



A comparative statistical analysis between teachers' and undergraduate students' perceptions of teaching and learning mathematics

Eti Mizrahi*

Istanbul Technical University, İstanbul, Turkey – mizrahi1@itu.edu.tr

Gizem İntepe

Istanbul Technical University, İstanbul, Turkey – gizem.intepe@itu.edu.tr

Students' perceptions and teachers expectations in teaching, usually contradicts in reality. This study aims to test this hypothesis by specially designed survey conducted to undergraduate service mathematics courses. Unfortunately, during their first year at university, a lack of awareness of the importance of math courses in their academic and professional life, diminish students' motivation. Similarly, teachers cannot find any time to attract students' attention and increase their motivation in densely designed syllabus, especially in service courses.

By the end of the term, two surveys have been conducted to students who are enrolled in math service courses and to teaching staff. A comparative analysis have been done for mandatory Math1 and Math2 courses among all departments with a total of 1200 students and lecturers in Istanbul Technical University (ITU), which is one of the top universities in Turkey. Differences between students' and lecturers' perspectives in the methodology, aim and perceptions have been clearly shown up. Results are important in order to improve teachers' lecturing strategies and increase students' motivation for producing the best possible outcomes in mathematics.

Keywords: mathematics education; service mathematics courses, comparative analysis