Reading Anxiety in First and Second Language Acquisition: A Comprehensive Literature review

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Abstract

Reading anxiety, a domain-specific form of affective disturbance, disrupts comprehension and hinders literacy development in both first (L1) and second/foreign (L2/FL) language contexts. This review synthesizes empirical and theoretical work to examine its conceptualization, prevalence, cognitive and affective correlates, educational consequences, and intervention strategies. Findings confirm that reading anxiety is distinct from general academic anxiety and is consistently associated with poorer reading performance, reduced motivation, and negative self-perceptions. Cognitive factors and affective influences shape its intensity and impact. A range of pedagogical interventions have demonstrated efficacy in reducing anxiety and improving outcomes. Yet, limitations in measurement tools, research design, and population diversity remain. The review highlights differences between L1 and L2 reading anxiety and calls for integrative theoretical models and longitudinal, multimethod research. Addressing reading anxiety is critical for fostering confident, capable readers across linguistic and educational settings.

Keywords

Reading anxiety;   First language (L1) reading; Second language(L2/FL)acquisition;

Introduction

Reading anxiety refers to the unpleasant feelings of worry or distress that learners experience when engaging in reading activities, particularly in a non-native language. It has been characterized as a situational, domain-specific form of anxiety or "specific phobia" triggered by reading tasks. While the broader construct of foreign language anxiety (FLA) encompasses general apprehension in language learning contexts (Horwitz, 1986), reading anxiety is specific to the act of reading. Saito, Garza, and Horwitz (1999) introduced the concept of foreign language reading anxiety (FLRA) and developed the Foreign Language Reading Anxiety Scale (FLRAS). They found that FL reading anxiety shared only about 41% of its variance with overall FLA, suggesting it is a related but distinct phenomenon in L2 contexts. Although much research has focused on L2 reading anxiety, recent scholarship has emphasized that anxiety can also occur when reading in one's first language (L1), especially among students with reading difficulties. Piccolo et al. (2017) note a dearth of studies on L1 reading anxiety, even though reading anxiety in L1 may contribute to understanding reading disabilities.

Reading anxiety is pedagogically important because it can create a vicious cycle: anxious readers may avoid practice, fall behind in skill development, and experience further anxiety. This review examines the state of knowledge about reading anxiety in L1 and L2, synthesizing findings on its definitions, prevalence, underlying cognitive and affective correlates, and consequences. We also critically assess methodological issues in the research and review intervention studies designed to alleviate reading anxiety. Finally, we compare reading anxiety across L1 and L2 contexts, noting both shared features and key differences, with the aim of informing educators and researchers about how to identify and support anxious readers.

1. What is Reading Anxiety?

1.1 Conceptualizing Reading Anxiety

Reading anxiety has been conceptualized in several ways. Early work by Horwitz, Horwitz, and Cope (1986) defined foreign language anxiety broadly as "a distinct complex of self-perceptions, beliefs, and feelings related to language learning" (Figure1.1). Within that framework, Saito et al. (1999) specifically introduced Foreign Language Reading Anxiety (FLRA) as a construct

associated with the act of reading in a FL. They described FL reading anxiety as learners' emotional and physiological reactions, including nervousness and tension, triggered when reading text in a non-native language. In a large study of learners of Spanish, Russian, and Japanese, Saito and colleagues developed the FLRAS questionnaire and found that FL reading anxiety is correlated with but distinct from general FLA. They reported a correlation of r = .64 between general language anxiety and reading-specific anxiety, meaning only 41% shared variance and 59% unique (Saito et al., 1999). This indicates that many factors contribute to reading anxiety that are not captured by general FLA.
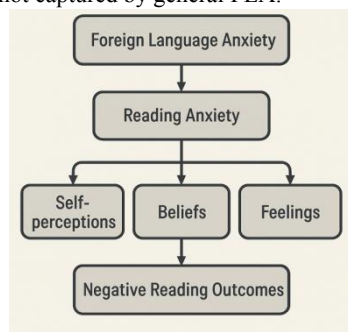

Figure1.1

The situational, phobic quality of reading anxiety is emphasized in later definitions. Piccolo et al. (2017) describe reading anxiety as "an unpleasant emotional reaction experienced by students when reading; it is a specific phobia, situational type". In other words, students may be generally confident, but reading a text, especially a difficult or unfamiliar one, triggers acute anxiety. Zhou (2015/2017) similarly defines FL reading anxiety as the worry or fear learners feel during a reading passage in the target language. This state-specific anxiety can manifest physically, like increasing heart rate, sweating, cognitively, like mind going blank, and emotionally, like frustration and panic, as discussed by Azizi et al. (2024) in their review of medical students' reading anxiety.

Researchers typically operationalize reading anxiety via self-report scales. The FLRAS by Saito et al. (1999) is widely used for L2 contexts, items probe worry about difficult vocabulary, culture, etc., and Horwitz's Foreign Language Classroom Anxiety Scale (FLCAS) includes a subscale on reading. Edwards et al. (2023) note that there is a need for reliable, reading-specific measures in L1 contexts as well. They developed a 10-item Reading Anxiety Scale for college students and found it to be distinct from general anxiety, which is higher correlation with reading fluency than math. Thus, the literature treats reading anxiety as a measurable construct separate from overall academic anxiety.

Conceptually, reading anxiety intersects with but is not identical to related constructs. It is linked to cognitive load, language skills, and affective factors, like motivation and self-efficacy. Critically, Piccolo et al. (2017) point out the importance of distinguishing reading anxiety from reading disabilities: anxious reading may hinder decoding and comprehension, but it can also co-occur with or stem from underlying dyslexia or learning problems. In sum, reading anxiety is best understood as a situational anxiety phenomenon tied to the specific challenge of reading text, whether in L1 or L2.

1.2 Prevalence and Patterns of Reading Anxiety

Empirical studies consistently report that reading anxiety is a common experience among language learners, often at moderate levels. Exact prevalence rates vary by context and measures. In FL/EFL settings, survey studies often find the majority of students experiencing at least some reading anxiety. For example, Dang (2024) found that 68.5% of Vietnamese university EFL learners reported moderate levels of English reading anxiety, with only a minority at very high or very low extremes. Similarly, Zhou (2015) observed that Chinese learners of Chinese as a foreign language generally reported a medium level of reading anxiety, with intermediate-level students experiencing lower anxiety than beginners. These findings suggest that while most students feel some apprehension, very high anxiety is less common.

In L1 contexts, prevalence data are scarce, but research indicates elevated anxiety among specific populations. Edwards et al. (2023) found that even native-English college students showed measurable differences in reading anxiety on their new scale. Importantly, students with diagnosed reading-related learning disabilities reported significantly higher reading anxiety than peers without such disabilities. This suggests that reading anxiety in L1, while not widely studied, can be substantial for struggling readers. Piccolo et al. (2017) emphasize that understanding L1 reading anxiety is crucial for addressing reading disabilities, yet empirical data remain limited. Overall, reading anxiety appears relatively prevalent among learners of all backgrounds; a key question is what cognitive, linguistic, and situational factors predict its level.

Several background factors have been linked to differences in reading anxiety. Gender findings are mixed, though Chen et al. (2014) reported that instructor-supported collaborative annotation reduced anxiety particularly among male middle-school learners. Age and education level matter: Azizi et al. (2024) compared first-year medical students in online versus face-to-face English courses and found that those in traditional classrooms exhibited higher mean reading anxiety than those in an online, collaborative platform. This could reflect changing learning environments or generational differences in attitude toward technology. Course context is also relevant: for instance, Oh (1992) discovered that anxiety levels varied significantly with different reading test formats (cloze vs. think-aloud) for Korean university freshmen.

2. Factors influencing reading anxiety

2.1 Cognitive Correlates

Cognitive factors are strongly associated with individual differences in reading anxiety. One key correlate is language proficiency and skill level. Unsurprisingly, stronger readers tend to feel less anxious: higher vocabulary knowledge, decoding ability, and fluency often correlate with lower anxiety (e.g. Sellers, 2000; Shi & Liu, 2006, as reviewed in Zhou, 2015). Zhou (2015) reports that learners with higher English proficiency and reading comprehension scores tend to report lower FL reading anxiety. Alamer and Lee's (2021) longitudinal study found that higher L2 achievement at an earlier time predicted lower later anxiety, whereas the reverse was not supported. Thus, competence and confidence in reading can buffer anxiety, and deficits can exacerbate it.

Relatedly, working memory capacity has been identified as a cognitive correlate. Reading in a L2 imposes high processing demands, so learners with limited working memory may become anxious when texts are hard. Chow, Mo, and Dong (2021) tested a model of how working memory and reading anxiety jointly affect L2 reading comprehension. They found that both verbal working memory and reading anxiety were unique predictors of comprehension performance. Specifically, higher working memory aided comprehension, but higher reading anxiety hindered it. Moreover, reading anxiety partially mediated the effect of working memory: learners with lower working memory tended to feel more anxious while reading, which in turn impaired comprehension. This suggests a dual pathway by which cognition and affect interact: processing resources can trigger anxiety, and anxiety itself can consume cognitive resources, creating a vicious cycle.

First-language literacy and cognitive skills also play a role. Sparks and Alamer (2023) found that strong L1 reading achievement and metalinguistic knowledge predicted lower L2 reading anxiety two years later. In their structural model, L1 reading skills influenced L2 reading anxiety both directly and indirectly (via L2 aptitude and L2 achievement). This highlights a cognitive transfer effect: students who are good readers in their native language bring stronger meta-cognitive strategies and phonological/orthographic processing skills that help them decode L2 texts more easily, reducing anxiety. Conversely, poor L1 reading skills, which often reflecting learning disabilities, make L2 reading much more threatening, elevating anxiety.

Task characteristics also influence cognitive load and thus anxiety. Saito et al. (1999) hypothesized that unfamiliar scripts and complex grammar increase FLRA. Indeed, Zhou's review notes that students reading Japanese with an unfamiliar non-Roman script were more anxious than those reading languages with more familiar orthographies. The nature of reading tasks, including skimming vs. careful comprehension, vocabulary difficulty, time pressure, likely alters cognitive demand. For instance, Oh (1992) found that cloze tests and think-aloud protocols evoked higher anxiety in L2 readers than simpler multiple-choice tests. These findings imply that educators should consider cognitive complexity when designing reading assessments to avoid unnecessarily provoking anxiety.

In sum, cognitive correlates of reading anxiety include the learner's existing reading skills in L1 and L2, working memory capacity, and task difficulty. High skill and capacity tend to mitigate anxiety, whereas demanding tasks and unfamiliar scripts amplify it.

2.2 Affective Correlates

Alongside cognitive factors, affective and motivational variables are closely linked with reading anxiety. Learner motivation and attitudes toward reading are powerful correlates. Chow, Chiu, and Wong (2018) examined predictors of EFL reading anxiety among Chinese undergraduates and found that learners' motivation, both intrinsic and integrative, significantly predicted their anxiety levels. In particular, students who reported higher motivation for learning English experienced lower reading anxiety, even after accounting for proficiency. Learning strategies influenced anxiety mainly indirectly: motivated learners used more effective reading strategies, which in turn improved performance and reduced anxiety. This highlights that an internal drive to read, like interest

and valuing English, can buffer anxiety by fostering engagement and persistence when challenges arise.

Self-efficacy and self-concept about reading ability also correlate with reading anxiety. Learners who believe they can succeed in reading tasks tend to feel less anxious. For example, Edwards et al. (2023) found that higher reading anxiety was associated with lower reading self-concept and enjoyment. Students who perceived themselves as poor readers reported more anxiety. In turn, low self-confidence can create a self-fulfilling prophecy: anxious students avoid practice and become weaker, validating their self-doubt. Conversely, interventions that boost students' confidence, including mastery experiences and scaffolding, often alleviate anxiety.

General language anxiety and personality factors contribute as well. Learners with high trait anxiety or general communication apprehension are more prone to reading anxiety. The FLRAS studies suggest that individuals who are anxious in FL classrooms also tend to be anxious when reading (the .64 correlation in Saito et al., 1999). However, some of the remaining unique variance suggests that domain-specific dispositions matter, some students may be anxious in speaking but relatively calm reading. Personality traits like neuroticism have been linked to higher FL anxieties (Abu-Rabia et al., 2014), which likely extends to reading.

Other affective correlates include classroom environment and teacher behavior. Zhou (2015) notes that learners who reported poorer classroom climates, for instance, more pressure or embarrassment when reading aloud, tended to have higher reading anxiety. Social aspects – fear of negative evaluation, peer comparison, or lack of support – can heighten anxiety during reading tasks, especially in a second language. Azizi et al. (2024) suggested that online or flipped classroom designs, which provide peer collaboration and anonymity, might lower reading anxiety compared to face-to-face lectures. This implies that affective correlates are not only internal but also situational: a supportive learning environment, positive feedback, and low-stakes practice can reduce anxiety.

In sum, students' feelings about reading – their motivation, confidence, and classroom experiences – significantly shape their reading anxiety. These affective factors interact with cognitive ones: a motivated, self-assured learner may overcome challenging texts, while a fearful, unconfident learner may feel overwhelmed. Understanding these correlates suggests holistic approaches to addressing reading anxiety by nurturing positive attitudes and a supportive environment, in addition to skill-building.

3. Consequences of Reading Anxiety

A central concern is how reading anxiety affects learning outcomes. By and large, research indicates that higher reading anxiety is associated with poorer comprehension and performance. Zhou (2015) reports that numerous studies have found significant negative correlations between FL reading anxiety and reading achievement. In one example, moderate negative correlations were observed between Chinese learners' reading anxiety and both elementary- and intermediate-level comprehension scores. Shi and Liu (2006) similarly found that ESL students with high FL reading anxiety scored lower on reading comprehension tests. These findings align with cognitive theory: anxiety consumes working

memory resources through worry (Eysenck et al., 2007), leaving fewer resources for understanding text. Moreover, anxious students often read more slowly and skip sections, hindering comprehension (Abu-Rabia, 2004).

Empirical studies using regression models confirm this negative impact. Liu and Dong (2023) conducted a longitudinal study of Chinese university English majors and found that their foreign language reading anxiety, measured at three points in a semester, was significantly negatively correlated with simultaneous reading test scores. Their analyses showed that FL reading anxiety was a significant predictor of students' reading performance at the same time point, even after controlling for background variables. However, reading anxiety at one time did not predict later performance, nor did past performance predict later anxiety, suggesting the effect is immediate rather than lasting over long delays. Al-Obaydi, Rahul, and Pikhart (2024) similarly reported that students in an oral-reading intervention group had lower reading anxiety and higher comprehension scores than a control group. Notably, they found a strong negative correlation between reading comprehension and anxiety measures, indicating that improvements in comprehension coincided with anxiety reduction.

However, some researchers caution that the anxiety-performance relationship may be more complex. Argaman and Abu-Rabia (2002) found significant relationships between language anxiety and both reading and writing skills among Hebrew speakers learning English. Interestingly, they hypothesized that because writing is a communicative skill it would be more affected by anxiety than reading. Contrary to this, they observed anxiety linked to reading too, and suggested an alternative interpretation: rather than anxiety causing poor performance, it may often be a consequence of failure or frustration in language tasks. In other words, struggling readers become anxious because of their difficulties, not solely vice versa. This view is echoed in the broader language anxiety literature that anxiety and achievement likely influence each other bidirectionally. An exception noted by Zhou (2015) is a finding by Joo and Damron (2015), who reported a moderate positive correlation between reading anxiety and comprehension among second-year students. They speculated that moderate anxiety might sometimes enhance focus, an "arousal" effect, or that more proficient students may worry more due to higher expectations. This anomaly aside, the consensus is that high reading anxiety generally undermines comprehension. Consequences extend beyond immediate test scores: anxious readers often avoid reading practice, choose easier texts, and enjoy reading less over time. Anxiety can also reduce willingness to participate in reading activities, affecting motivation and further weakening skills.

In L1 contexts, similar patterns emerge: children with reading difficulties not only have lower achievement but also higher anxiety (Hendren et al., 2018; as cited in [54]). Edwards et al. (2023) found that university students with learning disabilities had higher reading anxiety, suggesting that anxiety may both stem from and worsen reading problems even in L1. Ultimately, the consequences of reading anxiety are negative for learning: it directly impairs comprehension and indirectly hinders progress by reducing practice and confidence.

4. Methodological Considerations

4.1 Reading Anxiety Scale

The literature on reading anxiety has grown but also has methodological limitations that should caution interpretation. A common issue is measurement heterogeneity. Many studies borrow instruments from FL anxiety research, but these may vary in focus. The FLRAS (Saito et al., 1999) is standard for L2 reading, but different researchers have modified it or created ad hoc surveys. In L1 contexts, there is no widely used scale (Edwards et al., 2023 developed one specifically for college students). Some studies use general FLA scales (FLCAS) and extract reading items, which may conflate anxiety sources. Piccolo et al. (2017) highlight the need for more consistent use of validated reading-specific scales. Differences in instruments can make it hard to compare findings across studies or aggregate data in meta-analyses.

4.2 Research Design

Another limitation is research design. Much of the evidence is correlational and cross-sectional, which identifies associations but not causality. Few studies track reading anxiety over time or test interventions with control groups. Notable exceptions include Liu and Dong's (2023) longitudinal design and Sparks and Alamer's (2023) cross-lagged panel analysis. These sophisticated designs reveal temporal dynamics and indirect effects, like L1 achievement predicting later L2 anxiety. However, most studies rely on a single survey session, limiting insight into how reading anxiety develops or responds to change. The scarcity of experimental designs is apparent: only a handful of classroom studies (Lo et al., 2021; Al-Obaydi et al., 2024) manipulate teaching methods and measure anxiety pre/post.

4.3 Representativeness of the sample

Sample representativeness is another issue. Many studies sample university or high-school students studying English as a foreign language, often in East Asia. This limits generalizability to younger learners, other language pairs, or less formal settings. Few studies investigate L1 reading anxiety in children or diverse populations. Cultural factors may influence anxiety,like face-saving concerns, but cross-cultural comparisons are rare. Similarly, sample sizes vary widely; some promising findings may stem from small or convenience samples.

4.4 Operational definitions

Operational definitions also vary. Some researchers distinguish trait versus state reading anxiety (Chow et al., 2021), or anxiety during silent vs. oral reading (Al-Obaydi et al., 2024). Others do not specify and treat reading anxiety as a general tendency. This complicates synthesis, as an "anxiety" measure may tap momentary dread on a test or chronic avoidance of reading. Future research would benefit from clearly defining whether reading anxiety is conceptualized as a trait-like predisposition or a situational state and measuring accordingly.Finally, many studies conflate reading anxiety with related constructs. For example, "classroom anxiety" and "reading anxiety" often overlap in questionnaires, making it unclear what proportion of anxiety is specifically about reading versus general FL worry. Careful experimental manipulation, like Oh's 1992 work on different test formats, is needed to isolate

reading-specific factors. Despite these limitations, the accumulated research provides valuable insights; but readers should interpret correlational findings with caution and advocate for stronger methodologies in future work.

5. Intervention Strategies

A central goal of reading anxiety research is to identify ways to alleviate it. Encouragingly, a variety of instructional interventions have been shown to reduce reading anxiety and improve outcomes. These interventions fall into several categories:

5.1 Strategy Training

Teaching students explicit reading strategies, including skimming, scanning, inferencing, can empower them and thus reduce anxiety. For instance, Fathi and Shirazizadeh (2020) applied an L2 reading strategy instruction program to Iranian EFL learners and found that it significantly improved reading comprehension and reduced reading anxiety while not improving self-efficacy. (cf. Capan & Pektas, 2013). Dang (2024) provides further evidence: Vietnamese EFL students who frequently used reading strategies reported significantly lower anxiety. In that study, learners with lower anxiety used Problem-Solving Strategies, like predicting, summarizing, more regularly, and a negative correlation was observed between strategy use and anxiety. In practice, this suggests that equipping learners with metacognitive strategies and practice can make reading tasks feel more manageable and reduce the sense of helplessness that fuels anxiety. There is a example that can be used in real English classes, Example: Fathi et al. (2020) implemented a listening strategy framework with Iranian EFL learners, leading to improved comprehension and reduced anxiety. (Figure5.1) Operational Steps:

Initial Assessment: Use a reading strategy inventory to gauge learners' baseline use. Modeling: Demonstrate strategies such as predicting, summarizing, and questioning through think-alouds. Guided Practice: Students apply strategies to short passages with teacher scaffolding. Independent Application: Encourage students to use strategies on longer texts. Reflection: Facilitate group discussion on which strategies reduce anxiety and why.
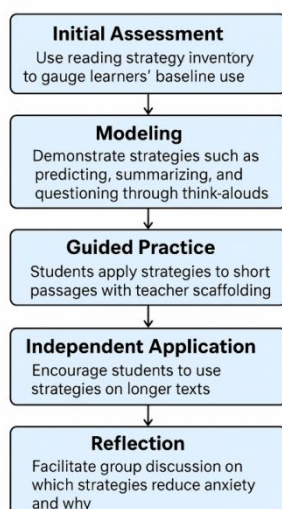

Figure5.1

5.2 Collaborative & Supported Reading

Chen et al. (2014) developed a predictive model (PRAPM) to identify when learners are experiencing reading anxiety by tracking their digital annotation behaviors. They used a Collaborative Digital Reading Annotation System (CDRAS) in which students annotated texts together. When combined with online instructor support, this collaborative approach significantly lowered reading anxiety, especially for male learners and improved comprehension. The idea is that social reading and real-time feedback can reduce isolation and fear of misunderstanding. Similarly, Azizi et al. (2024) found that medical students in an online, collaborative English reading course had lower anxiety than those in traditional lecture-based classes, indicating that a peer-supported environment can buffer anxiety. In general, interventions that make reading more interactive, peer discussion, group work and provide timely teacher reassurance can demystify texts and build confidence. Digital collaborative annotation has been utilized to foster active reading and peer support. For Example , Chen et al. (2014) employed a Collaborative Digital Reading Annotation System (CDRAS) with an AI-based PRAPM to predict and reduce anxiety. Operational Steps:

Digital Text Distribution: Share reading materials through annotation platforms. Collaborative Annotation: Students tag difficult segments, raise questions, and comment on peers' inputs. Instructor Feedback: Teachers monitor annotations and provide targeted responses. AI Monitoring: Use PRAPM to identify patterns and alert instructors to anxiety-prone students. Finally , Post-Reading Discussion: Review key insights and clarify misunderstood points.

5.3 Psychosocial Approaches

Other studies have addressed the anxiety indirectly by altering the learning context. For example, Lo, Lu, and Cheng (2021) implemented a "Reader's Theater" (RT) intervention, where students performed scripted dialogues from reading passages. High school EFL students reported that this drama-based approach not only improved reading comprehension but also reduced their English learning anxiety. RT likely lowers anxiety by making reading a playful, collaborative performance rather than a solitary academic task; even though students felt some pressure during improvisational stages, overall it gave them a sense of achievement. Gok, Bozoglan, and Bozoglan (2021) integrated a flipped classroom into an advanced reading course and found that pre-service teachers in the flipped group showed significant decreases in both foreign language classroom anxiety and reading anxiety. The flipped model, which means students engage with texts or videos at home, then practice together in class, may reduce anxiety by giving students more control over pacing and reducing in-class pressure.Operational Steps:

Pre-Class Materials: Assign video lectures or annotated readings. Interactive Quizzes: Require completion before class to ensure preparedness. In-Class Tasks: Facilitate group discussions, problem-solving, or comprehension games. Teacher Facilitation: Offer real-time support and clarification during class. Follow-Up Review: Assign reflection activities on anxiety levels and comprehension gains.

5.4 Oral Reading and Repeated Exposure

Incorporating oral reading exercises can also alleviate anxiety. Al-Obaydi et al. (2024) had EFL learners in Iraq read aloud regularly during online sessions. They observed that after six months of daily oral reading, the intervention group not only outperformed controls on comprehension tests but also experienced lower reading and classroom anxiety. The data showed that as comprehension scores rose, anxiety scores fell. The act of successfully reading aloud and receiving constructive feedback appears to build confidence. Teacher observations in that study highlighted that frequent oral reading in a supportive online environment improved rapport and motivation. Thus, repeated, guided reading practice can desensitize students to their fears and normalize reading difficulties. For instance , Al-Obaydi et al. (2024) showed that regular online oral reading improved scores and reduced anxiety. (Figure5.2) Operational Steps:

Routine Integration: Include oral reading as a consistent class activity. Safe Environment: Foster a judgment-free setting through peer encouragement. Use of Technology: Leverage tools like voice recorders or online conferencing. Feedback Loop: Provide constructive, non-evaluative feedback. Progress Tracking: Monitor growth in fluency and reductions in expressed anxiety.
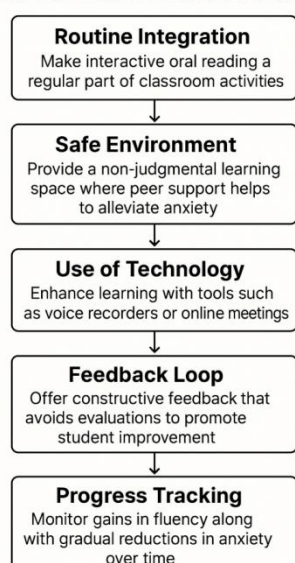

Figure5.2

5.5 Metacognitive Support

Although not always labeled as "interventions," providing metacognitive support, including teaching students to recognize anxiety symptoms, set goals, and self-monitor, can help. For instance, Dang (2024) recommended teaching coping strategies after noting the link between strategy use and anxiety. The idea is that if students understand why they feel anxious and have techniques, such as deep breathing, positive self-talk, or breaking tasks into smaller steps, they may become less overwhelmed. Shifting attribution, helping students see anxiety as normal and manageable, could also mitigate its effects, as could creating a classroom culture where mistakes are viewed as learning opportunities.

Overall, the intervention literature suggests that multifaceted approaches are most effective. Combining strategy training with a supportive learning environment, and gradually increasing text difficulty, can address both the skills gap and the emotional response. Importantly, interventions often produce the greatest anxiety reduction when they improve actual comprehension simultaneously, thus eliminating the source of worry. Many of the cited studies implemented quasi-experiments or mixed methods designs, like questionnaires plus interviews, which is encouraging compared to purely correlational research. However, most interventions have been short-term or context-specific, so more research is needed on long-term and diverse implementations.

6. Reading Anxiety in First and Second Language Contexts

An explicit comparison between L1 and L2 reading anxiety reveals both commonalities and divergences. On one hand, the core features, lik fear of decoding difficulties, test anxiety, are similar. Both first-language and foreign-language readers can feel anxious when encountering unfamiliar words, complex grammar, or challenging content. The physiological and emotional reactions, including sweaty palms, racing thoughts, are fundamentally the same. Edwards et al. (2023) demonstrate that college students reading in their native language still exhibit a measurable dimension of reading anxiety that correlates with reading fluency and self-concept. Similarly, Piccolo et al. (2017) argue that reading anxiety should be acknowledged as a facet of reading disability in L1 contexts. In this sense, reading anxiety is not exclusively an L2 phenomenon but a generic response to demanding literacy tasks.

However, the sources of reading anxiety often differ between L1 and L2. For L2 readers, anxiety frequently stems from linguistic uncertainty: not knowing vocabulary or syntax produces stress. Saito et al. (1999) noted that unfamiliar scripts and cultural content in FL texts are potent sources of anxiety. Zhou (2015) found Japanese learners anxious primarily due to their lack of familiarity with kanji characters. In contrast, L1 readers typically have less concern about basic decoding or meaning since the language is familiar, and anxiety in L1 is more likely tied to reading competence. For instance, children with dyslexia experience anxiety related to their struggles (Hendren et al., 2018), and Edwards et al. (2023) found that even adult L1 readers with learning disabilities felt elevated anxiety. Thus, L1 reading anxiety often coexists with or signals underlying learning disorders, whereas L2 reading anxiety can often be attributed to linguistic and cultural unfamiliarity.

The prevalence and intensity also tend to differ. Most studies indicate that L2 reading anxiety is quite common and can be a significant barrier for many learners, as seen by the moderate levels reported in EFL populations. L1 reading anxiety is less prevalent overall in the general population, but among individuals with reading problems it can be severe. Piccolo et al. (2017) lament the lack of research on L1 reading anxiety, but their review suggests it is especially relevant for early readers who fear reading failure. In bilingual situations, one might even find some learners who have high L1 reading anxiety due to a reading difficulty but lower

anxiety when reading a second language if, for example, the L2 was learned through context or if they have high motivation for the L2.

Comparisons between L1 and L2 reading anxiety are also reflected in educational implications. Sparks and Alamer's (2023) mediation model indicates that strengthening L1 reading achievement can reduce future L2 reading anxiety. This implies that supporting native-language literacy may have spillover benefits for foreign-language learning. Conversely, L2-focused interventions must account for students' L1 reading profiles. Argaman and Abu-Rabia (2002) found that Hebrew-speaking students had similar anxiety toward English reading and writing as toward their L1 language tasks, suggesting personal dispositions, like perfectionism or fear of failure, may transfer across languages.

In short, L1 and L2 reading anxiety share the basic phenomenon of text-induced distress, but they arise from different constellations of cognitive and emotional factors. The L2 literature (Saito, Zhou, Dang, etc.) emphasizes language proficiency and cultural distance, while the L1 literature (Piccolo, Edwards) focuses on literacy skills and disabilities. The available evidence suggests that interventions should be tailored accordingly: foreign language educators should focus on language support and strategy use, whereas L1 educators should identify and assist struggling readers to prevent anxiety.

Conclusion

Reading anxiety is a significant affective construct in language education, with proven impacts on learning. This review has shown that reading anxiety is well-defined as a situational, phobic reaction to reading tasks, occurring in both first- and second-language contexts. Empirical research indicates that it is widespread among language learners, generally at moderate intensity. It correlates negatively with comprehension and performance, and positively with traits like poor self-concept and low motivation. Yet, reading anxiety is also amenable to change: classroom interventions that improve skills and foster supportive environments can lower anxiety and improve outcomes.

Comparatively, L2 reading anxiety arises largely from linguistic challenges, whereas L1 reading anxiety often signals fundamental reading difficulties. Understanding this distinction is crucial for educators: reducing L2 reading anxiety may involve easing linguistic demands and building strategy use, while reducing L1 reading anxiety may require direct reading remediation and confidence-building. Sparks and Alamer (2023) suggest that strengthening L1 literacy can have downstream effects on L2 anxiety, implying a holistic approach to language education.

Methodologically, future research should move beyond cross-sectional surveys. Longitudinal and experimental studies (like those of Liu & Dong and Al-Obaydi et al.) provide more compelling evidence of causality. More work is needed on measurement in L1 contexts, on younger learners, and on varied linguistic settings. Research should also clarify the interplay between anxiety and achievement – for example, does anxiety reduction mediate gains from reading interventions, or vice versa?

For practitioners, the key takeaway is that recognizing and addressing reading anxiety is vital. Instructors should assess anxiety levels, using appropriate scales, and implement strategies training, supportive pedagogy, and frequent low-stakes reading practice to build learner confidence. Emphasizing comprehension rather than speed, encouraging peer collaboration, and addressing students' attitudes can create a classroom climate that minimizes fear. As Saito et al. (1999) and subsequent researchers have shown, reading anxiety is not an immutable trait but a response that can be alleviated. With careful instructional design and attention to learners' emotional states, educators can help anxious readers overcome barriers and become more proficient and confident readers in both their first and second languages.

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