Fayoum University
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The Effect of a Program Based on Visual Spatial Perception Skills in Reducing Perceived Spatial Anxiety and Improving Geometric Problems Solving Skills among Preparatory School Pupils

AThesis Proposal for PHD Degree In Education Specialization:

(Educational psychology)

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2025 AD / 1447 A.H

Abstract:

The study aimed at exploring the effect of a program based on visual-spatial perception skills in reducing perceived spatial anxiety and improving geometric problem-solving skills among second-year preparatory school pupils. The main study sample included (54) female pupils at the second -year of preparatory school, (28) female pupils representing the experimental group at Al-Nasiriyah New Preparatory School, and (26) female pupils representing the control group at Jasmine Preparatory School for Girls. The researcher prepared spatial anxiety scale, geometric problem-solving skills test and a Program Based on Visual Spatial Perception Skills. The study results indicated that There were statistically significant differences between the means ranks of the experimental group and the control group pupils in the post-measurement of spatial anxiety and its two subcomponents (spatial navigation anxiety, and mental visualization anxiety) in favor of the experimental group. There were statistically significant differences between the means ranks of the pre- and post-measurements in favor of the postmeasurement, and the pre- and follow-up measurements in favor of the follow-up measurement in spatial anxiety and its two sub-components. But There were no statistically significant differences between the means ranks of the post- and follow-up measurements in spatial anxiety and its two sub- components. In addition, There were statistically significant differences between the means ranks of the the experimental group and the control group in geometric problem- solving skills and the total score in favor of the experimental group, except for the review skill; the differences were not statistically significant. There were also statistically significant differences between the means ranks of the pre- and post-measurements in favor of the post-measurement, and the pre- and follow-up measurements in favor of the follow-up measurement for each skill of geometric problem-solving skills and the total score except for the skill of performing additional work; the differences were not significant. But there were no statistically significant differences between the means ranks of the post- and follow-up measurements in geometric problem- solving skills and the total score.

Key Words: Visual Spatial Perception Skills -Perceived Spatial Anxiety - Geometric Problems Solving Skills.