

**ABSTRACT:**

This study attempts to bridge the gap between theoretical linguistics and psycholinguistics in second language (L2) research. It investigates the acquisition and processing of English lexical stress by French Canadian L2 learners. The results of three experiments will be reported. The first experiment, an AXB task, indicates whether French Canadian L2 learners can perceive stress acoustically and represent it abstractly. The second experiment, a production task, shows the particular prosodic representations that French Canadian L2 learners use to realize stress. The third experiment, a cross-modal word-identification task, indicates whether French Canadian L2 learners can use stress to recognize words. The findings that will be discussed shed crucial light on the relationship between L2 perception, L2 production, and L2 processing.