DEVELOPMENT AND STANDARDIZATION OF ARABIC CENTRAL TEST BATTERY FOR CHILDREN

Thesis

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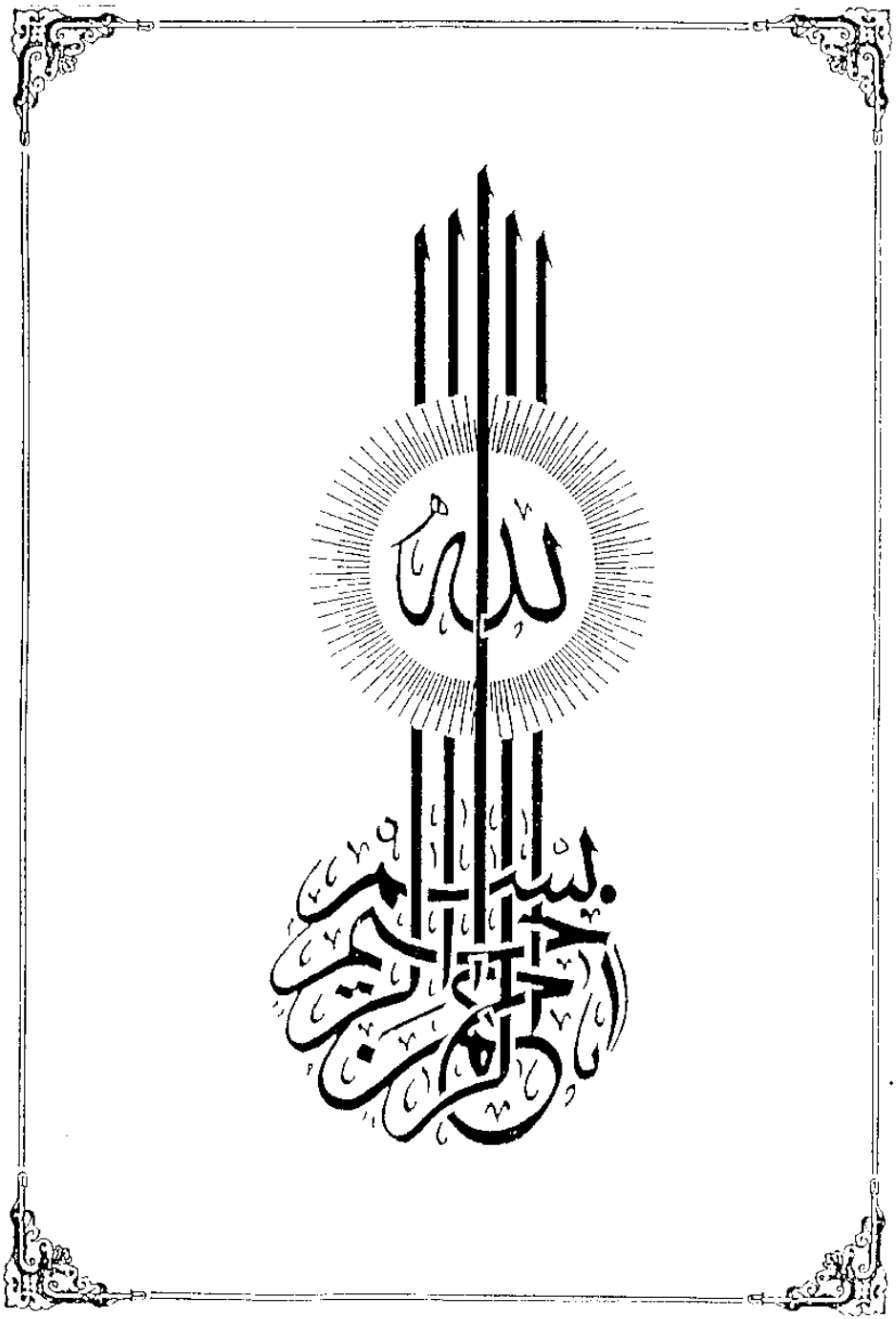

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The auditory channel is one of the most important avenues through which children receive information about their environment. Auditory input is mandatory for linguistic, intellectual and social development. In fact, audition and vision are generally accepted as the major sensory systems for learning. However, with respect to speech and language the auditory system is of prime importance (Chalfant and Scheffelin, 1969). The ability to perceive and process auditory stimuli is a critical function in our highly verbal society.

Auditory processing involves attention, sorting, scanning, comparing, retrieving and sequencing the spoken message. These processes occur at the moment of utterance (Keith, 1981). An intact auditory nervous system processes speech with no effort on the part of the listener. The immature or disordered nervous system, however, is unable to properly decode the presented signal. This in turn, gives the listener distorted and incomplete messages (Sloan, 1988).

Adults, in some instances, may not be able to handle auditory stimuli well. This disability may pass unnoticed

and usually has no real effect on the individual's life. On the other hand, a child with an auditory disorder may be unable to perform well academically. He may be unable to understand properly what is said or may suffer frustrations and feelings of reduced selfworth. He may be learning disabled (Sloan, 1988).

Central disorders in children became a prominent audiologic concern. Several attempts were done to adjust the existing adult central auditory tests for use with children. This, however, did not reflect their actual abilities or performances. Consequently, new central auditory test materials and testing paradigms were developed and standardized to conform to the children's interests and abilities (Jerger et al.,1988).

Goldman et al. (1974) were the first to propose an auditory discrimination test for children. This was later followed by several studies conducted by Willeford (1977), Pinheiro (1977) and Sweetow and Reddell (1978). Indeed, in the past decade, an increasing number of tests were developed using different test materials (Farrer and Keith, 1981; Musiek et al., 1982; Jerger et al., 1983 and Keith, 1986).

Concerning the Arabic speaking population, Soliman et al. (1985) developed a comprehensive audiologic central test battery and applied it on normal hearing adults. To date, none of the developed test materials was suitable to a young population. Therefore, this research was designed with an eye to develop and standardize Arabic central test battery for children.