

# Misconceptions About Decimal Numbers in One Middle School in Croatia

Ivana-Marija Pavković

*University of Split, Faculty of Science and Mathematics, Croatia*

## ABSTRACT

Misconceptions related to decimal numbers are quite frequent and ingrained among students. Misconceptions that appear with decimal related numbers are prior to the student's knowledge of the concept of fractions, and misconceptions that are not removed disrupt the proper incorporation of new knowledge in student's mental schema. In this research, we wanted to find out if fifth-grade elementary school students have misconceptions related to decimal numbers and how well they are rooted. Also, we wanted to find out if the misconceptions coincided with the misconceptions related to decimal numbers in previous research. In short, it was learned that there are misconceptions among students and that the results are similar to previous research. The results confirmed that misconceptions related to decimal numbers are grouped into three groups, misconceptions of the whole number, zero and/or fraction. and that test results do not depend on gender, or final grade, but they are strongly in correlation with ceretinity of solved tasks.

**Keywords:** connection of concepts, fraction, integration of new information, mathematical understanding, whole number, zero