Effect of Non-verbal Motor Imitation on Naming Ability in Autistic Children

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Abstract

Objective: This research was aimed to investigate the relation between non-verbal imitation and naming ability and effect of non-verbal motor imitation exercises on ability of naming in autistic children.

Materials & Methods: In the first phase of this research which was done comparatively, 22 autistic and 22 normally developed children were selected conveniently and their ability of naming and non-verbal imitation was examined. In the second phase, which was an experimental-interventional study with a pretest-posttest and control group design, the autistic children were assigned into two matched groups by balanced randomized method. Then non-verbal motor exercises intervention executed in experimental group for 60 days (one hour a day). During this period the control group received routine educational program. Before and after intervention, naming ability of two groups was assessed by naming test. Data were analyzed by Independent T-test and Variance analysis.

Results: Research findings showed statistically significant difference between autistic group and normal group in naming ability ($P<0.001$). In autistic group, there was a positive correlation between naming ability and non-verbal imitation ability ($r=0.878$). Furthermore findings showed significant difference in naming ability between control and experimental group after intervention ($P<0.001$).

Conclusion: This finding reveals that non-verbal motor imitation has a positive correlation with naming ability and non-verbal imitation exercises increases the naming ability in autistic children.

Keywords: Autism/ Imitation/ Naming/ Speech