

## INVESTIGATION OF MIDDLE SCHOOL STUDENTS' IMAGES OF SOLIDS: GEOMETRIC AND SPATIAL THINKING RELATIONS

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### Abstract

The purpose of this study 8<sup>th</sup> grade students' images of solids objects is to investigate with the relationship between geometric thinking and spatial thinking. In this study, quantitative research method is used. The research has been carried out with 359 students who are attending randomly chosen 10 state secondary schools in a district of Izmir Province. According to the result of quantitative data analysis, there are significant relations between Van Hiele Geometric Thinking levels and images. Spatial thinking has emerged effect on geometric objects. As a result, some teaching implications about solids were raised.

**Key Words:** Solids, concept image, geometric thinking, spatial thinking.