent skills progression (Pekrun, 2006; Deci & Ryan, 2000; Pawlak et al., 2020).

Second, reduce anxiety by building psychological safety without lowering standards. Use transparent rubrics that reward communicative effectiveness (clarity, structure, responsiveness) rather than minor error counts. Model self-repair strategies and normalize hesitation as part of professional communication. Implement rehearsal cycles that move from private rehearsal to small-group rehearsal to whole-class performance, providing graded exposure. Peer feedback should be structured and behavior-focused (Horwitz et al., 1986; Arabai, 2015; Dewaele & MacIntyre, 2014).

Third, strengthen situated self-confidence through scaffolded performance that fades. Provide language frames for key business functions (agreeing, disagreeing politely, proposing solutions, summarizing), planning time, and micro-skills practice (handling questions, clarifying, turn-taking). As competence grows, reduce scaffolds and increase spontaneity so learners experience successful performance under realistic constraints (MacIntyre et al., 1998; Long, 2015).

Fourth, treat mental toughness and resilience as learnable communication resources. Integrate goal-setting (for example, one question per class), brief reflective debriefs after speaking tasks (what worked, what to improve next time), and challenge framing that links effort to professional growth. Pair students for rehearsal mentoring and supportive debriefing to add a social layer to coping (Clough et al., 2002; Smith et al., 2008; Gucciardi, 2017).

Fifth, engineer peer interaction to increase desire to communicate with specific peers. Rotate groups strategically to prevent fixed hierarchies, assign facilitation roles, and establish norms for inclusive turn-taking. Over time, these routines can reshape peer climate so that speaking becomes less risky and more relationally meaningful (Cao & Philp, 2006; Peng & Woodrow, 2010).

At the program level, assessment practices should align with WTC. Portfolio assessment that includes rehearsal recordings, revisions, and reflections can reduce anxiety by emphasizing development. Extra-curricular speaking ecosystems (business clubs, pitch competitions, case events) can provide additional low-stakes practice that increases authentic exposure and builds professional identity (Ellis, 2003; Long, 2015).

11. LIMITATIONS AND FUTURE RESEARCH

Three limitations should be acknowledged. First, the proposed design is cross-sectional, which limits causal inference. Emotions and self-confidence likely influence each other over time, and experience-sampling designs are needed to capture moment-to-moment WTC dynamics in Business English tasks. Second, the study relies primarily on self-report. Future research should triangulate with behavioral indicators such as speaking-turn counts in recorded tasks, teacher ratings of participation, or participation traces from online discussion platforms. Third, mental toughness and resilience overlap with related constructs used in applied linguistics (e.g., self-efficacy, buoyancy, grit). Future studies should compare these constructs directly to clarify incremental validity and to avoid construct proliferation (Kang, 2005; Cao, 2011).

Future work should also test interventions. Task-design interventions can target boredom by increasing autonomy and authenticity, while feedback and assessment interventions can target anxiety by reducing evaluative threat. Psychological skills training and peer mentoring can target coping resources. Such work would move WTC research from explanatory models to actionable program design (Pekrun, 2006; Pawlak et al., 2020).

A further limitation is that 'Business English' is not a single uniform experience. Courses differ in whether they emphasize presentations, discussion, or writing, and these differences may shape the salience of anxiety and boredom. Multi-group analyses by course profile can offer initial insight, but future work should incorporate multilevel designs that explicitly model class- and instructor-level variance.

Finally, cultural generalizations should be avoided. While Saudi educational contexts share certain features, institutions and cohorts vary substantially. Accordingly, the study will report context descriptors transparently and will interpret results as patterns in the sampled programs rather than as essentialized claims.

12. Conclusion

Willingness to communicate is a pivotal outcome for Business English programs because it bridges knowing English and using English when professional interaction demands it. Grounded in MacIntyre's L2 WTC pyramid, this article developed a context-sensitive model for Saudi business administration colleges that integrates two affective barriers (anxiety and boredom) and two psychological resources (mental toughness and resilience). The model specifies how these variables operate through the pyramid's situated antecedents—state communicative self-confidence and desire to communicate with specific peers—and provides a transparent plan for empirical testing using structural equation modeling (MacIntyre et al., 1998; MacIntyre, 2007).

Practically, the model suggests that participation is most likely to increase when tasks are perceived as valuable, classroom climates are psychologically safe, performance is scaffolded, and students are supported in developing coping and recovery routines. By making these mechanisms explicit, the framework offers a researchable pathway for strengthening participation: diagnose whether silence is driven primarily by threat or by low task value, then adjust tasks and supports accordingly, in ways that students experience as professionally meaningful and fair (Pekrun, 2006; Dewaele & MacIntyre, 2014; Clough et al., 2002; Smith et al., 2008).

Funding:

The authors extend their appreciation to Prince Sattam bin Abdulaziz University for funding this research work through the project number (PSAU 2025/02/38246)

REFERENCES

- [1] Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of Japanese. *The Modern Language Journal*, 78(2), 155–168.
- [2] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- [3] Alrabai, F. (2014). A model of foreign language anxiety in the Saudi EFL context. *English Language Teaching*, 7(7), 82–101.
- [4] Alrabai, F. (2015). The influence of teachers' anxiety-reducing strategies on learners' foreign language anxiety. *Innovation in Language Learning and Teaching*, 9(2), 163–190.
- [5] Al-Saraj, T. M. (2014). Foreign language anxiety in female Arab learners of English in Saudi Arabia: Case studies. *Innovation in Language Learning and Teaching*, 8(3), 257–272.
- [6] Alrashidi, O., & Phan, H. (2015). Education context and English teaching and learning in the Kingdom of Saudi Arabia: An overview. *English Language Teaching*, 8(5), 33–44.
- [7] Bawazir, M. A. (2019). Factors influencing Saudi EFL learners' willingness to communicate in the classroom. Unpublished institutional report.
- [8] Bhatia, V. K. (1993). *Analysing genre: Language use in professional settings*. Longman.
- [9] Brinton, D. M., Snow, M. A., & Wesche, M. B. (1989). *Content-based second language instruction*. Newbury House.
- [10] Burgoon, J. K. (1976). The unwillingness-to-communicate scale: Development and validation. *Communication Monographs*, 43(1), 60–69.
- [11] Cao, Y. (2011). Investigating situational willingness to communicate within second language classroom from an ecological perspective. *System*, 39(4), 468–479.
- [12] Cao, Y., & Philp, J. (2006). Interactional context and willingness to communicate: A comparison of behavior in whole class, group and dyadic interaction. *System*, 34(4), 480–493.
- [13] Clough, P. J., Earle, K., & Sewell, D. (2002). Mental toughness: The concept and its measurement. In I. Cockerill (Ed.), *Solutions in sport psychology* (pp. 32–45). Thomson.
- [14] Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82.
- [15] Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. Harper & Row.

- [16] Dagnall, N., Denovan, A., Papageorgiou, K. A., & Clough, P. J. (2019). Psychometric assessment of the shortened Mental Toughness Questionnaire (MTQ-18). *Frontiers in Psychology*, 10, 1933.
- [17] Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- [18] Dewaele, J.-M., & Alfawzan, M. (2018). Does the effect of enjoyment outweigh that of anxiety in foreign language performance? *Studies in Second Language Learning and Teaching*, 8(1), 21–45.
- [19] Dewaele, J.-M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, 4(2), 237–274.
- [20] Dewaele, J.-M., Witney, J., Saito, K., & Dewaele, L. (2017). Foreign language enjoyment and anxiety in the FL classroom: The effect of teacher and learner variables. *Language Teaching Research*, 22(6), 676–697.
- [21] Dewhurst, S. A., Anderson, R. J., Cotter, G., Crust, L., & Clough, P. J. (2012). Identifying the cognitive basis of mental toughness: Evidence from the directed forgetting paradigm. *Personality and Individual Differences*, 53(5), 587–590.
- [22] Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Lawrence Erlbaum.
- [23] Dörnyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited*. Routledge.
- [24] Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). Pearson.
- [25] Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for specific purposes: A multidisciplinary approach*. Cambridge University Press.
- [26] Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.
- [27] Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218–226.
- [28] Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. Edward Arnold.
- [29] Gkonou, C., Daubney, M., & Dewaele, J.-M. (Eds.). (2017). *New insights into language anxiety: Theory, research and educational implications*. Multilingual Matters.
- [30] Gucciardi, D. F. (2017). Mental toughness: Progress and prospects. *Current Opinion in Psychology*, 16, 17–23.
- [31] Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly*, 20(3), 559–562.
- [32] Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132.
- [33] Horwitz, E. K. (2010). Foreign and second language anxiety. *Language Teaching*, 43(2), 154–167.
- [34] Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning-centred approach*. Cambridge University Press.
- [35] Hyland, K. (2006). *English for academic purposes: An advanced resource book*. Routledge.
- [36] Jones, G., Hanton, S., & Connaughton, D. (2002). What is this thing called mental toughness? An investigation of elite sport performers. *Journal of Applied Sport Psychology*, 14(3), 205–218.
- [37] Jones, G., Hanton, S., & Connaughton, D. (2007). A framework of mental toughness in the world’s best performers. *The Sport Psychologist*, 21(2), 243–264.
- [38] Kang, S.-J. (2005). Dynamic emergence of situational willingness to communicate in a second language. *System*, 33(2), 277–292.
- [39] Karim, M. R., & Jamshed, M. (2023). Business English in Saudi universities: A study on linguistic skills of the college undergraduates in line with the demand of future labour market of NEOM-Vision 2030. *Journal for Educators, Teachers and Trainers*, 14(2), 70–84.
- [40] Kruk, M. (2022). The emergence of boredom in an online language class. *System*, 105, 102751.
- [41] Li, C., Dewaele, J.-M., & Hu, Y. (2021). Foreign language learning boredom: Conceptualization and measurement. *Applied Linguistics Review*.
- [42] Long, M. H. (2015). *Second language acquisition and task-based language teaching*. Wiley Blackwell.
- [43] Louhiala-Salminen, L., & Kankaanranta, A. (2012). Language as an issue in international internal communication: English or local language? If English, what English? *Public Relations Review*, 38(2), 262–269.
- [44] Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543–562.

- [45] MacIntyre, P. D. (2007). Willingness to communicate in the second language: Understanding the decision to speak as a volitional process. *The Modern Language Journal*, 91(4), 564–576.
- [46] MacIntyre, P. D., Baker, S. C., Clément, R., & Donovan, L. A. (2003). Talking in order to learn: Willingness to communicate and intensive language programs. *The Canadian Modern Language Review*, 59(4), 589–608.
- [47] MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *Language Learning*, 48(4), 545–562.
- [48] Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227–238.
- [49] McCroskey, J. C., & Baer, J. E. (1985). Willingness to communicate: The construct and its measurement. Paper presented at the Annual Convention of the Speech Communication Association, Denver, CO.
- [50] Nickerson, C. (2005). English as a lingua franca in international business contexts. *English for Specific Purposes*, 24(4), 367–380.
- [51] Norton, B. (2013). *Identity and language learning: Extending the conversation* (2nd ed.). Multilingual Matters.
- [52] Pawlak, M., Zawodniak, J., & Kruk, M. (2020). Boredom in the foreign language classroom: A micro-perspective. Springer.
- [53] Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review*, 18(4), 315–341.
- [54] Pekrun, R., Goetz, T., Daniels, L. M., Stupnisky, R. H., & Perry, R. P. (2010). Boredom in achievement settings: Control-value antecedents and performance outcomes of a neglected emotion. *Journal of Educational Psychology*, 102(3), 531–549.
- [55] Peng, J. E., & Woodrow, L. (2010). Willingness to communicate in English: A model in the Chinese EFL classroom context. *Language Learning*, 60(4), 834–876.
- [56] Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129–158.
- [57] Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15(3), 194–200.
- [58] Tze, V. M. C., Daniels, L. M., & Klassen, R. M. (2016). Evaluating the relationship between boredom and academic outcomes: A meta-analysis. *Educational Psychology Review*, 28(1), 119–144.
- [59] Unger, M. (2011). *The social ecology of resilience: A handbook of theory and practice*. Springer.
- [60] Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal*, 86(1), 54–66.