

## Comparison of the Effect of Computer-Based Training with Traditional Teaching on the Mathematical Performance of Students with the Math Learning Disability

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### Introduction

Students with math learning disabilities, despite having natural intelligence, and perfect health in vision and hearing, are poor at performing computational skills. In this group of children, there is a serious defect in learning math skills, such as recognizing numbers, mathematical operations, and problems related to spatial perception and problem solving. Although some research has suggested that direct training can be effective in improving some active memory processes, but researchers have recently emphasized the importance of boosting memory, particularly active memory with the help of computers. Computers have changed the lives of people with learning disabilities, motivating them to work, providing information in both visual and auditory dimensions, and increase active memory capacity. Therefore, the purpose of this study was to compare the effectiveness of computer-based training with traditional teaching on mathematical performance of students with the mathematical disorders in Ahvaz city.

### Method

This research was an experimental-field method, with pretest-

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posttest design and control group. The statistical population of the study included all students with the mathematical learning disorder in the age range of 8-9 years. The sample of the present study consisted of 60 subjects assigned into three groups (two experimental groups and one control group) that were selected by simple random sampling from students with mathematical learning disorder, referred to four centers of learning disorders in Ahvaz. The data were collected using the Iranian Key-Mathematical Test.

### Results

The findings showed that both traditional and computer-based teaching methods improve the mathematical performance of students with mathematical disorders ( $F = 8.052$ ,  $p < 0.01$ ). However, descriptive data and averages indicated a more effective role of computer-based training in improving students' math performance.

### Conclusion

In general, the findings of this study showed that using computer and educational software can be effective in memory improvement, mathematical combination, and mathematical performance of students with learning disabilities.

**Keywords:** Computer-based training, Traditional teaching, Mathematical learning disorder, Mathematical performance.

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