Acquisition of second language (L2) phonology is possibly the most challenging task for L2 learners. As a result, many tend to preserve a foreign accent in their speech even after they have attained a high level of proficiency in other aspects of L2 use. The difficulty in acquiring an L2 phonological system has been attributed to factors such as age of L2 perceptual learning, quality and quantity of L2 input and interference from the first language phonological system. This paper contributes to ongoing discussions on the acquisition of L2 phonology by examining the difficulties encountered by two groups of Iraqi EFL learners in the perception of English vowels and the accuracy of perceived difficulty by Iraqi EFL teachers and learners. The results on perceived difficulty were compared with performance in a speech perception task. The findings show that Iraqi EFL learners encounter varying degrees of difficulty in the perception of English vowels. The findings also show that there is an effect in the level of proficiency on the accuracy rate for some vowel categories but two vowel categories, /əʊ/ and /æ/, were persistently difficult for most subjects regardless of their proficiency level in English. Iraqi EFL teachers and learners reported that they encountered difficulty learning some English vowels; however, the vowels that were identified as difficult differed considerably from those identified in the perception task.

**Keyword:** Speech perception; English vowels; Iraqi EFL learners; L2 experience; Perceived difficulty