

# **European Journal of English Language Teaching**

ISSN: 2501-7136 ISSN-L: 2501-7136

Available on-line at: www.oapub.org/edu

DOI: 10.46827/ejel.v8i5.5086

Volume 8 | Issue 5 | 2023

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

Li-Wei Wei<sup>i</sup>

Lecturer, Department of General Education, Chinese International College, Dhurakij Pundit University, Thailand

# **Abstract:**

The perennial challenge of reading fluency, notably profound among Asian EFL learners, stems largely from linguistic disparities, conventional teaching paradigms, and ingrained cognitive practices. This study critically investigates the challenges Chinese undergraduates face with English reading fluency, notably due to linguistic disparities and historically rooted teaching methodologies. Leveraging the Read-Aloud Instructional Strategy (RAIS), this quasi-experimental study sampled 73 students from a private university in Thailand. Baseline assessments depicted similar fluency levels across groups. Post-intervention, the instructor-centered approach demonstrated profound efficacy, with the mean fluency score soaring to 4.35, compared to the studentcentered mean of 2.69 and the near-static comparison group at 2.04. Additionally, confidence metrics evinced a remarkable ascent to 3.46 for the instructor-led group, a notable rise to 2.19 for the student-centered cohort, juxtaposed against the comparison group's minimal shift to 1.71. Furthermore, the instructor-centered method substantially ameliorated reading anxiety (d=1.378) and showcased stronger, albeit weak to moderate, post-intervention correlations between fluency, confidence, and anxiety. This comprehensive study underscores the transformative potential of RAIS, particularly the instructor-centered paradigm, in concurrently augmenting reading fluency, confidence, and reducing anxiety among Chinese EFL undergraduates. The implications herein suggest the exigency of reassessing prevalent pedagogical methodologies in Asian EFL environments.

**Keywords:** Read-Aloud Instructional Strategy (RAIS), reading fluency, anxiety, confidence, Chinese EFL undergraduate

\_

<sup>&</sup>lt;sup>i</sup>Correspondance: email <u>liwei.wei@dpu.ac.th</u>

LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

# 1. Introduction

# 1.1. Research Background and Problem Statement

Amid the landscape of English Language Teaching (ELT), a prodigious impediment faced by English as a Foreign Language (EFL) learners, notably among Asian learners, could be the quandary of reading fluency (Pham et al., 2023; Möller, 2020; Wang, 2017). Typically, within the taxonomy of English language skills, reading and listening are traditionally categorized as receptive or input skills, whereas speaking and writing are construed as productive or output facets (Nation, 2020; Hazaea & Alzubi, 2018). However, one might postulate, with a degree of logical rigor, that reading fluency assumes characteristics akin to an output perspective, given its conflation of rapid decoding with comprehension (Nation, 2020, Lien, 2016; Khansir & Dehghani, 2015). Such a perspective, whilst not universally endorsed, emanates from the assertion that genuine fluency transcends mere velocity, encompassing deeper elements of comprehension and prosody (Nur, 2021; Yoon, 2019). Regrettably, for non-native English interlocutors, particularly those hailing from the vast and diverse Asian context, the journey towards achieving this fluency remains laden with hurdles (Yoon, 2021; Bae & Oh, 2013). These barriers, upon meticulous scrutiny, arise not merely from the expected lacuna in lexical competence or the intricacies of English grammatical structures but are compounded by an endemic lack of habitual reading.

The etiology of these reading challenges in Asian EFL learners, especially within the Chinese undergraduate demographic, seems multifaceted. Linguistic factors, for instance, play a paramount role. The phonological disparities between many Asian languages, such as the tonal nuances in Mandarin, and English are vast (Nur, 2021; Yoon, 2019; Suleiman-Alfallaj, 2017). This phonological chasm often militates against the seamless phonological processing indispensable for fluent reading (Kondo, 2021; Senowarsito & Nur, 2019). Simultaneously, the profound orthographic variance between the logographic systems, epitomized by Chinese characters, and the alphabetic intricacies of English, necessitates a significant cognitive recalibration among learners (Ibrahim, 2018; Lien, 2016). Pedagogically, Asian EFL instruction, historically rooted in the grammar-translation method, often fails to furnish learners with holistic strategies imperative for nurturing reading fluency (Mo, 2020; Bidal & Doman, 2016; Muller et al., 2014). This pedagogical inclination, coupled with a curriculum often bereft of authentic texts, deprives learners of the requisite exposure to the idiosyncratic rhythms of genuine English. On a cognitive front, the propensity among many Asian learners to prioritize rote memorization over analytical and inferential reading stratagems adversely impacts fluency and comprehension (Wang, 2023; Bidal & Doman, 2016; Du, 2016). Furthermore, an over-reliance on transference strategies from their first language (L1) often culminates in a distorted reading experience, further exacerbating the fluency dilemma (Wang, 2023; Mo, 2020; Du, 2016).

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

Yet, the ramifications of deficient reading fluency extend beyond the mere act of reading. The ensuing discourse, informed by a corpus of empirical studies and grounded in educational psychology, posits a direct nexus between reading fluency and the psychosocial constructs of reading anxiety and self-confidence (Xue, 2022; Liu & Wang, 2018). Poor reading fluency, it appears, not only militates against comprehension but also engenders heightened levels of reading anxiety (Matlin, 2022; Driggs, 2013; Wallace, 2013). This heightened anxiety, cyclically, acts as a fetter, further undermining fluency. The concomitant erosion of self-confidence in reading among these learners, a corollary of both the fluency and anxiety predicaments, only compounds the issue (Yamaç & Çeliktürk, 2018). In essence, a triadic relationship manifests, wherein reading fluency, anxiety, and confidence are inexorably interwoven. It becomes incumbent, therefore, to devise pedagogical interventions, such as the Read-Aloud Instructional Strategy (RAIS), that address this intricate triad, fostering not only improved fluency but also buttressing learners' confidence and ameliorating their reading-induced anxieties.

# 1.2. Motivation and Research Questions

In the sphere of academic inquiry, it is paramount that the motivation underpinning any research be firmly rooted in a quest to address substantive and hitherto unmet challenges. A meticulous analysis of the milieu of English Language Teaching delineates a palpable gap in our understanding of the intricate mechanisms governing reading fluency, particularly in the EFL context of Chinese undergraduates. This lacuna, when juxtaposed against the pronounced consequences of impaired fluency, both in terms of comprehension and its repercussions on the psychosocial well-being of learners, warrants focused attention. Therefore, it is propelled by a dual desire: firstly, to demystify the intricate nexus between reading fluency, anxiety, and confidence, and secondly, to explore innovative pedagogical paradigms capable of engendering transformative change in this triadic dynamic. The RAIS, with its premise of fostering fluency through vocalization, offers a tantalizing prospect in this regard (Chen, 2019; Mega, 2018; Waring, 2014). This instructional modality, by simulating the multisensory processes of fluent reading, may indeed serve as a catalyst in recalibrating learners' reading trajectories, thus ameliorating associated anxieties and bolstering confidence. Given the aforementioned motivations, the research enterprise remains underpinned by the following meticulously delineated inquiries:

- 1) What are the pre- and post-intervention results for reading fluency, reading anxiety, and confidence among Chinese EFL undergraduates?
- 2) Are there any demonstrable correlations among Chinese EFL undergraduates' reading fluency, anxiety, and confidence from perspectives of post-intervention?
- 3) To what extent, how the read-aloud instructional strategy impact English reading fluency, anxiety, and confidence among EFL Chinese undergraduates?

LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

# 1.3. Significance of the Study

The quest for pedagogical efficacy and refinement, particularly within the domain of English Language Teaching (ELT), necessitates a continual exploration of innovative instructional methodologies and their attendant implications. The present study, by focusing on the RAIS as a potential linchpin for ameliorating the conundrum of reading fluency, anxiety, and confidence among EFL Chinese undergraduates, occupies a pivotal position in this ongoing exploration (Duncan, 2020; Apandi, 2018). The significance of this research appears manifold. Firstly, its quasi-experimental research design promises to yield empirical findings that imbue the theoretical deliberations on reading fluency with an empirical gravitas. These findings have the potential to bridge the dichotomy between academic postulations and classroom realities, thereby ensuring that pedagogical interventions are grounded in robust empirical evidence. Secondly, by placing the Chinese undergraduate demographic at the epicenter of this investigation, the research endeavors to illuminate the unique challenges and instructional exigencies specific to this significant cohort within the broader Asian EFL tapestry. Given the geopolitical and socio-educational stature of China within the global educational landscape, insights garnered from this demographic bear substantial ramifications for ELT policy formulations, curriculum design, and pedagogical praxis, both within China and beyond. Thirdly, the significance of this study is accentuated when viewed through the lens of its potential contributions to the realm of educational psychology. By elucidating the triadic interplay between reading fluency, anxiety, and confidence, this research extends an invitation to educators and curriculum designers to reconsider the psychosocial dimensions of reading pedagogy. A heightened understanding of this triad can pave the way for more nuanced, psychologically-informed pedagogical interventions, thus ensuring that the affective dimensions of learning are accorded the attention they duly deserve (Layne, 2023; Kreider, 2018; Santoso, 2015).

Moreover, the current study's comparative evaluation of the RAIS vis-à-vis traditional pedagogical paradigms amplifies its significance. Such a juxtaposition promises to elevate the discourse beyond the myopic confines of instructional efficacy, fostering a broader dialogue on the ontological and epistemological foundations of ELT methodologies. The insights from this comparative examination can potentially catalyze a reevaluation of entrenched pedagogical dogmas, thereby fostering a climate of pedagogical innovation and reflexivity. In summation, the significance of this research could be underscored by its potential to engender transformative shifts across multiple dimensions - be it in the realm of pedagogical efficacy, curriculum design, educational policy, or the psychosocial understanding of reading. In an era characterized by rapid linguistic and pedagogical metamorphoses, studies of this ilk serve as vital touchstones, guiding educators and stakeholders in their unyielding pursuit of excellence and efficacy in the domain of ELT.

LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

# 2. Literature Review

# 2.1 Reading Fluency (RF): Definition, Related Theory and Empirical Studies

Reading fluency, in the realm of English Language Teaching and the broader purview of Second Language Acquisition, is not simply a measure of speed or mere oral recitation of text, but rather a composite of intricate components that enable meaningful comprehension. The act of reading is far from a monolithic process; rather, it encompasses an array of cognitive functions that synergize to yield comprehension (Hoyt, 2017; Kor et al., 2014). At its core, reading fluency is constituted by three pivotal elements: accuracy, automaticity, and prosody (Lee et al., 2019; Young & Rasinski, 2017). Accuracy implies the precise identification and articulation of words while automaticity underscores the effortless recognition of words, transitioning reading from a deliberate act to an intuitive one (Birch & Fulop, 2020; Al-Mahroogi & Roscoe, 2014). This effortlessness, as elucidated by Bernhardt (2021) means the reader no longer grapples with individual words but rather, fluidly navigates the text, freeing cognitive resources to grasp the underlying meaning. Prosody, often relegated to the periphery in novice discussions, is paramount. It refers to the rhythmic and tonal aspects of speech - the pitch, volume, and intonation that echo the nuances of natural conversation, thereby enhancing comprehension (Gorsuch & Taguchi, 2021; Bernhardt, 2021). Collectively, these components converge to define reading fluency as an amalgam of accurate word recognition, fluidity in reading, and expressive oration, all of which serve the ultimate purpose of comprehension.

Additionally, the theoretical underpinnings of reading fluency find roots in both cognitive science and linguistic realms. Automaticity, as derived from the Information Processing Theory (IPT), posits that repeated exposure and practice transform the decoding of words from a conscious, resource-draining task to an automatic one (Zhou, 2016; Donaldson, 2013). The theoretical trajectory then leads us to LaBerge and Samuels' Theory of Automatic Information Processing in Reading (1974), which intimates that as readers attain automaticity in word recognition, they allocate more cognitive resources to understanding the text, thereby enhancing comprehension. On the linguistic front, the theory of prosody draws from phonology, emphasizing the role of rhythmic patterns, intonation, and stress in lending meaning to the text (Ayu et al., 2017; Finn, 1977). Such theoretical perspectives underscore that fluency is not merely a linear progression from decoding to understanding but is underpinned by a constellation of cognitive and linguistic processes.

Last but not least, empirical forays into reading fluency within the domains of English as a Foreign Language (EFL) and English Language Teaching (ELT) have yielded noteworthy insights. The National Reading Panel's assertion that fluency is a cornerstone of effective reading aligns with various studies, underscoring its criticality (Ehri et al., 2001). However, a nuanced observation reveals disparities between oral reading fluency and subsequent comprehension levels (Nation & Macaliste, 2020; Al-Seghayer, 2016),

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

suggesting that while fluency is imperative, it would not guarantee comprehension. Instruments such as DIBELS or running records facilitate the assessment of fluency across academic tenures, enabling educators to tailor interventions. Dahl's Repeated Reading Technique (RRT) is a salient empirical contribution, emphasizing repeated oral readings to enhance fluency, with subsequent studies corroborating its efficacy (Babadjanova, 2022; Price & Bradley, 2016; Carver, 1974). However, a cautionary note resonates from findings that position fluency and comprehension as distinct, rather than conflated pillars. Overemphasizing speed might compromise comprehension, highlighting the need for a balanced pedagogical approach.

# 2.2 Reading Fluency, Comprehension, and Anxiety

A meticulous analysis of the available literature pertaining to reading and reading comprehension reveals a dichotomy in reading strategies, identified as extensive and intensive reading. Nation and Macaliste (2020) conceptualize extensive reading as an exploration of literature predominantly for pleasure, where the acquisition of specific details is not the priority. In contrast, intensive reading is associated with a more meticulous and analytical approach to texts, prioritizing accuracy over fluency, making it a preferred strategy for English for Specific Purposes classrooms as stipulated by Stephens (2017). Intensive reading serves as a catalyst for in-depth language acquisition by fostering a detailed exploration of reading materials, allowing learners to master language intricacies. Delving further into the cognitive aspects, Ammour (2021) posits that the cognitive processes involved in reading are closely intertwined with the emotional states of the learners, highlighting the interplay between emotional intelligence and interaction with texts. The incorporation of such affective factors is crucial, as Cecil et al. (2020) underscore their substantial impact on language acquisition processes, with anxiety being a pivotal factor influencing both productive and receptive skills. A nuanced understanding of these affective components, therefore, is indispensable for educators aiming to optimize reading comprehension and overall language acquisition (Muzammil & Andy, 2018; Aro & Lyytinen, 2016).

An intriguing pivot is noted in early language research, as documented by Yamaç and Çeliktürk (2018), with a shifted focus from productive to receptive skills, emphasizing the inherent complexities of reading, even in one's native language as postulated by Angordans and Viera (1997). This shift underscores the pressing necessity for a comprehensive exploration of the complexities of reading in foreign or second languages, acknowledging the inherent anxiety and challenges it entails. Furthermore, an examination of the Foreign Language Reading Anxiety Scale (FLRAS) reveals divergent findings regarding the correlation between reading anxiety and second language reading performance. Sparks et al. (2018) through an empirical study involving 92 university students, found that participants did not exhibit significant anxiety related to reading in a second language, contrasting markedly with the findings of Lien (2016), who identified a direct relationship between reading anxiety and language anxiety and

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

their subsequent impact on reading comprehension performance. These contrasting findings necessitate a critical re-evaluation of the conceptual frameworks underlying reading anxiety, prompting a re-examination of the stability and impact of reading anxiety compared to language anxiety, and the intricate dynamics inherent in these constructs (Bilge & Kalenderoğlu, 2022; Hwang & Bae, 2022; Hafsha, 2020). In conclusion, the synthesis of these varied studies unveils the multifaceted nature of reading and the intricate weave of cognitive and affective components it involves. A critical appraisal of extensive and intensive reading strategies, coupled with a deeper understanding of the affective dimensions of learning, particularly anxiety, is paramount for fostering enhanced reading comprehension and language mastery (Margolis & Broitman, 2023; Hamada & Takaki, 2019; Saito et al., 1999). The divergence in empirical findings regarding reading anxiety and its implications necessitates a sustained and rigorous inquiry into the underlying constructs and their nuanced interrelations to construct a cohesive, nuanced, and multidimensional understanding of reading and reading comprehension in the context of English language learning.

# 2.3 Empirical Studies on Reading Anxiety

The exploration of anxiety, especially in the context of educational realms and English language acquisition, has manifested a panoply of interpretations, hypotheses, and implications. This multidisciplinary discourse has been enriched by seminal works by theorists such as Spielberger (1972), Scovel (1978), and Horwitz et al. (1986), who have contributed nuanced and critical understandings of anxiety and its multiple facets. Their works delineate anxiety as an amalgamation of subjective feelings of tension, apprehension, and worry, accompanied by arousal of the autonomic nervous system, thereby offering a cognitive and physiological perspective on the subject (Spielberger, 2019). In scrutinizing the implications of anxiety on learning, it is crucial to acknowledge the duality of its effects—facilitating and debilitating, as established by He (2018). This duality draws parallels with Eysenck's theory (Bech, 2020), which is reminiscent of the Yerkes-Dodson Law (Cohen, 2018), illustrating the curvilinear relationship between anxiety and achievement based on task difficulty. Most of the existing literature has predominantly underscored the negative connotations of anxiety, indicating its detrimental impacts on various cognitive abilities, achievements, and aptitudes in diversified subjects, elucidating the pervasive consensus on the negative correlation between anxiety and language achievement (Alsaleem, 2019; Hasanah & Sholihah, 2017; Cakici, 2016).

The nuance of reading anxiety, specifically in the domain of foreign language acquisition, although initially overlooked, gained recognition in late 1990s studies by eminent scholars such as Saito et al. (1999) and Horwitz et al. (1986). Their seminal work in this realm led to the formulation of the Foreign Language Reading Anxiety Scale (FLRAS), offering a distinctive insight into the relationship between reading anxiety and general foreign language learning anxiety. Such studies elucidate the uniqueness of

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

foreign language reading anxiety, illuminating its distinctiveness from general foreign language anxiety and highlighting the interrelation between higher levels of both anxieties, concomitant with more off-task thoughts and impaired recollection of systematic language points. The discourse has been further enriched by meticulous studies conducted in different national contexts. In particular, Gong & Lee's (2023) research represents a beacon of systematic and reliable inquiry into foreign language reading anxiety among Chinese university students. The findings provide comparative insights, revealing higher levels of reading anxiety among Chinese students compared to their Asian counterparts and delineating the gender disparities therein. Furthermore, their research elucidates the inverse correlation between reading anxiety and language achievement, corroborating the prevalent thesis in the discourse, with medium levels of anxiety facilitating optimal performance in comparison to high or low levels. Concurrently, investigations by Alsharhani et al. (2023) and Al-Obaydi et al. (2023) have contributed profound insights into the relationship between anxiety and reading comprehension in foreign languages, underscoring the uniqueness and distinguishability of foreign language reading anxiety from general foreign language anxiety. Their contributions underscore the manifestations of higher levels of anxiety as they correlate to elevated off-task thoughts and reduced recollection of systematic language points. It is evident from this enriched tapestry of scholarly discourse that the intricate dynamics of reading anxiety necessitate a nuanced and multifaceted approach, recognizing its unique manifestations, implications, and correlations in the broader spectrum of language acquisition and educational psychology. A continued exploration and deepening understanding of these dynamics would invariably contribute to optimizing pedagogical strategies and enhancing the efficacy of language acquisition endeavors, particularly in diverse and multilingual educational contexts.

# 2.4 Relationship between Reading Fluency, Anxiety, and Confidence

Within the expansive domain of Second Language Acquisition (SLA), a critical triad has consistently stood at the fore: reading fluency, reading anxiety and reading self-confidence. In an attempt to elucidate the intricate nexus binding these concepts, a meticulous review of extant literature was conducted. The seminal work of Suzuki and Kormos (2022) underscored the paramountcy of self-confidence in learners' propensity to engage in oral classroom endeavors, positing that a robust self-confidence predisposes students to greater communicative efficacy. This assertion is buttressed by a tapestry of studies, including the likes of Kim (2021) and Alsuhaibani (2019), which found a direct correlation between heightened self-confidence and a willingness to embrace linguistic errors as an inherent facet of the learning process, thereby fortifying language proficiency. The juxtaposition of these learners with their low-confident counterparts, who frequently grapple with apprehensions of judgment or critique (Bensalah & Guerroudj, 2020; Bensalem, 2018), brings to the fore a significant pedagogical implication: the imperativeness of crafting a conducive learning milieu where students burgeon with

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

confidence and enthusiasm. Yet, the rapport between self-confidence and academic achievement remains a contentious issue, rife with empirical dichotomies. Boakye's (2015) research converges with several others, suggesting a positive linear relationship between self-confidence and linguistic grades. This relationship, though seemingly intuitive, is underscored by a cyclicality wherein escalating self-confidence augments academic attainment, which in turn bolsters self-confidence further (Altumigah & Alkhaleefah, 2022). Conversely, a dearth of self-confidence induces academic stasis.

Transcending mere academic performance, Bista (2008) and Diaz-Ducca (2012) interweave the multifaceted variables influencing SLA, among which the triad of motivation, anxiety, and self-confidence emerges as the linchpin. Anxiety, described by Huensch (2020) as a formidable barrier in SLA, manifests in myriad forms: from trepidation over evaluation to test-related anxieties. This affective turbulence not only erects barriers to linguistic immersion but, as Mills (2014) discerned, also dictates pedagogical preferences, with anxious learners gravitating towards safer, teacher-centric modalities. Nicklin et al. (2023) incisive observations explicate the intricate interplay between anxiety, performance pressure, and the subsequent erosion of self-confidence. By tying one's academic self-worth to the stringent yardstick of perfectionism, the very crucible of learning metamorphoses into an arena of crippling self-doubt, paralyzing the adventurous spirit essential for linguistic risk-taking and exploration (Altumigah & Alkhaleefah, 2022; Boakye, 2015). This echoes Krashen's statement underscoring the corollary between a robust self-image, self-confidence, and efficacious language acquisition (Jegerski, 2021). Synthesizing these threads, the landscape that emerges is one of intricate interdependence. Thus, in distilling the intricate web spun by reading fluency, reading anxiety, and reading self-confidence, what becomes unequivocally clear is the multifactorial nature of SLA, demanding an integrative, holistic pedagogical approach.

# 2.5 Read-Aloud Instructional Strategy (RAIS): Theory and Empirical Studies

In the landscape of pedagogical techniques, the read-aloud instructional strategy has asserted itself as a pivotal instructional device. Rooted fundamentally in the act of orally conveying written texts, this approach transcends mere vocalization. It embodies a systematic verbal rendition of text by the instructor, conscientiously crafted to bolster comprehension and augment linguistic proficiency among the listeners (Layne, 2023; Ayu et al., 2017; Tracey & Morrow, 2017). As the researchers delineate its definition, it is imperative to differentiate between the read-aloud method and spontaneous oral reading activities (Kahng, 2022; Lu & Liu, 2015; Ortlieb, 2014). The former serves as an orchestrated didactic endeavor, characterized by a premeditated selection of materials, strategic pauses for eliciting responses, and often, interspersed explanatory interpolations to elucidate intricate textual nuances. It could be not merely a passive auditory experience for learners; rather, it endeavors to galvanize active cognitive engagement and heighten linguistic immersion (Rafatbakhsh & Ahmadi, 2022; Lü, C, 2019). Navigating the theoretical substratum of the read-aloud strategy necessitates an

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

exploration of its alignment with various learning theories and constructs. Foremost, Vygotsky's socio-cultural theory stands salient (Chaiklin, 2003). Vygotsky postulated that linguistic interactions, notably between a more knowledgeable other (MKO) and the learner, scaffold cognitive development (Lantolf, 2013). The read-aloud strategy, in this paradigm, can be perceived as a conduit for this scaffolded interaction, where the educator serves as the MKO, bridging the chasm between learners' current and potential developmental states (Swain et al., 2010). Concurrently, Krashen's Input Hypothesis resonates with this approach (Hunkler, 2017). He posited that language acquisition materializes when learners are exposed to 'comprehensible input' that slightly surpasses their current proficiency level, often referred to as 'i+1' (Liu, 2022; Ahmad-Baaqeel, 2020). The meticulous material selection and deliberate elucidation inherent in the read-aloud approach align seamlessly with this proposition, ensuring that learners consistently operate at the edge of their competence, thus facilitating linguistic growth (Gong, 2023; Hunkler, 2017).

When subjecting the read-aloud methodology to empirical scrutiny within the EFL (English as a Foreign Language) and ELT (English Language Teaching) domains, one discerns a preponderance of studies that attest to its efficacy. Multiple longitudinal studies have unveiled a direct positive correlation between regular exposure to readaloud practice and enhancement in linguistic capabilities, specifically in vocabulary acquisition, syntactical awareness, and comprehension proficiency (Kotani & Yoshimi, 2021; Jo & Ma, 2016). For instance, a seminal study conducted in the late 20th century demonstrated that EFL learners who were systematically exposed to read-aloud sessions manifested substantially improved lexical dexterity compared to their counterparts who were bereft of such exposure (Kotani & Yoshimi, 2021; Zaretsky, 2016). Moreover, experimental designs juxtaposing traditional teaching methods with the read-aloud technique evinced the latter's superiority in fostering a nuanced grasp of textual themes and subtexts. It's noteworthy, however, that like all pedagogical approaches, the efficacy of read-aloud stays contingent upon its judicious implementation. An over-reliance without concurrent activities promoting active learner engagement might attenuate its potential benefits. Thus, while the empirical edifice undergirding the read-aloud strategy in EFL and ELT domains is robust, it behooves educators to be circumspect in its deployment, ensuring it complements a holistic pedagogical framework.

# 3. Methods

# 3.1 Research Design

In the realm of educational research, the quasi-experimental multi-group design emerges as a quintessential paradigm to elucidate causal relationships where randomized controlled trials are either impractical or ethically indeterminate. The study at hand, entitled "Leveraging Read-Aloud Instructional Approach for Enhancing English Reading Fluency, Anxiety, and Confidence of EFL Chinese Undergraduates," embarks on an

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

exploration delineated within the purview of this design. Commencing with the delineation of three erudite queries concerning the modulations in reading fluency, trepidation, and self-assurance, both ante and post the integration of a read-aloud pedagogical method, the study further discerns potential interconnectedness among these parameters and contrasts the read-aloud strategy with more conventional instructional techniques. Structurally, the research bifurcates participants into one comparison group and two experimental conglomerates over an eight-week instructional continuum. The comparison group, functioning as a baseline, remains untouched by any pedagogical intervention, providing an unadulterated benchmark for evaluating the efficacy of the introduced treatments. On the contrary, Experimental Group 1 immerses in a student-centric read-aloud paradigm, whilst Group 2 adopts an instructor-led counterpart. The meticulousness of this study is further underscored by periodic evaluations: apart from the initial and terminal assessments on reading fluency, apprehension, and confidence, interim evaluations in weeks 3 and 6 stand as a testament to the research's commitment to capturing evolving trends and nuances. Figure 1 in the following page encapsulates the schematic representation of the current quasiexperimental multi-group design.

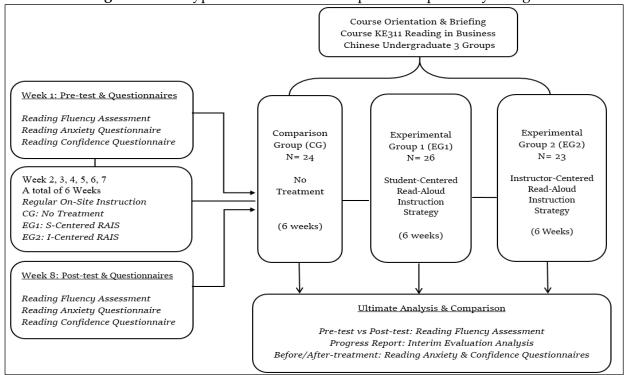
# 3.2 Research Participants

In any comprehensive investigation into the realms of pedagogical interventions, meticulous delineation of participant demography would be non-negotiable. The sample size comprised 73 Chinese undergraduates studying for their bachelor's degree at Chinese International College affiliated with a private university in Thailand. Notably, the dichotomy between the comparison and experimental groups was distinctly outlined. The comparison group comprised 24 participants (N=24, 32.9%), while the experimental cohorts-EG1 (N=26, 36.6%) and EG2 (N=23, 31.5%)-encompassed 26 and 22 participants respectively. On the other hand, the gender dispersion within this academic pursuit reveals a slight male dominance at 56.1% (N=41) juxtaposed with their female counterparts accounting for 43.9% (N=32). Such demographic intricacies could potentially inform nuances in educational psychology, bearing implications on the outcomes of the pedagogical method in question. Analyzing their academic specialization, International Business, claimed the most considerable chunk at 53.4% (N=39). Tourism Management and Accountancy & Finance trailed with 24.7% (N=18) and 21.9% (N=16) respectively. This diversification might offer crucial insights into the interdisciplinary implications of the Read-Aloud strategy. Lastly, a close look at their academic tenure reveals that freshmen, with a count of 42, dominated the sample space by 57.5%, while sophomores constituted 42.5% (N=31). This variance is pivotal as it might underscore the differential impact of the instructional approach based on the academic maturity of the participants. Presented Table 1 below serves as a concise tabulation delineating the demographic attributes of the participants:

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

Variable Category	Sub-Category	Number (N)	Percentage (%)
Group Assignment	Comp. Group	24	32.9%
	Exptl. Group 1	26	36.6%
	Exptl. Group 2	23	31.5%
Gender	Male	41	56.1%
	Female	32	43.9%
Undergraduate Profession	International Business	39	53.4%
	Tourism Management	18	24.7%
	Accounting and Finance	16	21.9%
Academic Level	Freshman	42	57.5%
	Sophomore	31	42.5%

**Figure 1:** Prototype of Mixed-Method Sequential Explanatory Design



# 3.3 Research Instrumentation

The study under consideration proffers a meticulous quasi-experimental multi-group design aimed at leveraging the Read-Aloud Instructional Approach to amplify English reading fluency, mitigate anxiety, and bolster the confidence of EFL Chinese Undergraduates. The meticulous selection of research instruments is crucial for the validity and reliability of the study.

The first instrument is an evaluative Rubric crafted for the assessment of Oral Reading Fluency (ORF), emanating from notable predecessors like the Oregon Public Education Network (Jungjohann et al., 2023; Mauludiyah, 2020; Zutell & Rasinski, 1991). This rubric functions on a 5-degree Likert Scale. With its evaluative criteria grounded in

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

phrasing, accuracy, and description, this tool demarcates six gradations of fluency, ranging from "1: Beginning Fluency" to "5: Exemplary Fluency." The high test-retest reliability of 0.90 establishes the instrument's rigor and its considerable alignment with standardized reading proficiency tests solidifies its external validity. In juxtaposition, the second instrument is the Foreign Language Reading Anxiety Scale (FLRAS), derived and refined from Saito et al. (1999). As a self-report measure, the FLRAS elucidates students' reading anxiety with respect to the target language, pivoting on the relative difficulty of reading vis-a-vis other linguistic competencies and their holistic reading perceptions. Comprising 20 items on a 5-point Likert scale, the FLRAS's range is delineated from 20 to 100, with an ascending score indicating augmented anxiety. With a commendable internal consistency coefficient of 0.822 (for a sample of n = 100), this instrument proficiently gauged English-speaking students' trepidation in reading English. Lastly, the PIRLS 2011 Students Confident in Reading Scale (SCIRS) from the Progress in International Reading Literacy Study (Hillman et al., 2023). This instrument, underpinned by a 7-item Likert scale, delineates its results through numerical values assigned to individual response categories, subsequently enabling the raw score calculation for respondents. Its rigorous statistical validation is evident from Cronbach's Alpha reliability coefficients, mostly oscillating around the 0.6-0.7 region, coupled with the factor loadings from principal components analysis which evince strong correlations. In summation, this triad of instruments lends the study a robust, multidimensional, and empirically validated scaffolding, enabling a comprehensive exploration of the research questions posed.

# 3.4 Guidelines of Instructional Treatment for All Groups

In the comparison group, an absence of a structured read-aloud strategy is markedly observed, where educators opt for a straightforward, unembellished dissemination of course content, foregoing an active, immersive engagement or recurrent exposition of the readings. This methodology, seemingly lacking in metacognitive enrichment, can potentially result in a paucity of cognitive engagement and subsequently, less effective internalization and synthesis of knowledge. Contrastingly, experimental group one employs a student-centered read-aloud approach, wherein students are stratified into diverse reading collectives, each bestowed with the responsibility of vocally articulating the course materials. This approach, indicative of a constructivist learning paradigm, fosters an enriched, interactive learning environment, necessitating students to engage with, interpret, and critically appraise the text, thereby cultivating enhanced comprehension and retention. Such methodology not only facilitates linguistic acquisition but also nurtures critical thinking, autonomy, and collaborative learning, seminal components in the developmental progression of metacognitive skills and linguistic proficiency. The second experimental group is characterized by the implementation of an instructor-centered read-aloud strategy. In this model, the instructor assumes a pivotal role, orchestrating the division of students into respective

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

reading clusters and leading the vocalization of textual content. Subsequent to the instructor's articulation, students are mandated to replicate the reading, invoking a symbiotic instructional interaction. This strategy amalgamates the benefits of authoritative instruction with active student participation, harnessing the instructor's expertise to model linguistic articulation and fluency, whilst the repetitive, active engagement facilitates the consolidation of newly acquired knowledge. Each stratagem, with its distinctive procedural framework, elicits varying degrees of cognitive engagement and learning outcomes. While the student-centered approach is redolent with opportunities for autonomous learning and critical reflection, the instructor-centered model offers a structured, guided learning pathway, amalgamating authoritative instruction with active learning. Conversely, the approach of the comparison group appears to be more passive, with potentially lesser engagement and internalization of the subject matter, indicative of a didactic, teacher-centered pedagogical paradigm.

# 3.5 Experimental Research Process, Data Collection and Analysis

In an academic study conducted from January to April 2023, we explored the impact of the Read-Aloud Instructional Strategy (RAIS) on English reading fluency, anxiety, and confidence among EFL Chinese undergraduates. The research had a quasi-experimental design with three groups: a comparison group with no treatment, Experimental Group 1 with student-centered RAIS, and Experimental Group 2 with instructor-centered RAIS. Over eight weeks, the study started with a pre-intervention test, had regular instructions from weeks 2 to 7, and concluded with a post-intervention assessment. Accurate data collection was essential, covering all three groups. Key data points were pre- and postintervention reading fluency scores, alongside reading anxiety and confidence questionnaires. Interim evaluations at weeks 3 and 6 ensured ongoing assessment. For data analysis, the study examined pre- and post-intervention results using descriptive analysis, while the Pearson Moment Correlation Analysis looked into correlations. To determine the read-aloud approach's impact, Cohen's d effect size and effect-size correlation (r-yλ) were used. This provided a comparative analysis between pre- and post-intervention reading fluency, confidence, and anxiety across all groups, offering a panoramic view of the instructional efficacy vis-a-vis traditional pedagogical techniques.

Cohen's 
$$d = M_1 - M_2 / \sigma_{pooled}$$
  
where  $\sigma_{pooled} = \sqrt{(\sigma_1^2 + \sigma_2^2) / 2}$   
 $r_{Y\lambda} = d / \sqrt{(d^2 + 4)}$ 

# 4. Results

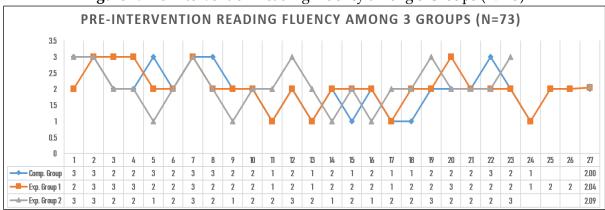
# 4.1 Experimental Groups: Enhanced Reading Fluency, Confidence and Low Anxiety

To address the first research question "What is the pattern and extent of academic burnout experienced by Chinese postgraduates during the thesis-writing process," the research results uncover a noteworthy pattern and extent of academic burnout experienced by Chinese postgraduates during distinct stages of the thesis-writing process. When analyzing the data pertaining to each phase, the Thesis-Writing Proposal (TTP) phase exhibited a mean burnout rating of 4.11, derived from 51 responses (X=4.11, N=51). This degree escalated during the Thesis-Writing 3-Chapter (TW3C) phase, registering a mean of 4.41 from 38 participants (X=4.41, N=38), indicating a peak in burnout during the midway point. However, a slight dip was observed in the final Thesis-Writing 5-Chapter (TW5C) phase, with a mean of 4.02 as recorded from 28 respondents (X=4.02, N=28). Cumulatively, across all three phases, the overall burnout mean is calculated to be 4.18, based on 117 responses (X=4.18, N=117). These findings vividly highlight the pervasive phenomenon of academic burnout amongst postgraduate students, confirming its pronounced existence throughout the thesis-writing process in its entirety. The intensity of burnout, although variable across stages, consistently maintains high levels, warranting further investigations into effective mitigation strategies. Table 3 succinctly encapsulates the synopsis of the extensive evaluation report on thesis-writing burnout among Chinese postgraduate students.

Table 3: Pre-and Post-Intervention Reading Fluency Performance among All Groups

Cuosan/Shushooz	Bef	ore INT	After INT		
Group/Strategy	Mean (X)	Std. Dev. (SD)	Mean (X)	Std. Dev. (SD)	
Comparison Group (No Treatment)	2.00	.722	2.04	.624	
Exp. Group 1 (Student-Centered)	2.04	.599	2.69	.735	
Exp. Group 2 (Instructor-Centered)	2.09	.668	4.35	.775	

Figure 2: Pre-Intervention Reading Fluency among 3 Groups (N=73)



# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

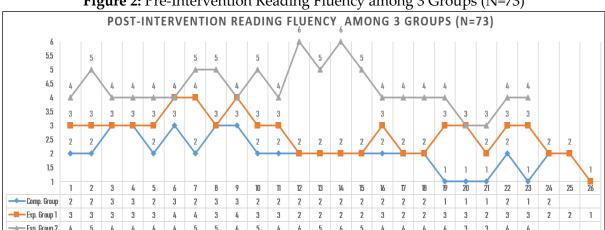


Figure 2: Pre-Intervention Reading Fluency among 3 Groups (N=73)

Moreover, in the meticulous scrutiny of the pre- and post-intervention results pertaining to reading confidence among Chinese EFL undergraduates, salient revelations emerge. Prior to intervention, a comparative examination reveals minimal discrepancies between the comparison group and the two experimental groups. The comparison group, consisting of a sample size (N) of 24, exhibited a mean confidence level (X) of 1.67 with a standard deviation (SD) of 0.574. Concurrently, both the student-centered (N=26) and instructor-centered (N=23) experimental groups manifested nearly identical mean confidence levels of 1.71, albeit with variances in standard deviations at 0.679 and 0.554, respectively. This commensurability accentuates the homogeneity of the cohort under study, providing a consistent baseline. However, the post-intervention data is more illuminative. The comparison group experienced a marginal enhancement, registering a mean confidence of 1.71 (SD=0.593). In stark contrast, the student-centered approach bore significant fruition with an escalated mean confidence level of 2.19 (SD=0.597), revealing a substantive augmentation in confidence post-intervention. Yet, the most conspicuous escalation was evident within the instructor-centered group, which registered an astonishing mean confidence level of 3.46 (SD=0.598). The ensuing disparities between the post-intervention results of the experimental groups and the comparison group unequivocally underscore the potent impact of pedagogical strategies on EFL undergraduate confidence. In Table 3, presented herein, a succinct compilation of outcomes is offered, encapsulating the reading self-confidence indices of Chinese EFL undergraduates before and after the intervention.

**Table 3:** Pre-and Post-Intervention Reading Confidence Level among All Groups (N=73)

Group & Intervention Type	N	Pre-INT (X/SD)	Post-INT (X/SD)
Comparison Group (No Treatment)	24	X=1.67; SD=.574	X=1.71; SD=.593
Exp. Group 1 (Student-Centered)	26	X=1.71; SD=.679	X=2.19; SD=.597
Exp. Group 2 (Instructor-Centered)	23	X=1.71; SD=.554	X=3.49; SD=.598

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

Furthermore, in pursuit of understanding the differential impact of intervention methods on reading anxiety levels of Chinese EFL undergraduates, the data gleaned from the study evinces notable shifts post-intervention. The commencement metrics, denominated as the "Pre-Intervention" phase, manifested almost marginal differentiation across the comparison group and both experimental subsets. The comparison group, comprised of 24 participants, rendered a reading anxiety mean (X) of 4.46 with a standard deviation (SD) of 0.525. Simultaneously, experimental group 1 (student-centered paradigm) with 26 participants proffered a mean (X) of 4.50 and an SD of 0.579, while experimental group 2 (instructor-centered paradigm) recorded an almost equivalent mean (X) of 4.47 with an SD of 0.552. Ergo, the preliminary data delineates only infinitesimal disparity amongst the three clusters. However, the Post-Intervention data elucidates a dramatic variance in reading anxiety levels. The comparison group experienced an almost negligible decrement in reading anxiety, settling at a mean (X) of 4.44 and an SD of 0.521. Contrastingly, Experimental Group 1 exhibited a substantial reduction in reading anxiety, plummeting to a mean (X) of 3.28 with an SD of 0.829. More profound was the shift in experimental group 2, where reading anxiety attenuated drastically to a mean (X) of 1.78, accompanied by an SD of 0.752. Thus, while the instructor-centered paradigm appeared to have a more pronounced ameliorative effect on reading anxiety, the studentcentered approach too demonstrated efficacy, albeit to a lesser magnitude. Table 4 provides a concise summary of the results, illustrating the level of reading anxiety among Chinese EFL undergraduates prior to and subsequent to the implementation of the intervention.

**Table 4:** Pre-and Post-Intervention Reading Anxiety Level among All Groups (N=73)

Group & Intervention Type	N	Pre-INT (X/SD)	Post-INT (X/SD)
Comparison Group (No Treatment)	24	X=4.46; SD=.525	X=4.44; SD=.521
Exp. Group 1 (Student-Centered)	26	X=4.50; SD=.579	X=3.28; SD=.829
Exp. Group 2 (Instructor-Centered)	23	X=4.47; SD=.552	X=1.78; SD=.752

# 4.2 Instructor-Centered Group: More Robust Correlation among Variables

In addressing the second research question posed, concerning the post-intervention correlations among Chinese EFL undergraduates' reading fluency, anxiety, and confidence, meticulous scrutiny of pre-intervention data becomes requisite. Prior to the intervention, the Comparison group, composed of 24 participants, demonstrated a weakly positive correlation between reading fluency and reading confidence (r=.097, p=.356). The same group evidenced a weakly negative correlation between reading fluency and reading anxiety (r=-.013, p=.051). Furthermore, the correlation between reading confidence and reading anxiety was likewise weakly negative (r=-.011, p=.958). Turning our analytical gaze to the experimental group, predicated on a student-centered pedagogical approach and consisting of 26 participants, it was ascertained that reading fluency and reading confidence bore a weakly positive correlation (r=.133, p=.253). Additionally, both the correlation between reading fluency and reading anxiety and

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

reading confidence and reading anxiety were weakly negative (r=-.122, p=.274; r=-.137, p=.894 respectively). Notably, the instructor-centered experimental group (N=23) displayed results in congruence with the aforementioned groups: reading fluency and reading confidence were weakly positively correlated (r=.077, p=.728), while the correlations for reading fluency and reading anxiety and reading confidence and reading anxiety were respectively weakly negative (r=-.119, p=.316) and moderately negative (r=-.208, p=.318).

Post-intervention, discernible shifts in the data can be witnessed. The Comparison group, retaining the same number of participants, postulated a slight increment in the positive correlation between reading fluency and reading confidence (r=.105, p=.148). Nonetheless, the correlations between reading fluency and reading anxiety (r=-.016, p=.938) and reading confidence and reading anxiety (r=-.107, p=.331) remained weakly negative. In the student-centered experimental group, the correlation between reading fluency and reading confidence became more pronounced, albeit still weakly positive (r=.154, p=.452), with the other correlations also persisting in their negative nature (r=-.145, p=.084; r=-.204, p=.041 respectively). Remarkably, the instructor-centered group post-intervention evidenced more robust correlations: reading fluency and reading confidence showcased a weakly positive correlation (r=.329, p=.294); meanwhile, the correlation between reading fluency and reading anxiety and reading confidence and reading anxiety were respectively weakly negative (r=-.352, p=.814) and moderately negative (r=-.544, p=.262). The results are succinctly summarized in Table 5, which depicts the correlations among three variables of Chinese EFL undergraduates prior to and subsequent to the intervention.

Table 5: Pre-and Post-Intervention Correlations among All Variables (N=73)

Group/Correlation	Fluency & Confidence	Fluency & Anxiety	Confidence & Anxiety
Comp. Group (Pre-)	r=.097 (p=.356)	r=013 (p=.051)	r=011 (p=.958)
Exp. Group 1 (Pre-)	r=.133 (p=.253)	r=122 (p=.274)	r=137 (p=.894)
Exp. Group 2 (Pre-)	r=.077 (p=.728)	r=119 (p=.316)	r=208 (p=.318)
Comp. Group (Post-)	r=.105 (p=.148)	r=016 (p=.938)	r=107 (p=.331)
Exp. Group 1 (Post-)	r=.154 (p=.452)	r=145 (p=.084)	r=204 (p=.041)
Exp. Group 2 (Post-)	r=.329 (p=.294)	r=352 (p=.814)	r=544 (p=.262)

**Note:** Correlation is significant at the 0.05 level (2-tailed).

# 4.3 Experimental Groups: Large or Extremely Large Effect Size

In elucidating the overarching query: to what degree the read-aloud instructional stratagem potentially modulates English reading capabilities, anxiety, and self-assurance among EFL Chinese undergraduates, a meticulous examination of the empirical data, both pre and post-intervention, emerges as quintessential. The ensuing discourse is committed to an analytical comparison of Cohen's d effect size, a veritable metric that quantitatively captures the magnitude of difference between two means.

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

In the realm of reading anxiety, the comparison group (pre-intervention) manifested a mean of 4.46 (SD=0.525) which marginally declined post-intervention to 4.44 (SD=0.521), yielding a d=0.038, thus categorized as a "trivial effect". Conversely, experimental group 1 (student-centered approach) witnessed a substantial decrement from a pre-intervention mean of 4.50 (SD=0.579) to a post-intervention mean of 3.28 (SD=0.829). This precipitous drop culminated in a Cohen's d of 0.706, signaling a "medium effect". The experimental group 2 (instructor-centered approach) exhibited an even more pronounced alteration; from a pre-intervention mean of 4.47 (SD=0.552) plummeting to 1.78 (SD=0.752) post-intervention, engendering a Cohen's d of 1.378, indisputably a "large effect size". In regard to reading confidence, the comparison group experienced a minuscule uptick post-intervention (Mean (X) =1.71, SD=0.593 from Mean (X)=1.67, SD=0.574 pre-intervention) with a Cohen's d of 0.068 - another "trivial effect". Experimental group 1 (student-centered) presented an uplift from 1.71 (SD=0.679) preintervention to 2.19 (SD=0.597) post-intervention, with a Cohen's d of 0.750, designating a "medium effect". Experimental group 2 (instructor-centered) exhibited an ascension from 1.71 (SD=.554) pre-intervention to an impressive 3.46 (SD=.598) post-intervention, amassing a d of 1.750, undeniably a "large effect size". Finally, concerning reading fluency, the comparison group illustrated a mere enhancement in the post-intervention phase, while both experimental groups, especially the instructor-centered one, showcased dramatic improvements, with Cohen's d effect sizes of 0.969 and a staggering 3.123 respectively.

This in-depth examination of the empirical data vis-à-vis the effect of the readaloud instructional intervention is revealing in its stark disparities among the groups. The comparison group, across all criteria – reading anxiety, confidence, and fluency – demonstrated only trifling alterations post-intervention, underscoring the absence of any significant external influence. This deduction finds validation in the uniformly trivial Cohen's d effect sizes observed. On the other hand, both the student-centered and instructor-centered experimental groups proffered results that defy inconspicuousness. While the student-centered approach yielded medium effect sizes in the domains of reading anxiety and confidence, the instructor-centered approach excelled with large effect sizes, indicating the profound impact of this particular pedagogic method. What is particularly arresting is the exceptional enhancement in reading fluency in the instructorcentered experimental group, registering an effect size that borders on the extraordinary. It intimates not only the efficacy of the read-aloud strategy but also underscores the instructor's pivotal role in the educational process, especially within the purview of English language teaching among Chinese undergraduates. Table 6 summarizes the effect size of read-aloud instructional method on three variables of Chinese EFL undergraduates prior to and after the intervention.

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

Table 5. Summary	of Effect Size RAIS	S on All Variables b	pefore and after th	e Intervention (N=73)
rable 3. Junimary	OI LITECT DIZE IVAL	on an variables t	ciore and anter in	

Group/Measure	Pre- X/SD	Post- X/SD	Cohen's d	Effect Size r	Interpretation
Comp. Group R. Anxiety	4.46 ± .525	4.44 ± .521	.038	.019	Trivial Effect
Exp. Group 1 R. Anxiety	4.50 ± .579	3.28 ± .829	.706	.649	Medium Effect
Exp. Group 2 R. Anxiety	4.47 ± .552	1.78 ± 752	*1.378	.752	Large Effect
Comp. Group R. Confidence	1.67 ± .574	1.71 ± .593	.068	.034	Trivial Effect
Exp. Group 1 R. Confidence	1.71 ± .679	2.19 ± .597	.750	.351	Medium Effect
Exp. Group 2 R. Confidence	1.71 ± .554	$3.46 \pm .598$	*1.750	.947	Large Effect
Comp. Group R. Fluency	2.00 ± .722	2.04 ± .624	.059	.029	Trivial Effect
Exp. Group 1 R. Fluency	2.04 ± .599	2.69 ± .735	*.969	.436	Large Effect
Exp. Group 2 R. Fluency	2.09 ± .668	4.35 ± .775	*3.123	.842	Extremely Large Effect

# 5. Conclusion and Discussion

In synthesizing the plethora of information gleaned from the in-depth analysis of the empirical data, several profound insights emerge which are worthy of cogitation. Initially, the baseline measurements, characterized by the pre-intervention phase, proffered marginal discrepancies among the groups, thus ensuring the integrity and legitimacy of the ensuing comparisons. The interventional efficacy, measured through means and standard deviations, reveals the palpable superiority of the instructor-centered read-aloud strategy over its student-centered counterpart in amplifying reading fluency, attenuating reading anxiety, and fortifying reading confidence among Chinese EFL undergraduates. This observation, buttressed by the dramatic variances in post-intervention outcomes, stands as a testimony to the critical influence an instructor wields in the pedagogic framework.

The Cohen's d effect size findings further fortify this proposition. In a discipline where effect sizes of 0.2, 0.5, and 0.8 demarcate small, medium, and large effects respectively (Cantor, 1996), the instructor-centered group's effect size in reading fluency is almost four times the threshold of a large effect. This observation would be nothing short of monumental and serves to underscore the profound repercussions this pedagogical method may hold for English language teaching paradigms. The pronounced magnitude of change registered by the instructor-centered paradigm – especially in comparison with the student-centered approach and the almost stasis-like comparison group – sheds light on the pivotal role of structured, instructor-guided methodologies in ameliorating the English language proficiency of Chinese EFL

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

undergraduates (Kondo, 2021; Kotani & Yoshimi, 2021). Further dissecting the correlations between reading fluency, confidence, and anxiety, it becomes apparent that while the student-centered pedagogical approach did manifest noteworthy progressions, the instructor-centered methodology's correlations post-intervention were substantially more robust. This substantiates the hypothesis that the efficacy of the instructor's pedagogical approach is not just circumscribed to a singular domain of reading fluency, but its reverberations can be discerned across multiple dimensions of the learning experience, from confidence to anxiety alleviation (Wyatt, 2022; Lü, 2019). The comprehensive analysis also alludes to the interdependence and interconnectedness of reading fluency, confidence, and anxiety, and how a strategic, instructor-led pedagogical intervention can concurrently optimize all three facets.

In summation, while both experimental groups – particularly when juxtaposed against the comparison group – have unequivocally validated the potential of the readaloud strategy in bolstering English reading capabilities, it is the instructor-centered approach that emerges as the veritable tour de force. Its unparalleled efficacy, as evinced by the empirical data, accentuates the monumental role instructors can play in the academic trajectory of EFL students, and by extension, underscores the indispensability of informed, research-backed pedagogical strategies in the realm of English language teaching. Future research might further explore the nuances of this instructor-led paradigm, potentially illuminating the specific aspects of this methodology that render it so efficacious, thereby paving the way for even more refined pedagogical strategies in the future.

# 6. Limitations and Recommendations

In the scholarly pursuit of knowledge, it is quintessential to approach findings, irrespective of their magnitude and resonance, with a modicum of circumspection. Delving into the limitations inherent in the present study, one must first acknowledge the potential constraints delineated by the study's cultural and geographical purview. Focusing predominantly on Chinese EFL undergraduates, there arises an inevitable question of external validity. Can these findings, as compelling as they are within their present context, be seamlessly extrapolated to other demographic and cultural cohorts? The instructor-led efficacy demonstrated herein may be intertwined with socio-cultural idiosyncrasies inherent to the Chinese educational milieu, where deference to an instructor's authority is deeply ingrained. It is conceivable that different sociocultural contexts might engender different relational dynamics between students and instructors, thereby potentially moderating the observed effects. Moreover, while the methodology is rigorous, the bifurcation into merely two pedagogical strategies - instructor-centered and student-centered - may inadvertently simplify a complex tapestry of instructional approaches. There exists a vast continuum of instructional modalities that could be embraced, each with its unique nuances and pedagogical implications. A more

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

granulated approach, exploring various hybridized strategies, may offer further insights into the multifaceted realm of English language teaching. Accordingly, future studies would benefit from a broader geographical and cultural spectrum, ensuring more generalized applicability of findings. Additionally, delving deeper into the intricate matrix of pedagogical methodologies beyond the binary distinction made in this study might unearth further nuances, thereby facilitating a richer, more textured understanding of English language teaching dynamics.

In terms of recommendations, this study underiably underscores the salience of the instructor's role in the English language teaching paradigm. Educational institutions, policy-makers, and curriculum designers should accord significant consideration to the incorporation of instructor-led strategies, particularly in contexts mirroring the cultural and educational predilections of the sample studied. Training programs could be instituted to further enhance instructors' skills in leveraging the read-aloud strategy to its utmost potential. Moreover, it would be judicious to explore technological augmentations that might serve to bolster the instructor's impact, potentially synergizing traditional pedagogy with contemporary digital advancements. Notwithstanding the prominence of the instructor-centered methodology elucidated in this study, it would be myopic to eschew the student-centered approach in its entirety. There remains merit in fostering student autonomy and self-directed learning. Thus, an ideal pedagogical framework might well be one that judiciously amalgamates both approaches, capitalizing on the strengths of each, while assiduously mitigating their respective limitations.

# **Conflict of Interest Statement**

The author declares no conflicts of interest.

# About the Author(s)

**Dr. Li-Wei (Henry) Wei** is a distinguished researcher, serving as a full-time Doctoral Pedagogue at the illustrious Chinese International College, a renowned institution within the acclaimed Dhurakij Pundit University. His broad spectrum of academic interest covers an impressive range of disciplines, inclusive of English as a Second Language (ESL) and English as a Foreign Language (EFL), English for Specific Purposes (ESP), Writing Instruction, Language Education Studies, Collocational Analysis, Research in Higher Education, Educational Psychology and to name but a few. Esteemed as an integral figure within the Thai-Chinese scholarly community at DPU Thailand, Dr. Wei has contributed to the academic world through an extensive corpus of insightful publications. Concurrently, he is engaged in an ongoing series of research projects aimed at broadening the horizons of his fields of expertise. His relentless pursuit of knowledge and dedication to his discipline align with his ultimate goal of achieving the respected title of professorship.

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

# References

- Ahmad-Baaqeel, N. (2020). Improving student motivation and attitudes in learning English as a second language; Literature as pleasurable reading: Applying Garner's theory of multiple intelligences and Krashen's filter hypothesis. *Arab World English Journal for Translation and Literary Studies*, 4(1), 37-51. <a href="https://doi.org/10.24093/awejtls/vol4no1.4">https://doi.org/10.24093/awejtls/vol4no1.4</a>
- Al-Mahrooqi, R., & Roscoe, A. (2014). Focusing on EFL reading: Theory and practice. Cambridge Scholars Publishing.
- Al-Obaydi, L. H., Rahul, D. R., & Pikhart, M. (2023). The effect of online oral reading on reading comprehension, reading anxiety, and classroom anxiety among EFL learners. *Education and Information Technologies*. <a href="https://doi.org/10.1007/s10639-023-11950-v">https://doi.org/10.1007/s10639-023-11950-v</a>
- Alsaleem, A. A. (2019). Review of foreign language anxiety relationship with language achievement of EFL students in Saudi Arabia. *International Journal of English Linguistics*, 10(1), 305. <a href="https://doi.org/10.5539/ijel.v10n1p305">https://doi.org/10.5539/ijel.v10n1p305</a>
- Al-Seghayer, K. (2016). ESL/EFL instructors' perceptions of the importance of computer-assisted reading in L2 reading instruction. *Theory and Practice in Language Studies*, 6(9), 1753. <a href="https://doi.org/10.17507/tpls.0609.05">https://doi.org/10.17507/tpls.0609.05</a>
- Alsharhani, H. K., Ghonsooly, B., & Meidani, E. N. (2023). Probing the relationship among reading anxiety, mindfulness, reflective thinking, and reading comprehension ability of Iraqi intermediate and advanced EFL learners. *Training*, *Language and Culture*, 7(3), 9-22. <a href="https://doi.org/10.22363/2521-442x-2023-7-3-9-22">https://doi.org/10.22363/2521-442x-2023-7-3-9-22</a>
- Alsuhaibani, Z. (2019). The relationship between female EFL students' use of reading strategies and their reading self-efficacy. *International Journal of Arabic-English Studies*, 19(2), 373-393. <a href="https://doi.org/10.33806/ijaes2000.19.2.8">https://doi.org/10.33806/ijaes2000.19.2.8</a>
- Altumigah, E. S., & Alkhaleefah, T. A. (2022). The relationship between reading self-efficacy and perceived use of reading strategies among Saudi EFL students. *International Journal of Linguistics*, 14(6), 48. <a href="https://doi.org/10.5296/ijl.v14i6.20037">https://doi.org/10.5296/ijl.v14i6.20037</a>
- Ammour, K. (2021). Developing elementary EFL learners' procedural knowledge and strategic awareness in reading classes during the COVID-19 pandemic: Algerian teachers' challenge. <a href="https://doi.org/10.31235/osf.io/gz92u">https://doi.org/10.31235/osf.io/gz92u</a>
- Angordans, J. P., & Viera, D. J. (1997). *Applied languages: Theory and practice in ESP*. Universidad de València.
- Apandi, A. (2018). The effect of interactive-read aloud strategy on the extroverted and introverted students' reading comprehension. *Academic Journal Perspective: Education, Language, and Literature,* 2(1), 194. <a href="https://doi.org/10.33603/perspective.v2i1.1658">https://doi.org/10.33603/perspective.v2i1.1658</a>
- Aro, M., & Lyytinen, H. (2016). Training reading skills in Finnish: From reading acquisition to fluency and comprehension. *Literacy Studies*, 125-140. <a href="https://doi.org/10.1007/978-3-319-30478-6">https://doi.org/10.1007/978-3-319-30478-6</a> 8

- Ayu, M., Dahlan Diem, C., & Vianty, M. (2017). Secondary school students' English literacy: Use of interactive read aloud instructional strategy. *International Journal of Applied Linguistics and English Literature*, 6(7), 292. https://doi.org/10.7575/aiac.ijalel.v.6n.7p.292
- Babadjanova, U. (2022). Repeated reading as a technique of developing fluency. *International Journal for Research in Applied Science and Engineering Technology*, 10(3), 845-846. <a href="https://doi.org/10.22214/ijraset.2022.40693">https://doi.org/10.22214/ijraset.2022.40693</a>
- Bae, E. Y., & Oh, S. (2013). Native speaker and nonnative speaker identities in repair practices of English conversation. *Australian Review of Applied Linguistics*, 36(1), 20-51. <a href="https://doi.org/10.1075/aral.36.1.02bae">https://doi.org/10.1075/aral.36.1.02bae</a>
- Bech, P. (2020). Psychoticism (Eysenck's theory). *Encyclopedia of Personality and Individual Differences*, 4235-4237. <a href="https://doi.org/10.1007/978-3-319-24612-3">https://doi.org/10.1007/978-3-319-24612-3</a> 1103
- Bensalah, H., & Guerroudj, N. (2020). The effect of cultural schemata on EFL learners' reading comprehension ability. <a href="https://doi.org/10.31235/osf.io/gzchv">https://doi.org/10.31235/osf.io/gzchv</a>
- Bensalem, E. (2018). Foreign language anxiety of EFL students: Examining the effect of self-efficacy, self-perceived proficiency and Sociobiographical variables. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3201901
- Bernhardt, E. B. (2021). Second-language reading. *Linguistics*. <a href="https://doi.org/10.1093/obo/9780199772810-0274">https://doi.org/10.1093/obo/9780199772810-0274</a>
- Bidal, J., & Doman, E. (2016). Departing from tradition: Innovations in English language teaching and learning. Cambridge Scholars Publishing.
- Bilge, H., & Kalenderoğlu, İ. (2022). The relationship between reading fluency, writing fluency, speaking fluency, reading comprehension, and vocabulary. *TED EĞİTİM VE BİLİM*, 47(209). <a href="https://doi.org/10.15390/eb.2022.9609">https://doi.org/10.15390/eb.2022.9609</a>
- Birch, B. M., & Fulop, S. (2020). English L2 reading: Getting to the bottom. Routledge.
- Boakye, N. A. (2015). The relationship between self-efficacy and reading proficiency of first-year students: An exploratory study. *Reading & Writing*, 6(1). <a href="https://doi.org/10.4102/rw.v6i1.52">https://doi.org/10.4102/rw.v6i1.52</a>
- Cakici, D. (2016). The correlation among EFL learners' test anxiety, foreign language anxiety and language achievement. *English Language Teaching*, 9(8), 190. https://doi.org/10.5539/elt.v9n8p190
- Cantor, A. B. (1996). Sample-size calculations for Cohen's kappa. *Psychological Methods*, 1(2), 150-153. <a href="https://doi.org/10.1037/1082-989x.1.2.150">https://doi.org/10.1037/1082-989x.1.2.150</a>
- Carver, R. P. (1974). Measuring the primary effect of reading: Reading-storage technique, understanding judgments, and cloze. *Journal of Reading Behavior*, *6*(3), 249-274. https://doi.org/10.1080/10862967409547100
- Cecil, N. L., Lozano, A., & Chaplin, M. (2020). *Striking a balance: A comprehensive approach to early literacy*. Routledge.
- Chaiklin, S. (2003). The zone of proximal development in Vygotsky's analysis of learning and instruction. *Vygotsky's Educational Theory in Cultural Context*, 39-64. <a href="https://doi.org/10.1017/cbo9780511840975.004">https://doi.org/10.1017/cbo9780511840975.004</a>

- Chen, C. (2019). Differences between visual style and verbal style learners in learning English. *Computer-Assisted Language Learning*, 1894-1908. <a href="https://doi.org/10.4018/978-1-5225-7663-1.ch090">https://doi.org/10.4018/978-1-5225-7663-1.ch090</a>
- Cohen, R. A. (2018). Yerkes-Dodson law. *Encyclopedia of Clinical Neuropsychology*, 3761-3762. <a href="https://doi.org/10.1007/978-3-319-57111-9">https://doi.org/10.1007/978-3-319-57111-9</a> 1340
- Donaldson, L. (2013). Structural contingency theory/Information processing theory. *Oxford Bibliographies Online Datasets*. <a href="https://doi.org/10.1093/obo/9780199846740-0062">https://doi.org/10.1093/obo/9780199846740-0062</a>
- Driggs, C. (2013). The efficacy of repeated reading on secondary students' oral reading fluency and retell fluency. <a href="https://doi.org/10.15385/tmed.2013.4">https://doi.org/10.15385/tmed.2013.4</a>
- Duncan, S. (2020). The reading aloud in Britain today (RABiT) project. *Oral Literacies*, 17-29. <a href="https://doi.org/10.4324/9780367087005-ch2">https://doi.org/10.4324/9780367087005-ch2</a>
- Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the national reading panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250-287. <a href="https://doi.org/10.1598/rrq.36.3.2">https://doi.org/10.1598/rrq.36.3.2</a>
- Finn, P. J. (1977). Word frequency, information theory, and cloze performance: A transfer feature theory of processing in reading. *Reading Research Quarterly*, 13(4), 508. <a href="https://doi.org/10.2307/747510">https://doi.org/10.2307/747510</a>
- Gong, J. (2023). The concept, content and implication of Krashen's input hypothesis. *Proceedings of the 2022 4th International Conference on Literature, Art and Human Development (ICLAHD 2022)*, 1208-1213. <a href="https://doi.org/10.2991/978-2-494069-97-8">https://doi.org/10.2991/978-2-494069-97-8</a> 154
- Gong, Y., & Lee, J. (2023). Effects of PASS theory on aged Chinese EFL learners' reading comprehension ability. *The English Teachers Association in Korea*, 29(1), 1-21. <a href="https://doi.org/10.35828/etak.2023.29.1.1">https://doi.org/10.35828/etak.2023.29.1.1</a>
- Gorsuch, G., & Taguchi, E. (2021). Foreign language reading fluency and reading fluency methodologies. *Research Questions in Language Education and Applied Linguistics*, 469-474. <a href="https://doi.org/10.1007/978-3-030-79143-8">https://doi.org/10.1007/978-3-030-79143-8</a> 83
- Hafsha, A. (2020). Relationship between reading anxiety, reading strategies and language competence of rural ESL secondary learners. <a href="https://doi.org/10.31237/osf.io/v8ajs">https://doi.org/10.31237/osf.io/v8ajs</a>
- Hamada, A., & Takaki, S. (2019). Approximate replication of Matsuda and Gobel (2004) for psychometric validation of the foreign language reading anxiety scale. *Language Teaching*, 54(4), 535-551. <a href="https://doi.org/10.1017/s0261444819000296">https://doi.org/10.1017/s0261444819000296</a>
- Hasanah, M., & Sholihah, R. Y. (2017). Correlation between reading literacy ability and achievement in learning Indonesian language in grade X. *ISLLAC: Journal of Intensive Studies on Language, Literature, Art, and Culture,* 1(2), 83-88. <a href="https://doi.org/10.17977/um006v1i22017p083">https://doi.org/10.17977/um006v1i22017p083</a>
- Hazaea, A. N., & Alzubi, A. A. (2018). Impact of mobile assisted language learning on learner autonomy in EFL reading context. *Journal of Language and Education*, 4(2), 48-58. <a href="https://doi.org/10.17323/2411-7390-2018-4-2-48-58">https://doi.org/10.17323/2411-7390-2018-4-2-48-58</a>

- Hillman, K., O'Grady, E., Rodrigues, S., Schmid, M., & Thomson, S. (2023). Progress in reading literacy study: Australia's results from PIRLS 2021. <a href="https://doi.org/10.37517/978-1-74286-693-2">https://doi.org/10.37517/978-1-74286-693-2</a>
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132. <a href="https://doi.org/10.1111/j.1540-4781.1986.tb05256.x">https://doi.org/10.1111/j.1540-4781.1986.tb05256.x</a>
- Hoyt, L. (2017). *Interactive read-alouds, grades K-1: Linking standards, fluency, and comprehension*. Firsthand Books.
- Huensch, A. (2020). Fluency. *The Routledge Handbook of Second Language Acquisition and Corpora*, 293-304. https://doi.org/10.4324/9781351137904-26
- Hunkler, M. A. (2017). Krashen's hypotheses. A critical and reflected perspective. GRIN Verlag.
- Hwang, I., & Bae, J. (2022). Foreign language reading anxiety and reading comprehension of Korean secondary EFL students. *Secondary English Education*, 15(4), 35-58. <a href="https://doi.org/10.20487/kasee.15.4.202211.35">https://doi.org/10.20487/kasee.15.4.202211.35</a>
- Ibrahim, M. (2018). Explicit versus implicit modes of EFL reading literacy instruction: Using phonological awareness with adult Arab learners. *English Language Teaching*, 11(9), 144. <a href="https://doi.org/10.5539/elt.v11n9p144">https://doi.org/10.5539/elt.v11n9p144</a>
- Jegerski, J. (2021). Krashen and second language processing. *Foreign Language Annals*, 54(2), 318-323. <a href="https://doi.org/10.1111/flan.12557">https://doi.org/10.1111/flan.12557</a>
- Jo, Y. A., & Ma, J. H. (2016). The effects of input enhancement on reading comprehension and vocabulary learning in L2 instruction. *The Linguistic Association of Korea Journal*, 24(3), 17-35. https://doi.org/10.24303/lakdoi.2016.24.3.17
- Jungjohann, J., DeVries, J. M., & Gebhardt, M. (2023). Measuring oral reading fluency (ORF) computer-based and paper-based: Examining the mode effect in reading accuracy and reading fluency. *Education Sciences*, 13(6), 624. https://doi.org/10.3390/educsci13060624
- Kahng, J. (2022). Fluency. The Routledge Handbook of Second Language Acquisition and Speaking, 188-200. <a href="https://doi.org/10.4324/9781003022497-17">https://doi.org/10.4324/9781003022497-17</a>
- Khansir, A. A., & Dehghani, N. (2015). The impact of extensive reading on grammatical mastery of Iranian EFL learner. *Theory and Practice in Language Studies*, *5*(7), 1501. <a href="https://doi.org/10.17507/tpls.0507.25">https://doi.org/10.17507/tpls.0507.25</a>
- Kim, S. (2021). Mindfulness, reading anxiety, and self-efficacy of Korean EFL college students. *The Journal of Mirae English Language and Literature*, 26(2), 213-239. https://doi.org/10.46449/mjell.2021.05.26.2.213
- Kondo, A. (2021). Phonological short-term memory's contribution to the L2 reading proficiency of Japanese EFL learners. *JALT Journal*, 43(2), 167. <a href="https://doi.org/10.37546/jaltij43.2-2">https://doi.org/10.37546/jaltij43.2-2</a>
- Kor, C. P., Low, H. M., & Lee, L. W. (2014). Relationship between oral reading fluency and reading comprehension among ESL students. *GEMA Online Journal of Language Studies*, 14(03), 19-32. <a href="https://doi.org/10.17576/gema-2014-1403-02">https://doi.org/10.17576/gema-2014-1403-02</a>

- Kotani, K., & Yoshimi, T. (2021). Predicting English proficiency with read-aloud performance and linguistic difficulty of sentences. *INTED2021 Proceedings*. https://doi.org/10.21125/inted.2021.0282
- Kreider, C. S. (2018). Read and move: A new approach to read-aloud time in primary grades. *Childhood Education*, 94(2), 64-71. <a href="https://doi.org/10.1080/00094056.2018.1451692">https://doi.org/10.1080/00094056.2018.1451692</a>
- LaBerge, D., & Samuels, S. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6(2), 293-323. <a href="https://doi.org/10.1016/0010-0285(74)90015-2">https://doi.org/10.1016/0010-0285(74)90015-2</a>
- Lantolf, J. P. (2013). *Sociocultural theory second language learning*. Oxford University Press. Layne, S. L. (2023). Establishing a successful read-aloud time. *In Defense of Read-Aloud*, 19-48. https://doi.org/10.4324/9781032681290-2
- Lee, J. Y., Kim, Y. T., & Kang, J. K. (2019). The role of reading automaticity and prosody in reading comprehension of elementary students in grades 2–4. *Communication Sciences & Disorders*, 24(4), 894-905. https://doi.org/10.12963/csd.19633
- Lien, H. (2016). Effects of EFL individual learner variables on foreign language reading anxiety and Metacognitive reading strategy use. *Psychological Reports*, 119(1), 124-135. <a href="https://doi.org/10.1177/0033294116659711">https://doi.org/10.1177/0033294116659711</a>
- Lien, H. (2016). Foreign language reading anxiety scale--Chinese version. *PsycTESTS Dataset*. <a href="https://doi.org/10.1037/t55269-000">https://doi.org/10.1037/t55269-000</a>
- Liu, S. (2022). The implication of Krashen's affective filter hypothesis on college students' listening learning. *Learning & Education*, 10(8), 163. <a href="https://doi.org/10.18282/le.v10i8.3105">https://doi.org/10.18282/le.v10i8.3105</a>
- Liu, S., & Wang, F. (2018). A qualitative study on learning trajectories of non-native Chinese instructors as successful Chinese language learners. *Asian-Pacific Journal of Second and Foreign Language Education*, 3(1). <a href="https://doi.org/10.1186/s40862-018-0043-5">https://doi.org/10.1186/s40862-018-0043-5</a>
- Lu, Z., & Liu, M. (2015). An investigation of Chinese university EFL learner's foreign language reading anxiety, reading strategy use and reading comprehension performance. *Studies in Second Language Learning and Teaching*, *5*(1), 65-85. <a href="https://doi.org/10.14746/ssllt.2015.5.1.4">https://doi.org/10.14746/ssllt.2015.5.1.4</a>
- Lü, C. (2019). Chinese literacy learning in an immersion program. Springer.
- Lü, C. (2019). Oral language, phonological awareness, word reading, and passage reading comprehension in grade 2. *Chinese Literacy Learning in an Immersion Program*, 133-166. https://doi.org/10.1007/978-3-030-04987-4\_7
- Margolis, A. E., & Broitman, J. (2023). *Learning disorders across the lifespan: A mental health framework*. Springer Nature.
- Matlin, J. (2022). Will you give me a reading?: What you need to read tarot with confidence. Llewellyn Worldwide.

- Mauludiyah, L. (2020). Oral reading fluency (ORF) method to improve Arabic reading comprehension. *LISANIA: Journal of Arabic Education and Literature*, 4(2), 127-139. https://doi.org/10.18326/lisania.v4i2.127-139
- Mills, N. (2014). 2. self-efficacy in second language acquisition. *Multiple Perspectives on the Self in SLA*, 6-22. <a href="https://doi.org/10.21832/9781783091362-003">https://doi.org/10.21832/9781783091362-003</a>
- Muller, T., Adamson, J., Brown, P., & Herder, S. (2014). Exploring EFL fluency in Asia. Springer.
- Muzammil, L., & Andy, A. (2018). Developing EFL learners' accuracy, fluency, and comprehension using repeated reading. *Proceedings of the Annual Conference on Social Sciences and Humanities*. <a href="https://doi.org/10.5220/0007423805150521">https://doi.org/10.5220/0007423805150521</a>
- Möller, V. (2020). From pedagogical input to learner output. *Pedagogical Linguistics*, 1(2), 95-124. <a href="https://doi.org/10.1075/pl.00001.mol">https://doi.org/10.1075/pl.00001.mol</a>
- Nation, I., & Macaliste, J. (2020). Extensive reading. *Teaching ESL/EFL Reading and Writing*, 55-69. https://doi.org/10.4324/9781003002765-4
- Nation, I., & Macalister, J. (2020). Intensive reading. *Teaching ESL/EFL Reading and Writing*, 30-54. https://doi.org/10.4324/9781003002765-3
- Nation, I., & Macalister, J. (2020). Reading faster. *Teaching ESL/EFL Reading and Writing*, 70-82. <a href="https://doi.org/10.4324/9781003002765-5">https://doi.org/10.4324/9781003002765-5</a>
- Nation, I.S.P., & Macalister, J. (2020). *Teaching ESL/EFL reading and writing*. Routledge.
- Nicklin, C., Patterson, A., & McLean, S. (2023). Quantifying proper nouns' influence on L2 English learners' reading fluency. *Studies in Second Language Acquisition*, 1-24. https://doi.org/10.1017/s027226312200050x
- Nur, R. (2021). Implementing cooperative integrated reading and composition (CIRC) method to enhance the reading comprehension of Indonesian EFL learner. *Journal of English Language Teaching and Applied Linguistics*, 3(11), 52-64. <a href="https://doi.org/10.32996/jeltal.2021.3.11.7">https://doi.org/10.32996/jeltal.2021.3.11.7</a>
- Ortlieb, E. (2014). *Theoretical models of learning and literacy development*. Emerald Group Publishing.
- Pham, V. P., Lian, A., Lian, A., & Hoang, N. T. (2023). Proceedings of the 19th International Conference of the Asia association of computer-assisted language learning (AsiaCALL 2022). Springer Nature.
- Price, L. H., & Bradley, B. A. (2016). *Revitalizing read Alouds: Interactive talk about books with young children, prek*–2. Teachers College Press.
- Rafatbakhsh, E., & Ahmadi, A. (2022). Predicting the difficulty of EFL reading comprehension tests based on linguistic indices. <a href="https://doi.org/10.21203/rs.3.rs-2166992/v1">https://doi.org/10.21203/rs.3.rs-2166992/v1</a>
- Saito, Y., Garza, T. J., & Horwitz, E. K. (1999). Foreign language reading anxiety scale. *PsycTESTS Dataset*. <a href="https://doi.org/10.1037/t54908-000">https://doi.org/10.1037/t54908-000</a>
- Santoso, E. (2015). Improving students' reading comprehension through interactive readaloud technique. *Premise Journal: ISSN online:* 2442-482x, *ISSN printed:* 2089-3345, 4(2). <a href="https://doi.org/10.24127/pj.v4i2.305">https://doi.org/10.24127/pj.v4i2.305</a>

- Scovel, T. (1978). The effect of affect on foreign language learning: A review of the anxiety research. *Language Learning*, 28(1), 129-142. <a href="https://doi.org/10.1111/j.1467-1770.1978.tb00309.x">https://doi.org/10.1111/j.1467-1770.1978.tb00309.x</a>
- Senowarsito, S., & Nur Ardini, S. (2019). Phonological fossilisation of EFL learners: The interference of phonological and orthographic system of L1 Javanese. *3L The Southeast Asian Journal of English Language Studies*, 25(2), 74-85. <a href="https://doi.org/10.17576/3l-2019-2502-06">https://doi.org/10.17576/3l-2019-2502-06</a>
- Sparks, R. L., Patton, J., & Luebbers, J. (2018). L2 anxiety and the foreign language reading anxiety scale: Listening to the evidence. *Foreign Language Annals*, 51(4), 738-762. <a href="https://doi.org/10.1111/flan.12361">https://doi.org/10.1111/flan.12361</a>
- Spielberger, C. D. (1972). Conceptual and methodological issues in anxiety research. *Anxiety*, 481-493. <a href="https://doi.org/10.1016/b978-0-12-657402-9.50013-2">https://doi.org/10.1016/b978-0-12-657402-9.50013-2</a>
- Spielberger, C. D. (2019). Anxiety, cognition and affect. *Anxiety and the Anxiety Disorders*, 171-182. https://doi.org/10.4324/9780203728215-11
- Stephens, M. (2017). Supplementing extensive reading for Japanese EFL learners. *Asian English Language Classrooms*, 71-82. <a href="https://doi.org/10.4324/9781315755243-5">https://doi.org/10.4324/9781315755243-5</a>
- Suleiman-Alfallaj, F. S. (2017). Reading competence of the Saudi EFL learner: Empowering the teachers through linguistics. *Advances in Language and Literary Studies*, 8(3), 12. <a href="https://doi.org/10.7575/aiac.alls.v.8n.3p.12">https://doi.org/10.7575/aiac.alls.v.8n.3p.12</a>
- Suzuki, S., & Kormos, J. (2022). The multidimensionality of second language oral fluency: Interfacing cognitive fluency and utterance fluency. *Studies in Second Language Acquisition*, 45(1), 38-64. <a href="https://doi.org/10.1017/s0272263121000899">https://doi.org/10.1017/s0272263121000899</a>
- Swain, M., Kinnear, P., & Steinman, L. (2010). Sociocultural theory in second language education: An introduction through narratives. Multilingual Matters.
- Tracey, D. H., & Morrow, L. M. (2017). Lenses on reading: An introduction to theories and models (3rd ed.). Guilford Publications.
- Wallace, J. (n.d.). Effectiveness and efficiency of reading error correction procedures on the reading accuracy, reading fluency, and reading comprehension of fourth grade students. <a href="https://doi.org/10.30707/etd2013.wallace.j">https://doi.org/10.30707/etd2013.wallace.j</a>
- Wang, Q. (2023). Text memorization: An effective strategy to improve Chinese EFL learners' argumentative writing proficiency. *Frontiers in Psychology*, 14. <a href="https://doi.org/10.3389/fpsyg.2023.1126194">https://doi.org/10.3389/fpsyg.2023.1126194</a>
- Wang, Y. (2017). English transitivity alternation in second language acquisition: An attentional approach. Taylor & Francis.
- Waring, R. (n.d.). Building fluency with extensive reading. *Exploring EFL Fluency in Asia*. <a href="https://doi.org/10.1057/9781137449405.0023">https://doi.org/10.1057/9781137449405.0023</a>
- Wyatt, M. (2022). Self-efficacy. *The Routledge Handbook of Second Language Acquisition and Individual Differences*, 207-219. https://doi.org/10.4324/9781003270546-17
- Xue, M. (2022). Investment in learning English: A case study of Chinese LOTE learners. *Asian Social Science*, *18*(9), 27. https://doi.org/10.5539/ass.v18n9p27

- Yamaç, A., & Çeliktürk Sezgin, Z. (2018). Relationships among fourth graders' reading anxiety, reading fluency, reading motivation, and reading comprehension. *TED EĞİTİM VE BİLİM*. <a href="https://doi.org/10.15390/eb.2018.7555">https://doi.org/10.15390/eb.2018.7555</a>
- Yoon, H. (2019). Word reading, reading fluency, and reading comprehension of first graders with and without vocabulary delay. *Korean Association for Learner-Centered Curriculum and Instruction*, 19(18), 143-158. <a href="https://doi.org/10.22251/jlcci.2019.19.18.143">https://doi.org/10.22251/jlcci.2019.19.18.143</a>
- Yoon, S. (2021). Native writer as native speaker: A reading of Chang-Rae Lee's native speaker. *The Korean Society for Teaching English Literature*, 25(3), 145-176. https://doi.org/10.19068/jtel.2021.25.3.06
- Young, C., & Rasinski, T. (2017). Readers theatre: Effects on word recognition automaticity and reading prosody. *Journal of Research in Reading*, 41(3), 475-485. <a href="https://doi.org/10.1111/1467-9817.12120">https://doi.org/10.1111/1467-9817.12120</a>
- Zaretsky, E. (2016). The role of L1 and L2 reading on L1 preservation and positive cross-linguistic transfer among sequential bilinguals. *Cross-linguistic Transfer in Reading in Multilingual Contexts*, 145-170. <a href="https://doi.org/10.1075/bct.89.07zar">https://doi.org/10.1075/bct.89.07zar</a>
- Zhou, N. (2016). Iceberg theory in teaching of vocational English reading. *ISME* 2016 *Information Science and Management Engineering IV*. <a href="https://doi.org/10.5220/0006446501790181">https://doi.org/10.5220/0006446501790181</a>
- Zutell, J., & Rasinski, T. V. (1991). This issue: Fluency in oral reading. *Theory Into Practice*, 30(3), 142-142. <a href="https://doi.org/10.1080/00405849109543493">https://doi.org/10.1080/00405849109543493</a>

# LEVERAGING READ-ALOUD INSTRUCTIONAL STRATEGY (RAIS) FOR ENHANCING ENGLISH READING FLUENCY, ANXIETY, AND CONFIDENCE OF EFL CHINESE UNDERGRADUATES: A QUASI-EXPERIMENTAL MULTI-GROUP DESIGN

# Creative Commons licensing terms

Authors will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions, and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of English Language Teaching shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a Creative Commons Attribution 4.0 International License (CC BY 4.0).