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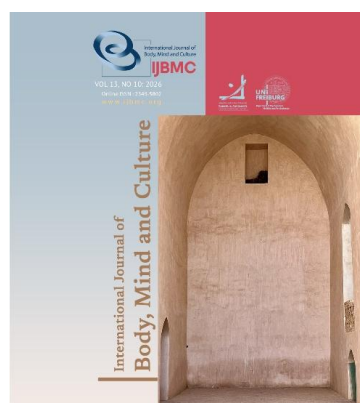
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Language Choice on Social Media, Cultural Belonging, and Communicative Affective Well-Being: A Proposed Multilevel Dual-Path Conceptual Framework

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ABSTRACT

Objective: This conceptual article examines how episode-specific appraisals of language choice on social media may be associated with communicative affective well-being through hypothesized recognition-belonging and judgment-regulation pathways. No empirical relationships, effect sizes, or causal effects are estimated.

Methods and Materials: A critical integrative conceptual synthesis was conducted across digital sociolinguistics, cultural psychology, social identity theory, communication accommodation, self-determination theory, belongingness, self-discrepancy, dynamic digital well-being, platform-affordance, and Kazakhstan-focused scholarship. Sources identified through targeted searches conducted between 2 July and 23 August 2026 were supplemented by backward and forward citation chaining. The synthesis was purposive rather than systematic or meta-analytic. Constructs were differentiated, mapped onto interaction, person/community, and platform/institution levels, and translated into provisional, falsifiable propositions.

Findings: The synthesis produced a proposed Digital Language–Belonging–Well-Being framework rather than empirical findings. The positive pathway hypothesizes that digital linguistic congruence, including expressive fit and identity fit, is associated with momentary cultural recognition, a momentary belonging signal, and higher communicative affective well-being. The negative pathway hypothesizes that linguistic incongruence is associated with anticipated linguistic judgment, self-monitoring, linguistic self-censorship, momentary identity tension, and lower communicative affective well-being. Six auxiliary propositions specify language agency, code-switching voluntariness, audience conditions, platform-language support, and institutional hierarchy as boundary conditions.

Conclusion: The proposed DLBW framework integrates established theories into a linguistically explicit, multilevel research agenda. Its contribution is conceptual and testable; it should not be interpreted as evidence that the proposed mechanisms have been established.

Keywords: Social Media, Language Choice, Digital Multilingualism, Cultural Recognition, Cultural Belonging, Communicative Affective Well-Being, Language Agency.

Introduction

Social media have multiplied the moments in which multilingual users must decide not only what to communicate, but also which language, script, register, or mixed repertoire to use. A single user may write in Kazakh to create cultural intimacy, use Russian to maximize local reach, turn to English for transnational study or professional networks, and combine resources to produce humor, nuance, or peer solidarity. These choices are rarely reducible to proficiency or stable preference. They are situated actions shaped by communicative goals, imagined audiences, platform conventions, visibility expectations, and anticipated responses (Androutsopoulos, 2014, 2015; Leppänen et al., 2009; Liu, 2021; Marwick & boyd, 2011).

Digital sociolinguistics has established that online multilingualism is networked, performative, and audience-sensitive. Language choice can construct local and transnational identities, establish participation in communities, expand domains for minoritized languages, and manage overlapping publics (Cru, 2015; Lee & Barton, 2011; McEntee-Atalianis et al., 2023; Reershemius, 2017). Code-switching and translanguaging can be creative resources rather than signs of deficiency, and multilingual speakers may experience shifts in self-presentation and emotional expression across languages (Dewaele & Li, 2014; Dewaele & Nakano, 2013; García & Li, 2014; Li, 2018; Pavlenko, 2005). Yet the emotional meaning of these practices remains under-specified. The same switch can feel playful when chosen freely, strategic when used to extend reach, or burdensome when performed to avoid correction, ridicule, or political interpretation.

A parallel psychological literature links belonging, autonomy, identity coherence, and social validation with well-being. The need to belong is a fundamental human motive, while autonomy and relatedness are central to self-determined functioning (Baumeister & Leary, 1995; Deci & Ryan, 2000). Cultural identity is associated with more adaptive functioning when it is experienced as coherent and socially supported, whereas identity conflict, discrimination, concealment, or threat can produce psychological costs (Benet-Martínez & Haritatos, 2005; Branscombe et al., 1999; Downie et al., 2004; Major & O'Brien, 2005; Schmitt et al.,

2014; Usborne & Taylor, 2010). Digital well-being research similarly cautions against treating social media as a uniform exposure: consequences depend on motives, interaction quality, perceived autonomy, social context, and momentary appraisals (Gilbert et al., 2023; Meier & Reinecke, 2021; Vanden Abeele, 2021; Verduyn et al., 2017). Language choice, however, is seldom modeled as a psychologically consequential feature of digital participation. A preliminary study of digital storytelling among language learners also reported changes in communication anxiety and learning motivation, underscoring the need to examine linguistic and interactional context (Pravitha et al., 2026).

The omission is especially consequential in multilingual societies where language is simultaneously a communicative resource, a marker of cultural membership, a route to mobility, and an object of institutional regulation. Kazakhstan is used here as a theoretically informative contextual illustration, not as evidence that the proposed pathways are Kazakhstan-specific or already demonstrated in that population. Its digital publics operate across Kazakh, Russian, English, and other linguistic resources, while present practices reflect histories of Russification, state-led Kazakhization, educational reform, regional variation, and changing geopolitical meanings (Dave, 2007; Jarlhøj & Valijärvi, 2024; Smagulova, 2008, 2014; Ten, 2024). Studies of young people and higher education show that prestige, ethnolinguistic identity, intercultural communication, and practical reach cannot be reduced to a Kazakh-versus-Russian binary (Akynova et al., 2014; Kambatyrova, 2024; Khamit et al., 2025; Tlepbergen et al., 2025; Zharkynbekova, Ayupova, et al., 2025; Zharkynbekova, Shakhputova, Anichshenko, et al., 2025; Zharkynbekova, Shakhputova, Galiyeva, et al., 2025). Digital self-presentation also connects language with nationalism and embodied cultural display (Kudaibergenova, 2019). Online language ideologies may moralize purity, legitimacy, decolonization, and the public meaning of speaking Kazakh (Kamalova, 2025), while media governance can distribute civic recognition unevenly across linguistic publics (Rakysbayeva et al., 2026).

The present article does not claim a direct or established relationship between social-media language choice and communicative affective well-being. It proposes that any association may depend on how users appraise the fit between the repertoire they enact and the repertoire through

which they can express intended meanings and an identity-relevant self. The proposed association may also vary with perceived language agency, audience feedback, platform-language support, and institutional conditions. The DLBW framework therefore specifies two hypotheses at the episode level: a recognition-belonging path linking congruence with momentary cultural recognition, a momentary belonging signal, and communicative affective well-being; and a judgment-regulation path linking incongruence with anticipated linguistic judgment, self-monitoring, linguistic self-censorship, momentary identity tension, and lower communicative affective well-being. The direction, size, and temporal order of these relations remain empirical questions.

The proposed framework makes five conceptual contributions. First, it separates observable language practice from episode-specific appraisal, allowing the same practice to carry different meanings across persons and contexts. Second, it limits digital linguistic congruence to expressive fit and identity fit and treats social safety as an external condition. Third, it separates momentary recognition, belonging, identity tension, and affect from their accumulated person/community-level counterparts and from general psychological well-being, mental health, and digital fatigue. Fourth, it integrates social identity, self-determination, belongingness, self-discrepancy, communication accommodation, and dynamic digital well-being theories into a linguistically explicit multilevel architecture. Fifth, it distinguishes five core propositions from six auxiliary boundary propositions and specifies rival explanations and a staged validation program. These contributions remain provisional until construct validity, temporal ordering, and cross-level effects are tested.

Methods and Materials

Study Design

This article uses a critical integrative conceptual synthesis combining theory synthesis and model development. Conceptual work requires an explicit design because its contribution depends on how constructs are selected, delimited, related, and transformed into an explanatory architecture rather than on the accumulation of citations alone (Jaakkola, 2020). The analysis also treats a conceptual

framework as a network of interdependent concepts whose meanings emerge partly through their relations (Jabareen, 2009). The objective is to develop a bounded, provisional account of how situated language practices might be associated with recognition and belonging or with identity-relevant regulation and affective discomfort. The design does not test relationships, estimate effects, or establish causal direction.

Materials and Search Strategy

Source identification was conducted between 2 July and 23 August 2026 using a targeted, concept-driven search strategy appropriate for an integrative conceptual synthesis. Searches were undertaken through PubMed, the ACL Anthology, journal and publisher search interfaces, DOI landing pages, and scholarly bibliographic web searches. These searches were supplemented by backward citation tracking from foundational and review publications and forward citation tracking to identify subsequent theoretical and empirical developments. Because access to subscription-based multidisciplinary databases was not uniform across all stages of the review, the search was designed to identify theoretically relevant and methodologically informative literature rather than to provide exhaustive coverage. Accordingly, the review is presented as a purposive conceptual synthesis rather than as a systematic review or meta-analysis.

Foundational works in social psychology, sociolinguistics, communication accommodation, social identity, belongingness, and self-determination were included without date restrictions when they provided essential theoretical foundations for the proposed model. For research on digital communication, social media, multilingual practices, platform conditions, and psychological outcomes, priority was given to studies published between 2009 and August 2026, with particular attention to more recent empirical and conceptual work.

The principal search string combined three conceptual domains: ("social media" OR "digital communication" OR platform*) AND ("language choice" OR code-switch* OR translanguag* OR "digital multilingualism") AND (belong* OR recognit* OR identit* OR affect* OR "emotional well-being" OR stress OR fatigue).

Additional searches combined terms related to language agency, linguistic self-censorship, identity threat, context

collapse, audience norms, algorithmic visibility, content moderation, automated speech recognition, language-technology inequality, low-resource languages, cultural belonging, Kazakhstan, Kazakh language, Russian language, and multilingual youth. These additional searches were used to identify literature relevant to the proposed mediating mechanisms, boundary conditions, platform-level influences, and the Kazakhstan-focused contextual illustration and potential test setting for the framework.

Source selection was guided by conceptual relevance rather than by publication volume alone. Priority was given to sources that contributed directly to construct definition, mechanism specification, theoretical differentiation, platform or institutional boundary conditions, or the formulation of testable DLBW propositions. Sources were not treated as evidence that the proposed DLBW paths, mediators, or moderators had already been demonstrated. The search terms, source-selection logic, inclusion and exclusion functions, and analytical procedure are reported in the present Methods and Materials section.

Sources were included when they performed at least one of five functions: defining a core construct; explaining a mediating or moderating mechanism; documenting multilingual digital practice; identifying platform or technology conditions with human consequences; or illuminating Kazakhstan and comparable multilingual contexts. Purely technical natural-language-processing studies were excluded unless they directly addressed unequal language support, speech recognition, or content moderation with plausible consequences for user participation. Studies of language learning were included only when they examined identity, confidence, affect, belonging, or digital communication. Because this was a purposive conceptual synthesis rather than a systematic review, no claim of exhaustive retrieval, risk-of-bias aggregation, or meta-analytic effect estimation is made (Snyder, 2019).

Analytical Procedure

Conceptual analysis proceeded in six stages. First, recurrent constructs were compared for overlap and ambiguity. Second, sources were coded by the mechanism they implied, including audience accommodation, self-discrepancy, identity validation, anticipated judgment, autonomy support, context collapse, platform inequality,

and cumulative digital load. Third, each mechanism was assigned to an interaction, person/community, or platform/institution level. Fourth, adjacent constructs were differentiated to avoid circular definitions and overlapping indicators. Fifth, each construct and pathway was anchored in established theory and assessed for incremental explanatory value. Sixth, relations were organized into five core propositions, six auxiliary boundary propositions, rival explanations, and empirical tests. No causal effect, mediation effect, or moderator was inferred from the synthesis; arrows in the framework denote hypotheses requiring prospective validation.

Findings and Results

The outputs reported below are products of conceptual integration, including definitions, boundary conditions, theoretical mappings, and hypotheses, rather than empirical results. No data were collected or analyzed to test the proposed DLBW pathways.

Construct Clarification and Boundary Setting

Digital Language Practices

Digital language practices refer to the situated selection, mixing, switching, stylization, translation, or withholding of linguistic and semiotic resources in social-media communication. The construct includes the choice of a named language but is broader than a categorical language variable. Users may alternate scripts, combine lexical resources, reply in a different language from the source post, use automated translation, or decline to post because no available option feels appropriate. These practices position users in relation to audiences and communities and therefore constitute social action rather than a neutral record of competence (Barton & Lee, 2013; Bucholtz & Hall, 2005). Audience design is central because social-media users often address an imagined audience whose boundaries are uncertain, while context collapse brings peers, relatives, employers, teachers, activists, and strangers into the same communicative space (Androutsopoulos, 2014; Davis & Jurgenson, 2014; Marwick & Boyd, 2011).

Digital Linguistic Congruence

Digital linguistic congruence is provisionally defined as the perceived fit between the repertoire enacted in a specific online interaction and the repertoire the user regards as

appropriate for expressing intended meanings and an identity-relevant self. It has two distinguishable first-order components. Expressive fit concerns whether the enacted resources convey the intended informational and emotional meaning. Identity fit concerns whether the practice permits a self-presentation the user experiences as culturally and personally truthful. The dimensions may converge, but neither is assumed to compensate fully for the other. An interaction can convey intended meaning while feeling identity-incongruent, or feel identity-affirming while limiting expressive precision. Congruence does not require monolingual consistency. For one user, a Kazakh-Russian mix may provide high fit; for another, a single language may be more congruent. Digital linguistic incongruence denotes low fit on one or both dimensions in a particular episode. Future measurement should assess expressive fit and identity fit with separate episode-referenced item sets and compare correlated-factor, higher-order, interaction, and profile models rather than assume a single compensatory score.

This definition deliberately excludes social safety. Safety, anticipated penalty, audience tolerance, and institutional support are external conditions that may influence the occurrence and meaning of congruent expression; placing them inside the congruence construct would make the framework circular. Digital linguistic congruence is related to, but narrower than, general subjective fit, authenticity, and self-discrepancy. Subjective fit concerns compatibility between persons and broader environments (Cable & DeRue, 2002); authenticity concerns self-awareness and unobstructed self-expression across life domains (Kernis & Goldman, 2006); and self-discrepancy theory concerns relations among actual, ideal, and ought selves and their affective implications (Higgins, 1987). Digital linguistic congruence specifies a linguistic, enacted, and interaction-bounded appraisal. Its discriminant validity must be demonstrated against these constructs, language proficiency, and perceived language agency.

Momentary Cultural Recognition, Belonging Signals, and Accumulated Cultural Belonging

Momentary cultural recognition is provisionally defined as the episode-specific perception that a language-linked self has been treated as intelligible, legitimate, and worthy of participation. Candidate indicators should capture

affirmative uptake, such as feeling understood, respected, or culturally legitimate in a specific interaction. Visibility, popularity, and reaction counts are not sufficient indicators because a post can be visible while its speaker is treated as deficient or politically suspect. The absence of humiliating correction indicates low rejection or greater audience safety, not positive recognition by itself. Social identity and ethnolinguistic vitality perspectives explain why such signals may matter when language indexes group membership and status (Giles et al., 1977; Tajfel & Turner, 1979). The construct is reserved for affirmative, culturally meaningful validation in a particular interaction.

A momentary belonging signal is the immediate, episode-specific sense of relational fit or inclusion experienced during or shortly after digital participation. Candidate indicators should refer explicitly to the focal interaction, such as feeling included, socially anchored, or able to remain present in that exchange. It is not durable cultural belonging. Accumulated cultural belonging refers to a more stable attachment that may develop across repeated interactions and communities and should be measured with a longer time frame. This temporal separation prevents an episode-level mediator from being conflated with a person/community-level state. Belonging can be local, transnational, professional, generational, or platform-specific, and several belongings may coexist (Yuval-Davis, 2006). Need-to-belong and sociometer perspectives suggest that people monitor environments for acceptance and rejection cues (Baumeister & Leary, 1995; Leary et al., 1995), but whether repeated positive signals predict accumulated belonging remains to be tested.

Anticipated Linguistic Judgment, Self-Monitoring, Self-Censorship, Momentary Identity Tension, and Accumulated Identity Strain

Anticipated linguistic judgment is the episode-specific appraisal that a language practice may trigger criticism, stereotyping, exclusion, political attribution, or competence evaluation. It should be assessed before or during posting and distinguished from judgment that has already occurred. Self-monitoring is the cognitive effort devoted to calibrating language against anticipated audiences; candidate indicators include repeated checking, editing effort, and attention devoted specifically to linguistic presentation. Linguistic self-censorship is the behavioral suppression, simplification,

deletion, switching, or withholding of expression in response to anticipated consequences and should be measured separately from self-monitoring. Momentary identity tension is the immediate identity-specific strain experienced when regulation obstructs access to a self-relevant repertoire in a particular interaction. Accumulated identity strain is the more durable burden that may emerge if such tension recurs across episodes. Neither construct implies a stable identity crisis or clinical disorder.

Momentary identity tension and accumulated identity strain overlap with identity threat but are not identical to it. Identity threat refers broadly to situations in which valued identities are devalued or endangered (Petriglieri, 2011; Steele et al., 2002). The DLBW constructs specify an immediate tension and a possible longer-term burden linked specifically to management of language-repertoire discrepancies in digital interaction. They also differ from language anxiety, which commonly emphasizes performance apprehension, and from discrimination, which is an external treatment. Discrimination and stigma research nevertheless make the proposed pathway plausible by showing associations between anticipated devaluation, repeated identity-relevant disadvantage, and psychological outcomes (Branscombe et al., 1999; Major & O'Brien, 2005; Schmitt et al., 2014). Empirical work must establish that identity-tension items do not duplicate general negative affect or communicative affective well-being items.

Perceived Language Agency

Perceived language agency is the felt capacity to choose, combine, change, or withhold linguistic resources among meaningful alternatives. Candidate indicators should assess whether viable alternatives were available, whether the user felt free to mix or switch, and whether the enacted choice was experienced as voluntary or pressured. The construct is not equivalent to formal legal permission, because a language may be legally available yet socially costly, technically unsupported, or algorithmically disadvantaged. It is also narrower than global autonomy because it concerns control over the repertoire through which a user participates. Communication accommodation can signal empathy, solidarity, expertise, or strategic competence (Giles et al., 1991), but the DLBW framework treats the availability of meaningful alternatives and the voluntariness of adaptation as empirical boundary conditions.

Communicative Affective Well-Being and Exploratory Downstream Fatigue

Communicative affective well-being is provisionally defined as the quality of immediate affective experience during and shortly after a specific digital interaction. Candidate indicators include communicative comfort, manageable tension, positive and negative affect, and willingness to remain engaged in the exchange. The construct excludes expressive fit, authenticity, recognition, and social safety as defining indicators because those concepts enter earlier parts of the framework. It also differs from global life satisfaction, eudaimonic psychological well-being, psychiatric diagnosis, and generalized mental health. Communicative affective well-being must remain distinct from momentary identity tension: the latter is restricted to identity-relevant strain associated with obstructed access to a self-relevant repertoire, whereas the former refers to the overall affective quality of the interaction. Their item pools must not overlap, and discriminant validity must be established before the proposed negative serial pathway is tested. This bounded outcome is consistent with dynamic approaches that locate digital well-being in person-by-context episodes rather than in screen exposure alone (Vanden Abeele, 2021; Meier & Reinecke, 2021; Verduyn et al., 2017).

Cumulative digital depletion is retained only as an exploratory downstream construct. It refers to cognitive and emotional exhaustion across repeated demanding digital interactions and should be assessed across days or weeks rather than within a single episode. Literature on digital vigilance, communication load, and autonomy frustration suggests possible links with stress and fatigue (Gilbert et al., 2023; Van Gaeveren et al., 2026). Batyrkhanova et al. (2026) extend this discussion to algorithmic mood management and somatic digital fatigue among Kazakhstani university students. The DLBW framework does not claim that language regulation causes bodily symptoms. It proposes only that accumulated identity strain might be associated with greater depletion when it co-occurs with general digital load. Any cognitive or somatic extension requires independent longitudinal validation and is not one of the eleven formal propositions.

Provisional Operationalization and Discriminant Requirements

The constructs introduced in this article are theoretical definitions, not validated scales. Future instruments should use explicit episode or accumulation time frames, avoid embedding antecedents or consequences inside outcome items, and maintain non-overlapping item pools. Each new construct should be evaluated for content, convergent, discriminant, criterion, and incremental validity before the structural propositions are tested.

Table 1 therefore presents candidate operational indicators rather than finalized measures. A valid empirical test would need to show, for example, that digital linguistic congruence is distinguishable from proficiency, authenticity, self-discrepancy, and language agency; momentary cultural recognition from visibility and generic approval; a momentary belonging signal from accumulated belonging; momentary identity tension from communicative affective well-being; and cumulative depletion from mental health diagnoses or somatic illness.

Table 1.*Provisional Definitions, Candidate Operational Indicators, Model Roles, and Conceptual Boundaries*

Construct	Provisional definition and candidate indicators	Proposed role	Required discriminant boundary
Digital language practices	Episode-specific selection, switching, mixing, translation, stylization, or withholding of linguistic resources. Indicators: named language(s), script, mixing pattern, switching, translation, deletion, or non-posting in a focal interaction.	Observed or self-reported focal behavior	General platform use, stable preference, or language proficiency
Digital linguistic congruence	Perceived expressive fit and identity fit between enacted and self-relevant repertoire. Indicators: separate episode-referenced items for meaning precision and intended self-representation; factor structure must be tested.	Two-dimensional primary appraisal	General authenticity, person-environment fit, self-discrepancy, proficiency, agency, or social safety
Perceived language agency	Felt capacity to choose, combine, switch, or withhold resources among meaningful alternatives. Indicators: viable options, freedom of choice, pressure, and voluntariness.	Person x interaction boundary condition	Formal legal permission, global autonomy, or language confidence
Momentary cultural recognition	Episode-specific perception that a language-linked self is understood, respected, legitimate, and worthy of participation. Indicators must capture affirmative uptake.	Core positive-path mediator	Visibility, popularity, reaction counts, absence of rejection, or generic approval
Momentary belonging signal	Immediate relational fit or inclusion in the focal interaction. Indicators: feeling included, socially anchored, and able to remain present in the exchange.	Core positive-path mediator	Accumulated cultural belonging, formal membership, or national identity category
Accumulated cultural belonging	More durable attachment potentially associated with repeated positive recognition and belonging signals. Indicators require a longer time frame and repeated-episode design.	Exploratory person/community state	Momentary belonging signal or stable ethnolinguistic category
Anticipated linguistic judgment	Episode-specific expectation of criticism, stereotyping, exclusion, political attribution, or competence evaluation. Assess before or during posting.	Core negative-path appraisal	Experienced discrimination, feedback already received, or language anxiety
Self-monitoring	Cognitive effort devoted specifically to calibrating language against anticipated audiences. Indicators: checking, editing effort, and attention to linguistic presentation.	Core cognitive mediator	General self-awareness, routine proofreading, or self-censorship behavior
Linguistic self-censorship	Suppression, simplification, deletion, switching, or withholding of language-linked expression because of anticipated consequences.	Core behavioral mediator	Strategic brevity, ordinary editing, or self-monitoring effort
Momentary identity tension	Immediate identity-specific strain associated with obstructed access to a self-relevant repertoire in a focal interaction.	Core negative-path mediator	General negative affect, accumulated identity strain, clinical disorder, or communicative affective well-being
Accumulated identity strain	More durable burden potentially associated with repeated momentary identity tension across episodes and time.	Exploratory person/community state	Stable identity crisis, language anxiety, or general fatigue
Communicative affective well-being	Immediate affective quality during and shortly after a focal interaction. Indicators: comfort, manageable tension, affective valence, and willingness to remain engaged.	Core interaction-level outcome	Expressive fit, recognition, safety, identity tension, life satisfaction, psychological well-being, or mental health
Cumulative digital depletion	Cognitive and emotional exhaustion across repeated demanding digital interactions, assessed across days or weeks.	Exploratory downstream outcome	Momentary discomfort, general mental health, somatic diagnosis, or language-specific identity tension

A Multilevel Theoretical Architecture

The proposed framework separates three levels of explanation. Level 1 is the interaction or episode level. It includes the enacted language practice, the appraisal of congruence or incongruence, momentary cultural recognition and belonging signals, anticipated linguistic judgment, self-monitoring, linguistic self-censorship, momentary identity tension, and communicative affective well-being. Interactional audience conditions, including context collapse, monolingual norms, and audience heterogeneity, are proposed as moderators at this level. These processes can vary within the same person across posts, topics, audiences, and platforms. A Russian-language post may be congruent when freely chosen for accessible local reach yet incongruent when used because the user expects Kazakh content to be ignored. A Kazakh-language post may be associated with intimacy in one network and evaluation anxiety in another. These examples illustrate hypotheses; they do not establish population-level effects.

Level 2 is the person and community level. Users bring repertoire depth, language confidence, identity histories, cultural attachments, and perceived language agency into each interaction. Repeated momentary recognition and belonging signals might be associated with more durable cultural belonging, while repeated momentary identity tension might be associated with accumulated identity strain. Community norms may also shape what counts as legitimate speech, including whether new speakers, uneven proficiency, or translanguaging are welcomed. These accumulation paths are exploratory and require longitudinal evidence; they are not included in the five-proposition core.

Level 3 is the platform and institutional level. Platform affordances shape visibility, persistence, editability, discoverability, and audience management (Evans et al., 2017). Algorithms, speech recognition, automated translation, and moderation may support some languages more effectively than others. Research documents unequal coverage and performance across languages and varieties (Blodgett et al., 2020; Joshi et al., 2020; Koenecke et al., 2020), while work on low-resource-language moderation shows that technical presence does not guarantee equitable governance (De Gregorio & Stremlau, 2023; Nicholas & Bhatia, 2023). Sociolinguistic hierarchy, language policy, and media governance may further shape how users

interpret platform feedback. In Kazakhstan, a language can function simultaneously as a practical medium, a statehood marker, a decolonial claim, and a boundary of civic recognition (Kamalova, 2025; Rakysbayeva et al., 2026; Tlepbergen et al., 2023; Zharkynbekova et al., 2026). These Level 3 conditions are proposed as cross-level moderators, not as deterministic causes of individual experience.

Theoretical Anchoring and Incremental Contribution

The DLBW framework is not intended to replace established psychological or communication theories. It translates them into an episode-specific, linguistically explicit architecture. Social identity theory and ethnolinguistic vitality explain why language may index group membership and status; self-determination theory explains why autonomy and relatedness matter; belongingness and sociometer perspectives explain sensitivity to acceptance and rejection cues; and self-discrepancy, authenticity, and subjective-fit perspectives explain why mismatch may carry affective meaning. Communication accommodation and audience design locate adaptation in social context, while dynamic digital well-being and platform-affordance perspectives explain why the same practice may have different meanings across episodes and infrastructures.

The incremental contribution is conjunctive and level-specific. The framework introduces a linguistic, episode-bound appraisal of expressive and identity fit; separates affirmative cultural recognition from momentary and accumulated belonging; narrows autonomy to perceived language agency and switching voluntariness; specifies language-related self-monitoring and self-censorship as distinct cognitive and behavioral processes; locates platform-language support and institutional hierarchy as cross-level boundary conditions; and defines communicative affective well-being as a bounded interactional outcome. Whether this architecture explains more than simpler models based on prior belonging, proficiency, baseline affect, or strategic adaptation remains an empirical question. Table 2 summarizes the theoretical foundations and the distinct contributions proposed by the DLBW framework.

Table 2.

Established Theoretical Foundations and the Incremental Contribution of the Proposed DLBW Framework

Established framework	What it explains	Limitation for this problem	Incremental DLBW contribution
Social identity theory and ethnolinguistic vitality	Language as a marker of group membership, status, and intergroup comparison.	Does not by itself specify episode-level appraisal of an enacted digital repertoire or distinguish recognition from belonging.	Introduces momentary cultural recognition and links it provisionally to linguistic congruence, belonging signals, and cross-level status conditions.
Self-determination theory	Autonomy, competence, and relatedness as conditions of self-determined functioning.	Global need satisfaction does not identify whether a particular language choice is experienced as freely chosen among meaningful alternatives.	Specifies perceived language agency and code-switching voluntariness as language-specific boundary conditions rather than generic autonomy.
Belongingness and sociometer perspectives	Sensitivity to acceptance, rejection, and relational inclusion.	Often leaves culturally specific recognition and temporal accumulation under-differentiated.	Separates affirmative momentary cultural recognition, a momentary belonging signal, and accumulated cultural belonging.
Self-discrepancy, authenticity, and subjective-fit perspectives	Affective implications of mismatch between self-representations and environments.	Do not isolate enacted linguistic fit or separate expressive fit from identity fit in a focal online interaction.	Defines digital linguistic congruence as two distinguishable episode-specific dimensions and excludes social safety from the construct.
Communication accommodation and audience design	Strategic adaptation of communication to audiences, goals, and imagined publics.	Adaptation is not necessarily differentiated by voluntariness or linked to identity-specific regulation and immediate affect.	Distinguishes agentic from compelled adaptation and separates self-monitoring from linguistic self-censorship.
Dynamic digital well-being and platform-affordance perspectives	Person-by-context variability and the role of platform features in digital outcomes.	Language is rarely treated as a psychologically meaningful feature of digital participation.	Adds language-repertoire appraisal, platform-language technology support, institutional hierarchy, and a bounded interaction-level affective outcome.

The Multilevel DLBW Model and Propositions

The proposed framework contains a five-proposition core spine and six auxiliary boundary propositions. Propositions 1-5 constitute the central dual-path contribution: the hypothesized congruence-recognition-belonging-signal-communicative-affective-well-being sequence (P1-P3) and the hypothesized incongruence-judgment-monitoring-self-censorship-identity-tension sequence (P4-P5). Propositions 6a, 6b, 7, 8a, 8b1, and 8b2 are auxiliary extensions specifying conditions under which the core associations may be stronger or weaker. They should be tested after the core constructs have demonstrated adequate measurement validity. Repeated-episode accumulation into cultural belonging or identity strain, and any later association with depletion, remains an exploratory temporal extension rather than a formal proposition. This hierarchy keeps the core architecture falsifiable even if a particular moderator is not supported. Every proposition is theoretical and provisional.

Recognition-Belonging Pathway

Digital linguistic congruence is hypothesized to covary with momentary cultural recognition because a user who enacts a repertoire experienced as expressively adequate and identity-relevant may be more likely to interpret affirmative audience uptake as validation of a language-linked self. Identity is accomplished in interaction, and audience response helps shape whether a performance is treated as socially valid (Bucholtz & Hall, 2005). Networked multilingualism expands the possible forms of such performance, including strategic alternation, mixed repertoires, and participation in overlapping language-linked publics (Androutsopoulos, 2015; Lee & Barton, 2011). The proposed association requires episode-level testing and may be confounded by prior belonging, proficiency, or audience selection.

Recognition may be especially salient when a language has disputed status or limited domains of use. Social media can create visibility and interactional space for minoritized languages (Cru, 2015; Reershemius, 2017), while bottom-up language initiatives can generate public value beyond formal policy (Kamalova, 2025; Tlepbergen et al., 2023). Yet language promotion can coexist with purity demands that marginalize mixed or less-proficient speakers. The framework therefore treats episode-specific congruence, not

categorical heritage-language use, as the proximal appraisal. Whether congruence predicts recognition beyond audience composition and prior identity attachment must be established empirically.

Proposition 1. Within a social-media interaction, greater digital linguistic congruence is hypothesized to be positively associated with stronger momentary cultural recognition.

Momentary cultural recognition is hypothesized to be positively associated with a momentary belonging signal because culturally meaningful validation may provide evidence that participation is more than tolerated. A user who can communicate through an identity-relevant repertoire without having to justify its legitimacy may be more likely to report immediate relational fit with the audience or community. Recent work also suggests that associations between language proficiency and emotional well-being are contextual and shaped by power, status, and the individual's full repertoire rather than by a single language in isolation (Ticheloven et al., 2026). The direction of the recognition-belonging relation nevertheless requires temporal testing.

Proposition 2. Within a digital interaction, momentary cultural recognition is hypothesized to be positively associated with a momentary belonging signal.

The positive path is specified as a serial hypothesis rather than as an established direct effect. The proposed order is congruence, momentary cultural recognition, a momentary belonging signal, and communicative affective well-being. This order must be compared with direct, reverse, and common-cause models. Research on bicultural integration and cultural identity clarity makes the sequence plausible by documenting associations between compatibility among cultural orientations and adaptive functioning (Benet-Martínez & Haritatos, 2005; Downie et al., 2004; Usborne & Taylor, 2010), but it does not validate the DLBW mediation pathway.

Proposition 3. Momentary cultural recognition and a momentary belonging signal are hypothesized to sequentially mediate the association between digital linguistic congruence and communicative affective well-being.

Digital linguistic incongruence arises when the enacted repertoire conflicts with expressive needs or an identity-relevant self. It may follow explicit restriction or occur where available resources do not carry the intended meaning or self-presentation. To preserve the construct boundary, anticipated consequences, including reduced reach, correction, ridicule, political attribution, or judgments that a speaker is insufficiently modern, national, educated, authentic, or loyal, are not treated as constituents of incongruence. They are proposed as a subsequent appraisal. Anticipation may also influence the initial repertoire selection, making reciprocal direction plausible. Context collapse may intensify uncertainty because one message can be evaluated by audiences applying incompatible norms (Androutsopoulos, 2014; Davis & Jurgenson, 2014; Marwick & boyd, 2011).

Anticipated linguistic judgment is hypothesized to be associated with greater self-monitoring. Users may repeatedly edit posts, simplify expression, avoid culturally specific terms, or select a lower-risk lingua franca. Such strategies may be rational and effective. They become potentially burdensome when monitoring is persistent and identity-relevant. Linguistic self-censorship is specified as a distinguishable behavioral response, including suppressing a language, deleting a post, declining to comment, or hiding mixed competence. In Kazakhstan, moralized expectations about authenticity and public discourses assigning different values to Kazakh and Russian make these hypothesized processes analytically visible (Kamalova, 2025; Ten, 2024; Zharkynbekova & Chernyavskaya, 2022), but no Kazakhstan-specific effect is inferred here.

Proposition 4. Digital linguistic incongruence is hypothesized to be positively associated with anticipated linguistic judgment, which in turn is hypothesized to be associated with greater self-monitoring and then linguistic self-censorship.

Linguistic self-censorship is hypothesized to be associated with greater momentary identity tension when the suppressed repertoire is identity-relevant. Multilingual speakers may report different self-presentations and emotional intensities across languages (Dewaele & Nakano, 2013; Koven, 1998; Pavlenko, 2005). Difference is not

inherently problematic; the proposed tension concerns situations in which one version of the self is experienced as the only viable public option. Repeated tension might be associated with accumulated identity strain, but that temporal claim lies outside the formal proposition set and requires longitudinal evidence.

Proposition 5. Anticipated linguistic judgment, self-monitoring, linguistic self-censorship, and momentary identity tension are hypothesized to sequentially mediate the association between digital linguistic incongruence and lower communicative affective well-being.

Agency and Code-Switching

Perceived language agency is proposed as a moderator of both pathways, not as an established direct benefit. A person who freely selects a wider-reach language may experience the choice as competent and connecting, whereas a person who perceives no viable alternative may experience the same observable practice as identity obstruction. Agency is therefore hypothesized to alter the appraisal of adaptation. Its moderating role must be distinguished from stable confidence, proficiency, and prior belonging.

Proposition 6a. The positive association between digital linguistic congruence and momentary cultural recognition is hypothesized to be stronger when perceived language agency is higher.

Proposition 6b. The positive association between digital linguistic incongruence and anticipated linguistic judgment is hypothesized to be weaker when perceived language agency is higher.

Code-switching is a behavior, not a psychological outcome. Studies of youth, migrants, and bilingual social-media users show that switching may expand expressive flexibility and access to multiple communities (Cunliffe et al., 2013; Dewaele & Li, 2014; Leppänen et al., 2009; McEntee-Atalianis et al., 2023; Sargeant et al., 2012). Its affective meaning is proposed to depend partly on voluntariness. Agentic switching may expand the repertoire available to the self, whereas compelled switching may narrow what the user perceives as socially possible. Observed switching alone cannot identify either mechanism.

Proposition 7. Voluntary code-switching is hypothesized to be associated with higher digital linguistic congruence

and momentary cultural recognition, whereas compelled code-switching is hypothesized to be associated with greater incongruence and anticipated linguistic judgment, conditional on context.

Audience, Platform, and Institutional Moderation

Audience composition may influence whether a practice is intelligible and valued. Monolingual norms can frame fluid multilingualism as contamination, incompetence, or exclusion, while context collapse can increase uncertainty because the user cannot tailor one message to all observers. These are interactional audience conditions, distinct from platform infrastructure and institutional language hierarchy. Their moderating effects have not been tested in this article.

Proposition 8a. The positive association between digital linguistic incongruence and anticipated linguistic judgment is hypothesized to be stronger under greater context collapse and stronger monolingual audience norms.

Platform-language technology support operates at Level 3. Recommendation and search systems may privilege high-volume languages, while inadequate interface support, speech recognition, machine translation, or moderation may leave a language technically present but structurally disadvantaged (Blodgett et al., 2020; Joshi et al., 2020; Koenecke et al., 2020; Nicholas & Bhatia, 2023). The framework proposes that such limitations may weaken the probability that an otherwise congruent expression receives affirmative cultural recognition.

Proposition 8b1. The positive association between digital linguistic congruence and momentary cultural recognition is hypothesized to be weaker when platform-language technology support is lower.

Institutional hierarchy and media governance operate through status, policy, and public recognition. Institutional multilingualism can broaden access while still ranking audiences and forms of citizenship differently (Rakysbayeva et al., 2026). The framework proposes that these conditions may moderate the affective meaning of self-censorship. When a repertoire is institutionally marked as less legitimate, politically suspect, or conditionally acceptable, suppressing it may be more likely to be appraised as identity obstruction rather than as a neutral communicative strategy.

This cross-level hypothesis requires comparative empirical testing.

Proposition 8b2. The positive association between linguistic self-censorship and momentary identity tension is hypothesized to be stronger under greater institutional language inequality and less inclusive media-governance conditions.

Exploratory Accumulation and Downstream Fatigue

Immediate communicative affective well-being must not be conflated with cumulative fatigue. The exploratory temporal extension suggests that repeated momentary recognition and belonging signals might be associated with accumulated cultural belonging, whereas repeated momentary identity tension might be associated with accumulated identity strain. Digital stress research documents associations among online vigilance, communication load, goal conflict, autonomy frustration, momentary stress, and later mental fatigue (Gilbert et al., 2023; Van Gaeveren et al., 2026). The DLBW framework adds a possible identity-relevant linguistic source of vigilance. It does not assume that linguistic regulation is necessary or sufficient for depletion, and any somatic manifestation remains contingent.

Because the accumulation and depletion sequence lies beyond the eleven formal propositions, it should be tested separately with intensive longitudinal designs. Analyses should control for general digital load, total platform use, sleep, workload, baseline anxiety, and language proficiency and should compare forward, reverse, and common-cause explanations.

Figure 1 depicts the proposed core within-episode paths, auxiliary boundary conditions, and exploratory accumulation paths. The diagram is a hypothesis map for future validation and does not represent estimated or established relationships.

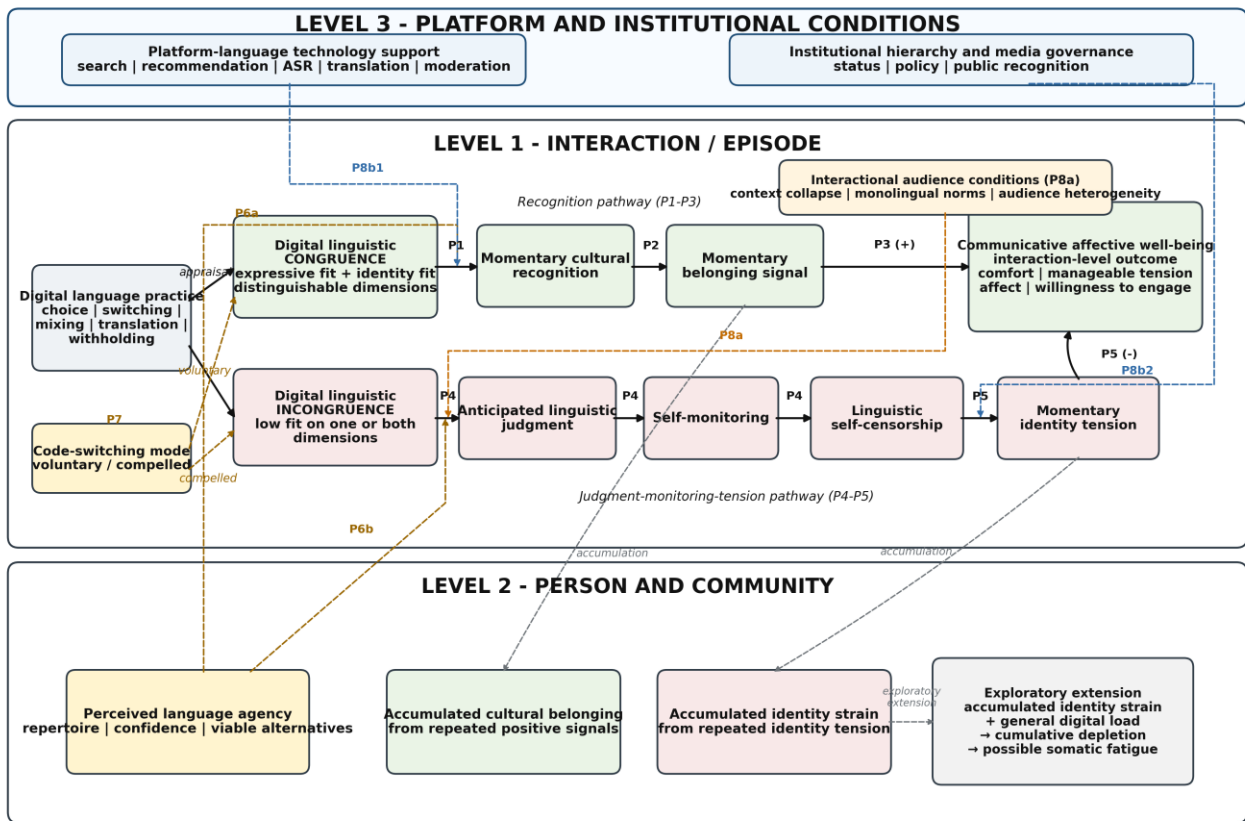


Figure 1. Proposed Multilevel Dual-Path Digital Language-Belonging-Well-Being Framework

Note. The figure depicts untested theoretical expectations. Solid arrows represent the core within-episode propositions P1-P5. Dashed arrows represent auxiliary boundary propositions P6a, P6b, P7, P8a, P8b1, and P8b2. Dotted accumulation paths represent exploratory temporal extensions rather than formal propositions. Arrow direction is a hypothesis to be tested and should not be interpreted as evidence of causality. Expressive fit and identity fit are distinguishable first-order dimensions; low fit on one or both constitutes digital linguistic incongruence. Communicative affective well-being is an interaction-level outcome distinct from general psychological well-being, mental health, and cumulative digital fatigue. Accumulated cultural belonging and accumulated identity strain are person/community-level states.

Table 3.**Core and Auxiliary Propositions, Candidate Measures, and Priority Validation Designs**

Proposition	Status	Hypothesized relation	Candidate measures	Priority design and analysis
P1	Core	Within-episode positive association between congruence and momentary cultural recognition.	Expressive fit and identity fit modeled separately; affirmative recognition.	ESM or diary; multilevel regression; vignette experiment.
P2	Core	Within-episode positive association between momentary cultural recognition and a momentary belonging signal.	Affirmative recognition; immediate relational fit and inclusion.	ESM; temporally ordered experiment; multilevel regression.
P3	Core	Proposed serial indirect path: congruence, recognition, belonging signal, communicative affective well-being.	All four constructs with non-overlapping episode-referenced items.	Multilevel SEM; intensive longitudinal serial mediation; rival-model comparison.
P4	Core	Proposed sequence: incongruence, anticipated judgment, self-monitoring, linguistic self-censorship.	Fit dimensions; threat appraisal; editing effort; suppression, switching, deletion, or withholding.	ESM; process tracing; experimental manipulation of audience cues.
P5	Core	Proposed serial indirect path from incongruence through regulation and identity tension to lower communicative affective well-being.	Judgment, monitoring, self-censorship, identity-specific tension, and immediate affect measured separately.	Multilevel SEM; intensive longitudinal mediation; temporal and common-cause comparisons.
P6a	Auxiliary boundary	Higher language agency is expected to strengthen the congruence-recognition association.	Meaningful alternatives, voluntariness, congruence, recognition.	Moderated multilevel mediation; factorial vignette.
P6b	Auxiliary boundary	Higher language agency is expected to weaken the incongruence-judgment association.	Meaningful alternatives, pressure, incongruence, anticipated judgment.	Moderated multilevel mediation; factorial vignette.
P7	Auxiliary behavior-specific	Voluntary and compelled code-switching are expected to show different associations with congruence and judgment.	Observed switching plus motive, voluntariness, fit, and judgment.	Within-person mixed methods; event-contingent diary; experiment.
P8a	Auxiliary audience	Context collapse and monolingual norms are expected to strengthen the incongruence-judgment association.	Audience heterogeneity, norm climate, context collapse, judgment.	Cross-platform study; randomized comment-environment experiment.
P8b1	Auxiliary platform	Lower language-technology support is expected to weaken the congruence-recognition association.	Search and recommendation visibility; ASR, translation, interface, and moderation support; recognition.	Platform audit; field experiment; cross-level moderation.
P8b2	Auxiliary institutional	Institutional language inequality is expected to strengthen the self-censorship-identity-tension association.	Language status, policy and media-governance climate, self-censorship, identity tension.	Cross-context multilevel study; factorial vignette; moderated mediation.

Discussion and Conclusion

Theoretical Contributions

The proposed DLBW framework offers an incremental conceptual contribution rather than an empirical demonstration. Its central addition is the integration of language-specific appraisal, momentary social response, and multilevel boundary conditions into one falsifiable architecture. Social identity theory explains why language may index group membership and status, but does not by itself distinguish enacted repertoire from episode-specific congruence or trace how affirmative uptake becomes a momentary belonging signal. Self-determination theory explains autonomy and relatedness, but the DLBW framework narrows autonomy to perceived language agency and switching voluntariness. Self-discrepancy and subjective-fit perspectives explain mismatch-related affect, but the framework specifies expressive fit and identity fit as separable linguistic appraisals. The novelty therefore lies in integration, level separation, and construct differentiation, not in claiming that new psychological effects have already been observed.

Conceptually, the framework extends digital sociolinguistics by treating language choice as a regulatory practice through which users may manage fit among self, message, audience, and institutional conditions. Digital linguistic congruence provides a common appraisal for apparently different practices. Consistent use of one language, strategic alternation, and translanguaging may each be congruent when they are experienced as supporting intended meaning and an identity-relevant self. Any of them may be incongruent when experienced as imposed. This avoids romanticizing either linguistic purity or hybridity while preserving the need for empirical comparison with proficiency and strategic-adaptation explanations.

The framework also separates momentary cultural recognition, a momentary belonging signal, and accumulated cultural belonging. Recognition concerns whether a language-linked self is treated as legitimate in a particular interaction; a belonging signal concerns

immediate relational fit; and accumulated belonging concerns a more durable attachment across repeated episodes. This distinction provides a testable explanation for why visibility alone may not correspond to belonging. A platform may host content in a minoritized language while comments, moderation, or algorithms devalue its speakers, whereas a small community may provide strong recognition despite limited reach. These are conceptual possibilities, not reported effects.

For health and psychological audiences, the proposed outcome is intentionally narrow. Communicative affective well-being concerns the immediate affective quality of a digital interaction and willingness to remain engaged. It is not a measure of general psychological well-being, life satisfaction, psychiatric symptoms, or mental health status. Cumulative digital depletion is a separate exploratory construct assessed across repeated interactions, and somatic fatigue is not treated as a necessary outcome of language regulation. This boundary aligns with dynamic accounts of digital well-being in which outcomes arise from person-by-context appraisals rather than time online alone (Vanden Abeele, 2021). Batyrkhanova et al. (2026) provide a Kazakhstan-focused conceptual vocabulary for algorithmic mood management and somatic digital fatigue, but their account and the present temporal extension both require independent empirical validation. Culturally sensitive accounts of mental and physical well-being likewise caution against overlooking the interpretive role of cultural context (Seyed Alitabar, 2025).

Kazakhstan is a contextual illustration and potential test setting because communicative utility, cultural dignity, statehood, mobility, and geopolitical meaning are distributed unevenly across languages. Research on youth attitudes, higher education, language value, and media governance shows that prestige, reach, and recognition need not align (Kucherbayeva & Smagulova, 2023; Rakysbayeva et al., 2026; Tlepbergen et al., 2025; Zharkynbekova et al., 2026). These studies motivate boundary questions but do not demonstrate the DLBW pathways or make the framework specific to Kazakhstan. Cross-context validation

is required before any claim of generality or context specificity can be made.

Scope, Provisional Status, and Limitations

This article reports no empirical test, prevalence estimate, effect size, mediation estimate, or causal estimate. Every arrow in [Figure 1](#) and every proposition in [Table 3](#) denotes a falsifiable theoretical expectation rather than an established psychological relationship. The framework should therefore be judged at this stage by conceptual coherence, construct discriminability, and empirical testability. Direct, indirect, moderated, reciprocal, and temporal effects remain open questions.

The synthesis was purposive and concept-driven rather than systematic or meta-analytic. Coverage may reflect database access, language availability, and source-selection decisions. Construct boundaries may change after qualitative elicitation and psychometric testing; some proposed mediators may collapse empirically, occur in a different order, or be explained by prior belonging, personality, offline language climate, platform-specific norms, or proficiency.

Kazakhstan is not treated as a population in which the model has been demonstrated. It is used to illustrate theoretically relevant multilingual conditions and as one possible setting for future tests. Claims about prevalence, group differences, Kazakhstan-specific parameter values, or causal effects would require representative empirical data and replication in other multilingual societies.

Alternative Explanations

Several rival explanations should be treated as equally plausible until data adjudicate among them. A selection model proposes that people with stronger prior belonging choose identity-relevant languages more often. An affect-driven model proposes that pre-existing anxiety or mood shapes cautious language choice and audience interpretation. A competence model attributes discomfort to limited proficiency rather than identity strain. A strategic-adaptation model treats self-monitoring as a skill that may protect communicative affective well-being. A community-

first model proposes that prior belonging determines whether feedback is interpreted as recognition. The DLBW framework should be retained only if its core paths explain within-person variation beyond these simpler models. Cross-sectional evidence linking social-media English use, language confidence, cultural identity, and communication intentions illustrates the plausibility of chained associations but not their causal order ([Zhang et al., 2025](#)).

Future Research Agenda

Validation should begin with qualitative construct elicitation and staged item development. Interviews or focus groups should include users with different language-dominance profiles, repertoire complexity, proficiency, and platform practices. An interdisciplinary expert panel should evaluate content coverage and redundancy, followed by cognitive interviews in each target language to identify ambiguous wording and mismatched time frames. Expressive fit and identity fit should be represented by separate item pools; a simple difference score between preferred and enacted language should be avoided. These steps should precede any test of structural paths ([Boateng et al., 2018](#)).

Psychometric evaluation should use independent development and validation samples where feasible. Exploratory factor analysis can guide item reduction, while confirmatory factor analysis should compare correlated first-order factors, higher-order structures, interactions, and profile solutions. Reliability should be assessed with coefficient omega and, for constructs expected to show short-term stability, test-retest estimates. Convergent, discriminant, criterion, and incremental validity should be examined against language proficiency, general authenticity, self-discrepancy, cultural identity clarity, perceived language agency, baseline affect, and general psychological well-being. Non-overlapping item content is essential, particularly for momentary identity tension and communicative affective well-being.

Sampling should extend beyond convenience samples of university students. A maximum-variation or stratified strategy should include differences in age, region, urban-

rural residence, education, language dominance, repertoire complexity, ethnolinguistic identification, platform use, and exposure to low-support language technologies. Less-represented and minoritized repertoires may need to be oversampled to permit stable subgroup and cross-level estimates. Kazakhstan offers one informative test setting, but replication in other multilingual societies is necessary. Sample sizes should be determined through design-specific power or Monte Carlo simulation based on anticipated intraclass correlations, indirect effects, and cluster structure rather than by a single rule of thumb.

Within-person testing should use experience-sampling or event-contingent diary designs that prompt users after specific interactions to report enacted repertoire, audience, perceived choice, congruence, momentary recognition, momentary belonging, anticipated judgment, self-monitoring, self-censorship, identity tension, and immediate affect. Multilevel models should separate between-person differences from deviations around each person's own average (Curran & Bauer, 2011). Multilevel structural equation modeling can then evaluate the proposed serial indirect paths while respecting the nesting of episodes within persons (Preacher et al., 2010). Cross-sectional mediation should not be treated as a sufficient test of the episode-level architecture.

Experimental work should manipulate theoretically prior conditions rather than assume that self-reported associations are causal. Factorial vignettes can vary perceived choice, audience composition, visible language norms, correction tone, and institutional legitimacy. Interface or field experiments can vary platform-language support, including search, recommendation, speech recognition, translation, captioning, or moderation quality. Because congruence is subjective, experiments should measure whether the manipulation changed expressive fit and identity fit before testing recognition or affective outcomes. Manipulation checks, preregistration, blinded coding where possible, and direct comparison with alternative mechanisms are recommended. An adjacent discussion of digital mental-health technologies similarly stresses cultural interpretation and human connection in

assessing technologically mediated experiences (Seyed Alitabar, 2026).

Longitudinal studies should test accumulation and reciprocity. Repeated momentary belonging signals may precede accumulated cultural belonging, and repeated identity tension may precede accumulated identity strain, but reverse effects are also plausible. Multiwave and intensive longitudinal designs should compare forward, reverse, and trait-like explanations rather than rely on standard cross-lagged or one-time mediation alone (Hamaker et al., 2015; Maxwell & Cole, 2007). Analyses of cumulative depletion should control for total platform use, general online vigilance, sleep, workload, baseline anxiety, and language proficiency before attributing variance to language-related regulation.

Cross-language validation requires more than direct translation. Committee translation, independent review, cognitive interviewing, and reconciliation should be followed by tests of configural, metric, and scalar invariance across Kazakh, Russian, English, and mixed-repertoire formats before group means or structural paths are compared (Putnick & Bornstein, 2016). Partial invariance should be reported transparently, and participants should be allowed to describe repertoires without being forced into mutually exclusive language categories.

Structural testing should proceed hierarchically. Researchers should first validate the measurement model and test the five core propositions, then evaluate the six auxiliary boundary propositions in adequately powered samples. Competing direct-effect, reverse-order, proficiency, prior-belonging, and baseline-affect models should be compared with the proposed serial paths. Within-person predictors should be centered appropriately, indirect and moderated effects should be reported with uncertainty intervals, and null findings should be retained rather than used to expand the model post hoc.

Mixed-methods work should combine trace data with self-report and qualitative interpretation. Public posts reveal enacted language but not unrealized choices, perceived pressure, or private appraisal. Interviews and digital diaries can identify why a user switched, simplified, translated, or

remained silent, while platform audits can assess unequal technical support. Trace data should not be treated as transparent evidence of identity, affect, or mental health, and ethical consent and data-minimization procedures are required when individual-level inference or identifiable content is involved.

Practical and Policy Implications

For platform designers, the framework suggests that linguistic inclusion should be evaluated beyond nominal interface translation. Future audits can examine whether search, recommendation, speech recognition, automated captioning, moderation, and content discovery operate comparably across languages and mixed repertoires. Audience-management tools may help users separate publics without forcing a single linguistic identity. Evaluation should include user-reported recognition and agency as candidate outcomes, but the proposed benefits require empirical assessment.

For universities and youth organizations, the framework identifies hypotheses for digital multilingual literacy and student-support research. Uneven proficiency and mixed repertoires may be treated as developmental realities rather than grounds for humiliation. Counseling and student well-being services in multilingual settings can consider whether digital stress includes language evaluation, concealment of identity, and pressure to perform cultural authenticity, without assuming that such experiences constitute mental disorder.

For language policy, the framework suggests evaluating more than content volume. Candidate indicators include whether new and mixed speakers report legitimacy, whether users perceive meaningful linguistic alternatives, whether correction practices are supportive rather than punitive, and whether participation is possible across domains. Bottom-up initiatives may strengthen vitality, while purity-based exclusion may undermine participation and belonging (Kamalova, 2025; Tlepbergen et al., 2023). These policy implications remain hypotheses until tested with appropriate outcome measures.

Language choice on social media is an ordinary practice with potentially consequential cultural and affective meanings, but this article does not establish those consequences. The proposed multilevel DLBW framework asks whether an episode-specific practice is experienced as expressively and identity-congruent, whether it is accompanied by momentary cultural recognition and a belonging signal, and whether the user perceives meaningful language agency. It also hypothesizes that incongruence may be associated with anticipated judgment, self-monitoring, linguistic self-censorship, momentary identity tension, and lower communicative affective well-being. These relationships are testable expectations rather than findings.

The proposed interaction-level paths are embedded in person and community histories and may be conditioned by audiences, platform-language technologies, sociolinguistic hierarchies, and media governance. Repeated positive signals may be associated with accumulated cultural belonging, while repeated identity tension may be associated with accumulated identity strain, but these temporal extensions require longitudinal validation. Any later association with cumulative digital depletion or somatic fatigue remains exploratory and contingent. Kazakhstan provides a contextual illustration and potential test setting, not evidence of a context-specific model. By separating constructs, levels, temporal scales, core propositions, auxiliary extensions, and rival explanations, the framework provides a disciplined pathway toward empirical validation.

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Conflict of Interest

The authors declare no conflict of interest.

Ethical Considerations

This manuscript is a theoretical and conceptual synthesis. It did not involve human participants, animals, interviews, surveys, experiments, clinical procedures, or analysis of individual-level social-media data.

Data availability

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Author contributions

All authors contributed equally to the conceptualization, methodology, literature identification and evidence synthesis, development of the DLBW model and propositions, visualization, writing - original draft, and writing - review and editing. All authors read and approved the final manuscript and agree to be accountable for all aspects of the work.

Use of generative AI tools

A complete disclosure is provided on the separate title page. The authors reviewed the final manuscript and remain fully responsible for its scholarly content.

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