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Growth Language Mindset: A Potential Moderator in the Relationship between Ideal L2 Self and English Achievement

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Abstract

Motivational factors have been widely recognised as important correlates of second language learning outcomes. However, reported relationships between ideal L2 self and English achievement vary across learners and contexts. Drawing on the L2 Motivational Self System and language mindset theory, this research proposal will examine whether growth language mindset strengthens the association between ideal L2 self and English achievement among Chinese senior high school learners. A quantitative, single-wave correlational survey will be linked to a subsequent English examination. Second-year learners will be recruited by convenience sampling from one school in Yunnan Province. An initial power calculation specifies 395 analysable cases for a small interaction, with recruitment and analysis to account for missing data and class clustering. Six ideal L2 self items and four growth language mindset items will be adapted, translated into Chinese, cognitively reviewed, piloted, and evaluated using a two-factor measurement model. The questionnaire will be administered approximately one week before the examination; prior English achievement and class membership will be incorporated into the analysis. Regression models will estimate the ideal-self association and its interaction with mindset, with conditional slopes and confidence intervals reported. The proposal provides a testable account of how beliefs about developing language ability may condition the relationship between future self-images and examination performance. The observational design cannot establish causation, and no empirical findings are reported.

Keywords: Ideal L2 self, growth language mindset, English achievement, moderation

1. Introduction

In recent years, research on second language acquisition (SLA) has increasingly emphasised the dynamic interplay between learners' self-beliefs and their academic outcomes. Among these motivational constructs, the ideal L2 self, one's vivid image of becoming a proficient future L2 user (Fathi & Hejazi, 2024), has emerged as a potentially important correlate of language learning engagement and performance.

However, the strength of this relationship may vary across learners and settings (Fathi & Hejazi, 2024; Fathi et al., 2025; Subekti, 2018), suggesting that additional factors may shape how motivational visions relate to actual performance. Growth language mindset, the belief that language ability can develop through learning and effective strategies (Lou & Noels, 2019), may be one such condition. Its moderating role in associations involving teacher support and willingness to communicate provides a relevant precedent (Hejazi et al., 2023), although this does not establish the same role for examination achievement. Examining the proposed interaction may clarify when a stronger ideal L2 self is associated with higher English performance and guide subsequent longitudinal or intervention research.

2. Literature Review

2.1 Ideal L2 Self

The ideal L2 self is a core construct within the L2 Motivational Self System (L2MSS) proposed by Dörnyei (2009), representing a learner's vision of themselves as a successful and proficient future user of the target language. It reflects the personal aspirations, goals, and imagined identities that learners hope to attain. This future-oriented self-image can motivate effort to reduce the discrepancy between current abilities and a desired future state. Research has linked ideal L2 self with student engagement, including through L2 grit (Derakhshan & Fathi, 2024). These associations concern motivational processes and should not automatically be equated with gains in objectively assessed achievement.

2.2 Growth Language Mindset

Growth language mindset refers to learners' belief that their capacity to learn a language is malleable (Lou & Noels, 2019). Rooted in Dweck's (2006) growth mindset theory, this domain-specific belief provides a framework for interpreting difficulty as an opportunity to develop rather than as conclusive evidence of fixed inability. It may support adaptive responses to mistakes, strategy revision, and persistence. Sadoughi et al. (2023) linked growth mindset with academic engagement through ideal L2 self and found that learning experience conditioned the mindset–engagement association. Such findings support examining contextual and motivational conditions; they do not imply that endorsing growth beliefs necessarily produces higher achievement.

2.3 Ideal L2 Self, Growth Language Mindset and English Achievement

Regarding the relationship between ideal L2 self and English achievement, some studies have reported positive associations (Fathi & Hejazi, 2024; Fathi et al., 2025). For example, among 452 Iranian EFL learners, ideal L2 self was directly and positively associated with foreign

language achievement and was also linked to achievement through grit and enjoyment (Fathi & Hejazi, 2024). However, Subekti (2018) found no significant ideal-self–achievement relationship among Indonesian EAP learners, while Moskovsky et al. (2016) reported that L2MSS components were not consistently related to achievement among Saudi EFL learners. Differences in populations, measures, and learning conditions may contribute to these mixed findings.

Research also connects ideal L2 self with growth language mindset, although the outcomes and statistical pathways differ. Derakhshan and Fathi (2024) examined their associations with engagement through grit. Zhang et al. (2024) found a direct ideal-self association with willingness to communicate, whereas the growth-mindset association operated indirectly through boredom. Jiang, Yue, and Lou (2024) modelled ideal L2 self as part of the pathway from growth beliefs to perseverance. Fan and Wang (2025) modelled growth language mindset as an outcome of ideal L2 self among Chinese junior middle school learners, but reported a negative direct mindset–willingness-to-communicate association. Oppositely specified paths across observational studies do not demonstrate reciprocal causation.

Evidence concerning achievement is similarly qualified. Khajavy et al. (2021) found a weak positive association between growth language mindset and L2 achievement. Among 486 Chinese high-school learners, Jiang, Tian, and Lou (2024) also reported a modest association with subsequent English scores, alongside pathways involving autonomous motivation and engagement. These studies concern direct or mediated associations rather than the interaction proposed here. Hejazi et al. (2023) found that the teacher-support–willingness-to-communicate association was significant at medium and high growth-mindset levels. This provides a rationale for considering mindset as a condition of another association, while leaving its role in the ideal-self–achievement relationship unresolved.

2.4 Rationale for the Proposed Moderation

The proposed interaction concerns whether the association between a future English-using self and achievement becomes more positive as growth language mindset increases. An ideal L2 self provides a desired direction, but the perceived distance from that future self can elicit different responses. A learner who believes that ability can develop may interpret the gap as manageable, seek useful feedback, and revise unsuccessful strategies. A learner with weaker growth beliefs may see the same gap as evidence that the desired self is unattainable and disengage when progress is difficult. This interpretation integrates the future-self account of motivation (Dörnyei, 2009) with the adaptive responses proposed in language mindset theory (Lou & Noels, 2019).

Feedback-seeking findings provide one plausible behavioural link: Papi et al. (2019) associated growth beliefs with learners' pursuit of feedback. Accordingly, the same degree of ideal-self endorsement may be more closely associated with examination achievement when accompanied by stronger growth beliefs. The directional expectation is a positive ideal-self × mindset coefficient. It is a theoretical prediction, not a conclusion established by the reviewed studies. Growth beliefs might instead have an additive association, compensate for a weak ideal self, or show little association where learning opportunities are restricted; these alternatives

make the interaction an empirical question.

The study will test moderation rather than a mediating mechanism. Feedback seeking, persistence, and strategy use explain why the proposed pattern is plausible, but they will not be measured as intervening variables. The design therefore cannot establish that these behaviours account for any interaction observed.

2.5 Research Questions and Hypotheses

Based on the preceding review, this proposed study will investigate whether growth language mindset moderates the relationship between ideal L2 self and English achievement, as represented in Figure 1. The study will address the following research questions:

RQ1: Is ideal L2 self positively associated with subsequent English achievement among Chinese senior high school students after adjustment for relevant background factors?

RQ2: Is the ideal-self–achievement association more positive at higher levels of growth language mindset?

The following hypotheses will be tested:

H_1. Ideal L2 self will be positively associated with subsequent English achievement after adjustment for growth language mindset, prior English achievement, age, gender, and class membership.

H_2. Growth language mindset will positively moderate the ideal-self–achievement association, such that the association will be more positive at higher levels of growth language mindset.

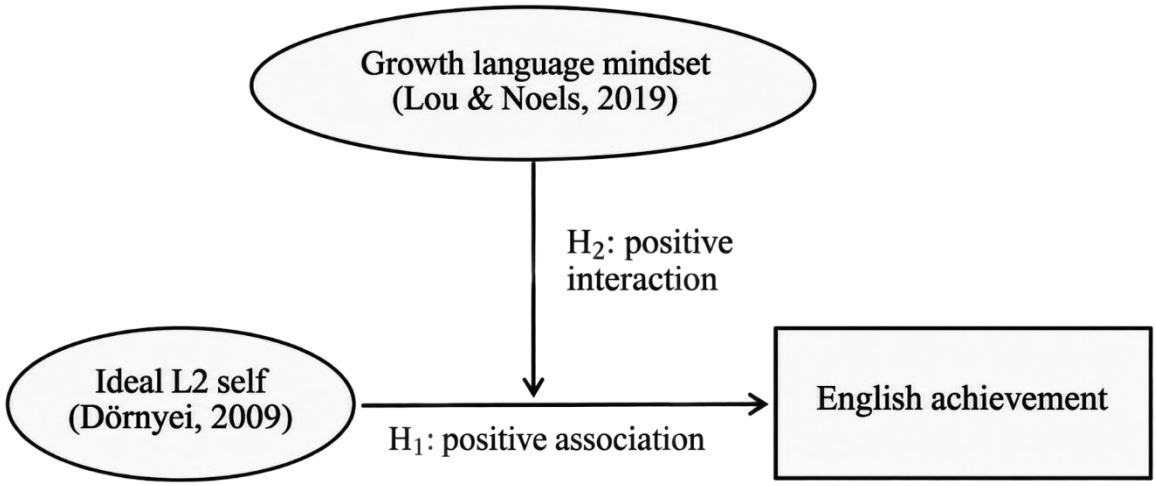


Figure 1. The conceptual framework of the study

3. Proposed Methodology

3.1 Research Paradigm, Approach and Design

The proposed study will adopt a positivist paradigm, which emphasises objectivity, replicability, and statistical testing of hypotheses (Bryman, 2016). A quantitative approach will be employed to measure and analyse the proposed relationships (Creswell & Creswell, 2018). Specifically, a cross-sectional questionnaire survey will assess the two motivational constructs once and will be linked prospectively to an examination approximately one week later. No variables will be manipulated. This is a single-wave observational design with a short outcome follow-up, rather than a study of motivational change over time. It will estimate associations and conditional associations, not causal effects.

3.2 Sampling and Sample Size

Participants will be recruited through convenience sampling from second-year senior high school EFL learners at a senior high school in Yunnan Province, China, subject to school approval and voluntary participation. All accessible classes in the year group will be invited; participation will not be restricted to high-performing classes. Eligibility will require enrolment in the relevant English course and consent or assent for the questionnaire and score linkage. The numbers eligible, invited, consenting, completing the survey, and linked to examination records will be reported, together with class sizes, age, and gender distributions. Regarding the sample size, the study follows the guidelines of Krejcie and Morgan (1970), utilizing a sample size of approximately 350.

3.3 Research Instruments and Scoring

The proposed study will employ a composite questionnaire and a measure of English achievement. The questionnaire will assess participants' ideal L2 self and growth language mindset. Demographic information, including age and gender, will also be collected. Class codes and prior English examination scores will be obtained through the approved linkage procedure. Appendix 1 provides the exact proposed English wording, source-item identifiers, response anchors, and adaptation decisions.

Ideal L2 self will be assessed with six proposed adaptations of the items in Papi (2010, Appendix, p. 477; original item numbers 9, 17, 25, 33, 41, and 51). They cover imagined English use in speaking, international relationships, work, university study, correspondence, and living abroad. The wording retains future self-images rather than measuring current proficiency. The published instrument was used with Iranian high-school learners, which supports age relevance but does not validate this proposed Chinese version.

Growth language mindset will be assessed using four proposed adaptations of the growth subscale in Papi et al. (2019, Appendix B, p. 222; original item numbers 49, 56, 58, and 60). The adaptations specify English and use first-person wording. The source term language-learning intelligence is expressed as capacity to learn English to aid comprehension; this substantive wording change will require particular attention during cognitive interviews. The items concern perceived malleability, not the amount of effort actually expended. Papi et al.

studied university foreign-language learners in the United States, so their evidence does not establish validity for Chinese adolescents.

Chinese school-based research provides contextual support for studying these constructs, but not validation of the exact proposed ten-item instrument. Fan and Wang (2025), for example, used a shorter ideal-self measure, a different mindset source, and five response categories with junior middle school learners. The present six-category adaptations must therefore be evaluated in the intended senior high school population before their scores are used to support substantive claims.

All ten items will use 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = slightly agree, 5 = agree, and 6 = strongly agree. All items are positively keyed; none will be reverse-coded. The four fixed-mindset items from Papi et al. (2019) will not be administered or reverse-scored as substitutes for the growth items. A separate mean score will be calculated for each construct, with higher scores indicating stronger endorsement. For descriptive scoring, a mean will require at least five of six ideal-self items and three of four mindset items; otherwise the scale score will be missing. These thresholds will be fixed before the main survey, and complete-item scores will be examined in a sensitivity analysis. Missing-data handling for regression is specified in Section 4.2.

3.4 Translation and Adaptation

As the questionnaire will be administered in Chinese, translation and adaptation will follow a documented process informed by Dörnyei and Dewaele (2023). Two bilingual reviewers will independently translate the proposed English wording into Simplified Chinese and reconcile differences. A further bilingual reviewer, without access to the English wording, will back-translate the reconciled version. The team will compare meanings, resolve discrepancies, and revise wording before cognitive review and piloting. A dated item-level log will retain the source identifier, proposed English adaptation, both translations, reconciled Chinese version, back-translation, reason for each decision, and reviewers' agreement.

Particular attention will be given to the distinction between capacity to learn and current proficiency, to the hypothetical nature of future self-images, and to the intensity of the six response options. The six original ideal-self situations will be retained unless learners consistently misunderstand them; any substantive replacement will be documented and re-piloted. The final Chinese instrument and translation log will be archived with the research materials before the main survey, subject to applicable instrument-use permissions. No completed translation validation is claimed at this proposal stage.

3.5 Validity and Reliability

Validity refers to the degree to which a tool, test, or study accurately measures or evaluates what it is intended to measure., whereas reliability concerns their consistency (Creswell & Guetterman, 2019). The proposed study will examine content, response-process, and structural evidence, together with internal consistency, before interpreting the questionnaire scores.

Content validity will be evaluated by two bilingual experts with relevant language-learning and

measurement experience. They will review construct coverage, cultural appropriateness, age suitability, and translation equivalence. Face Validity will be established with approximately seven comparable learners who will not join the main study will examine how they understand each statement and choose a response. Participants will paraphrase the items and explain difficult wording. Decisions will be recorded rather than inferred solely from a favourable general impression.

A pilot with approximately 50 comparable learners from another school will assess administration time, missing responses, response-category use, and preliminary item behaviour. Cronbach's alpha and, where estimable, coefficient omega will be reported separately for each scale with uncertainty intervals. Values around .70 or above will be treated as provisional evidence of internal consistency, not proof of validity. Item–total relationships and conceptual coverage will inform revisions; items will not be removed merely to maximise alpha. Material changes will require renewed cognitive review and piloting. Pilot data will not be combined with the main sample.

Construct validity will be examined through a Confirmatory Factor Analysis (CFA) with six ideal-self indicators and four growth-mindset indicators, correlated factors, and no initial cross-loadings or correlated residuals. An ordinal estimator, such as weighted least squares with mean and variance adjustment, will be used for the six-category responses. Convergence, improper solutions, response-category sparsity, standardised loadings, residuals, and the latent correlation will be considered alongside CFI, TLI, RMSEA with its 90% confidence interval, and SRMR. CFI/TLI near .95, RMSEA near .06, and SRMR near .08 will be used as diagnostic reference points (Hu & Bentler, 1999), with recognition that these benchmarks are not universal pass–fail rules, particularly for ordinal estimators.

3.6 English Achievement and Background Factors

English achievement will be operationalised using participants' scores on a standardised final English examination, subject to permission to access the relevant examination records. The examination is expected to assess English skills through components such as listening, reading, and writing. The researchers will document the assessment's scoring range, administration procedures, and available evidence regarding scoring consistency when the scores are obtained.

3.7 Data Collection

Data will be collected through paper-and-pencil questionnaires approximately one week before the relevant final examination. Before recruitment, approval will be sought from the relevant institutional ethics body and school administration. Adult participants will provide informed consent; minors will provide assent with parental or guardian consent as required by the approved protocol. Students will be informed about the study purpose, voluntary participation, confidentiality, and their right to skip items or withdraw within the stated period. Participation will not affect grades, and teachers will not receive identifiable individual responses.

3.8 Screening and Missing Data

Preliminary screening will evaluate missing data, data-entry errors, score ranges, influential

observations, and regression assumptions. Descriptive statistics and plots will be presented for each scale and examination score, followed by Pearson correlations with confidence intervals where appropriate. Genuine extreme achievement scores will not be deleted merely because they are extreme; robust or rank-based sensitivity analyses will assess their influence. Class sizes and intraclass correlations will be reported.

The frequency and pattern of missing items, unlinked scores, and unavailable covariates will be reported. When missingness is minimal, complete-case estimates will be presented with their assumptions. If missingness is more substantial and a missing-at-random assumption is defensible, multiple imputation will include the outcome, individual scale items or appropriately specified scale scores, covariates, and class structure. The imputation model must preserve the predictor–moderator interaction, using a substantive-model-compatible procedure rather than imputing the product term independently. Estimates will be compared with complete-case results. If prior scores cannot be obtained, the primary adjusted question cannot be answered as planned; any reduced model will be explicitly reported as a deviation.

3.9 Data Analysis: Regression and Interaction Analysis

H_1 will be tested using regression including ideal L2 self, growth language mindset, prior achievement, age, gender, and class indicators; H_2 will add the ideal-self × mindset interaction while retaining both main effects. Continuous predictors will be mean-centred, and mindset will remain continuous. The hypothesised positive interaction will be assessed using two-sided tests ($\alpha = .05$), with coefficients, 95% confidence intervals, changes in R^2, f^2, and conditional slopes reported (Hayes, 2022). Small-sample-corrected cluster-robust inference, diagnostic checks, and sensitivity analyses will assess robustness. Few clusters or inconsistent findings will limit confirmatory claims, and all analytical decisions will be documented without drawing causal conclusions.

4. Conclusion

The proposed study is expected to contribute to research on L2 motivation by testing whether growth language mindset conditions the relationship between ideal L2 self and English achievement in a Chinese senior high school EFL setting. The findings may inform future research and pedagogical practice, but any theoretical or practical implications will be considered in light of the results obtained and the limitations of a single-wave, non-probability sample. A positive interaction would support further investigation of whether growth beliefs help learners sustain the pursuit of an envisioned English-using self. It would not demonstrate that changing mindset improves grades.

Interpretation will remain constrained by one-school recruitment, possible range restriction, common-method influences on the two self-report scales, imperfect measurement, unmeasured background differences, and the short survey–examination interval. Prior-score adjustment can reduce some differences in attainment but cannot remove all confounding or reverse influence. Inadequate interaction power or weak measurement would make a null result inconclusive. Replication across schools and longer-term or experimental research would be needed before making broader pedagogical recommendations.

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Appendix 1. Proposed Questionnaire Wording and Source Mapping

Ideal L2 Self Items

Source mapping: Papi (2010), Appendix, p. 477. The statements retain the six future-use situations while simplifying their wording. Native-like speaking remains a source-specific image in I1, not a requirement for successful English learning.

I1. In my future, I picture myself speaking English with native-like fluency. (Source item 9.)

I2. I picture future conversations in English with friends or colleagues from other countries. (Source item 17.)

I3. When I picture my future job, English is part of my working life. (Source item 25.)

I4. I picture attending a university that teaches every course in English. (Source item 33.)

I5. I picture writing fluent emails and letters in English in the future. (Source item 41.)

I6. I picture a future overseas in which English enables me to communicate effectively with local people. (Source item 51.)

Growth Language Mindset Items

Source mapping: Papi et al. (2019), Appendix B, p. 222. English replaces the general language-learning domain; capacity to learn replaces intelligence; first-person wording makes the referent explicit. The four statements retain the source facets of continuing, substantial, person-independent, and basic-capacity development. Their equivalence remains to be evaluated.

G1. My capacity to learn English can continue to develop. (Source item 49.)

G2. Whatever my present capacity for learning English, substantial development is possible. (Source item 56.)

G3. Every person, including me, can greatly develop the capacity to learn English. (Source item 58.)

G4. Even my basic capacity to learn English can develop substantially. (Source item 60.)

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Obtained.

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The Publication Ethics Committee of the Macrothink Institute.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

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The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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