We have the data from a study that compares a method of teaching statistics in a group of students with the use of ICT (method=1) in relation to traditional teaching (method=0) to improve academic performance in the course in question, as measured by a standard tool. The score before the application of the experiment is denoted by ‘y1’ and after the method by ‘y2’.

The researcher has included other information that he believes may affect the academic performance of the students. With ‘x’ is denoted a variable that measures the general level of knowledge (general grade) of the student (e.g., expressed by the average of the rest of the courses).

The variable sex symbolizes with 1 the woman and 0 the man, the variable work with 1 the employees and 0 the non-employees.

The region variable has values 1= agricultural, 2=semi-urban, 3=urban

The variable “educ” expresses the level of education and has values of 1 = primary, 2 = secondary, 3 = higher, 4 = highest

Students have completed a standardized tool for math-related anxiety scale (AMAS) with the following questions (X1-X9 items)

*Having to use the tables in the back of a math book*  
  *Thinking about an upcoming math test one day before*  
  *Watching a teacher work an algebraic equation on the blackboard*  
  *Taking an examination in a math course*  
  *Being given a homework assignment of many difficult problems that is due to the next class meeting*  
  *Listening to a lecture in a mathematics class*  
  *Listening to another student explain a math formula*  
  *Being given a pop quiz in math class*  
  *Starting a new chapter in a math book*

The answers to AMAS are given on a Likert scale with 5 possible answers from 1 (low anxiety) to5 (high anxiety) and the total score in this tool is derived as the sum of the 9 questions.