Arabic Phonological Transfer in English Stress Assignment: Patterns and Pedagogical Implications

Abstract:

Stress assignment is a critical factor in English intelligibility, and its acquisition is often challenging for Arab EFL learners due to the predictable stress patterns in Arabic that conflict with the variable stress patterns of English. In Arabic, stress is typically placed on the penultimate syllable of heavy syllables or on the antepenultimate syllable of light syllables, rules that often diverge from the stress assignment principles in English. This study examines the role of Arabic L1 phonological patterns in English stress assignment, with a particular focus on the transfer effects of L1 stress rules and the effectiveness of explicit instructional interventions. A total of 180 tenth-grade Arab EFL learners participated in listening and pronunciation tasks involving a corpus of 1,200 words, representing various stress patterns, including penultimate, antepenultimate, and irregular stress. Acoustic analysis using *Praat* software, focusing on stress-related duration, pitch, and intensity, provided quantitative data on learners' stress placement. The results indicate that learners predominantly applied Arabic stress rules to English words, with higher accuracy observed in words with predictable stress patterns (penultimate) than in irregular stress patterns. Furthermore, explicit instructional interventions—such as contrastive phonological analysis and targeted auditory discrimination exercises—led to statistically significant improvements in stress placement accuracy, particularly with irregular stress patterns. These findings address a noted gap in the literature by demonstrating how tailored instructional strategies can remediate L1-induced stress errors and enhance pronunciation accuracy in English, suggesting that focused error correction and targeted practice should be integral components of instruction for Arab EFL learners.