Power System Technology
ISSN:1000-3673

Received: 16-08-2025 Revised: 05-09-2025 Accepted: 02-10-2025

The Effect of Noise on ESL Students' Reading Skills in the ESL Reading Classroom

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Abstract

This study investigates the impact of environmental noise on the reading abilities of students acquiring English as a Second Language (ESL) within educational environments. Utilizing cognitive load theory alongside research on second language acquisition, the article examines the ways in which noise disrupts reading comprehension and fluency. Additionally, it evaluates empirical evidence demonstrating that different forms of noise—such as ambient conversations, traffic sounds, or classroom discussions—affect ESL learners in distinct ways compared to native speakers. The study concludes by discussing the implications for ESL teaching practices and offering recommendations for future research.

Introduction

Reading serves as a fundamental skill in the acquisition of a second language, essential for both academic achievement and daily communication. For students learning English as a second language (ESL), reading comprehension encompasses not only the ability to decode written material but also the engagement in intricate cognitive and linguistic processes (Grabe, 2009). Nevertheless, classroom settings are not always optimal for concentrated reading, especially when disrupted by noise. While noise can negatively impact reading performance across all learners, ESL students may be particularly susceptible due to the heightened cognitive demands associated with processing a second language (Kormos, 2017). This study explores the influence of environmental noise on the reading capabilities of ESL students within classroom environments and considers the implications for teaching practices.

Theoretical Background

Cognitive Load Theory, as proposed by Sweller in 1994, indicates that excessive demands on working memory can impede the learning process. Engaging with text in a second language inherently places considerable cognitive strain on the learner, and the presence of background noise exacerbates this strain, thereby diminishing the effectiveness of information processing (Klatte, Bergström, & Lachmann, 2013). Additionally, findings from psycholinguistic studies reveal that ambient noise interferes with both the decoding and comprehension of language, especially for those who have not yet achieved a high level of automaticity in the second language (Rönnberg et al., 2013).

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Types of Noise and Their Effects

Noise can be categorized into three distinct types: continuous (for example, the steady hum of a fan), intermittent (such as the sound of a door slamming), and informational (like nearby conversations). Informational noise presents a considerable obstacle for English as a Second Language (ESL) learners, as it competes directly with their ability to process language (Klatte et al., 2013).

Numerous research studies indicate that noise adversely impacts the reading performance of English as a Second Language (ESL) learners. Shield and Dockrell (2008) revealed that students in noisy classroom settings, especially those with conversational background noise, achieved significantly lower scores on reading comprehension assessments compared to their counterparts in quieter settings. Additionally, Ljung, Sörqvist, and Hygge (2009) illustrated that ESL students exhibited poorer performance on silent reading tasks when subjected to irrelevant auditory stimuli, in contrast to native-speaking students, suggesting a heightened vulnerability.

ESL Learners' Vulnerability

The challenges encountered by ESL learners in noisy settings arise from slower lexical retrieval, diminished syntactic processing capabilities, and a lack of familiarity with phonological indicators (Van Engen & Bradlow, 2007). These challenges are exacerbated when students must read in environments where their attention is split between filtering out noise and comprehending the text. Furthermore, for younger or novice ESL students, who may still be honing fundamental reading skills, ambient noise can significantly impede phonemic awareness and reading fluency (Gupta & Jamal, 2006). This issue is particularly alarming in multilingual classrooms, where students may possess diverse literacy experiences.

Classroom Implications

Considering the cognitive and linguistic difficulties presented by noisy settings, it is crucial for educators to take into account classroom acoustics when planning reading activities. Implementing strategies like utilizing sound-absorbing materials, establishing silent reading areas, or timing intensive reading sessions for quieter periods can alleviate noise-related challenges (Dockrell & Shield, 2006). Furthermore, integrating noise-resilience training into English as a Second Language (ESL) instruction—such as developing metacognitive strategies to handle distractions—can assist students in effectively managing unfavorable listening and reading environments (Goh & Taib, 2006).

Conclusion and Future Directions

Environmental noise poses a considerable obstacle to effective reading instruction in English as a Second Language (ESL) classrooms. This disruptive influence is particularly significant for ESL learners, who experience an increased cognitive load while processing a new language. To assist these students, it is essential for educators to acknowledge the critical role of the acoustic environment and modify their teaching strategies accordingly. Subsequent research should examine the enduring impacts of prolonged noise exposure on ESL reading development and investigate strategies that enhance learners' ability to cope with such distractions.

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ISSN:1000-3673
Received: 16-08-2025 Revised: 05-09-2025 Accepted: 02-10-2025

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