

The benefits of being a student of applied statistics

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Basic information about the programme

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Faculty	Percentage of professors
Faculty of Mathematical Sciences	34.88%
Faculty of Economy	23.25%
Faculty of Philosophy	11.62%
Faculty of Organisational Sciences	2.32%
Faculty of Technical Sciences	6.97%
Medical Faculty	18.60%

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Faculty	Percentage of students
Faculty of Mathematical Sciences	38.46%
Faculty of Economy	19.23%
Faculty of Philosophy	26.92%
Military Academy	7.69%
Medical Faculty	7.69%

Basic information about the programme

- First and unique programme in Novi Sad, and maybe in Serbia
 - Completely interdisciplinary programme
 - Two-year programme (120 ECTS credits)
 - On the second year, students choose one of the modules:
 - Biomedicine (17.64%)
 - Economy (58.82%)
 - Social sciences (17.64%)
 - Engineering (5%)
 - Students can choose lectures from other programmes

Basic information

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- Second generation was enrolled in 2012
(20 students)
- In 2012 master studies obtained premises, computers and relevant literature

My experience or introspective method

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- First year:
 - Probability theory and principles of statistics (Obligatory)
 - Linear algebra and Calculus (Elective)
 - Statistical Software (Obligatory)
 - Methodologies for data collection (Obligatory)
 - Sampling theory (Obligatory)
 - Official statistics (Obligatory)
 - Introduction to linear models (Obligatory)
 - Multivariate analysis (Obligatory)
- Student practice: Academic skills

My experience or introspective method

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 - Probability theory and principles of statistics (Obligatory) }
 - Linear algebra and Calculus (Elective) }
 - Theory of estimation and detection }
 - Statistical Software (Obligatory) }
 - Methodologies for data collection (Obligatory) }
 - Sampling theory (Obligatory) }
 - Official statistics (Obligatory) }
 - Introduction to linear models (Obligatory) }
 - Multivariate analysis (Obligatory) }
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My experience or introspective method

- Second year (module: Social Sciences):
 - Analysis of categorical data (Obligatory)
 - Structural Equations (Obligatory)
 - Advanced linear modeling (Obligatory)
 - Methodology of researches in psychology of personality (Elective)
 - Principles of modern scientific communication (Elective)
 - Survival analysis (Elective)
- Student practice: Practice in the Statistical Office of the Republic of Serbia

My experience or introspective method

- One of the differences between students that enrolled in applied statistics master and other studies is attitude toward knowledge and information

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Satisfaction of students

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(Thomas and Galambos, 2004)
- Student feedback serves as an internal guide for educational improvement and externally as a source of information to other stakeholders
(Harvey, 2003)

Satisfaction of students

- Survey:
 - Subjects: 18 students of Applied Statistics
(First year: 15 students; Second year: 3 students)
 - Age of students: Mdn= 1983, IQR= 11; Range= 1974 – 1990

Satisfaction of students

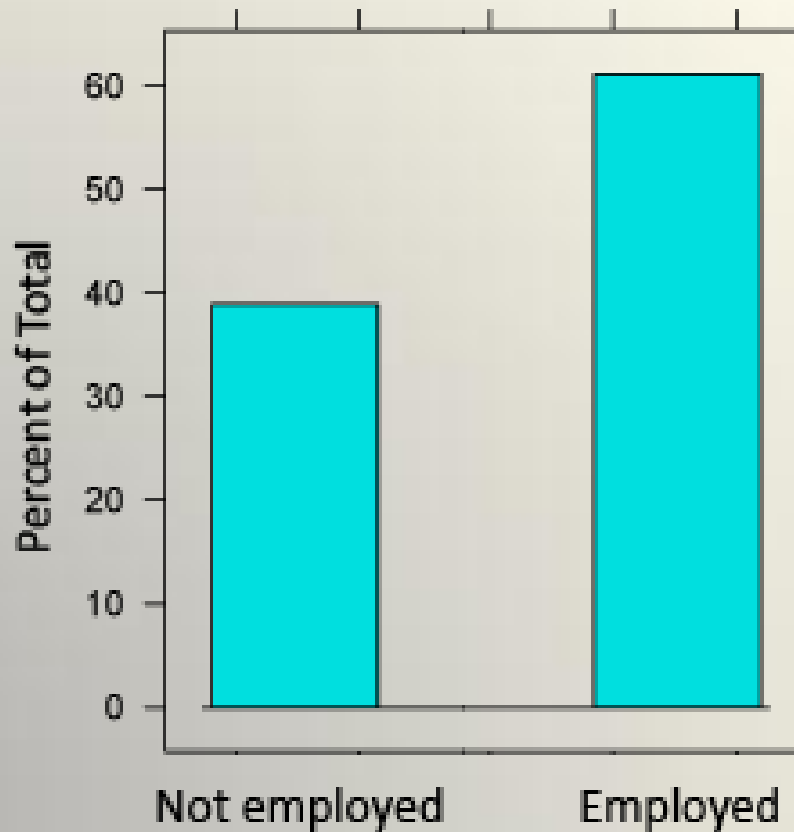
- Survey:
 - Subjects: 18 students of Applied Statistics
(First year: 15 students; Second year: 3 students)
 - Age of students: Mdn= 1983, IQR= 11; Range= 1974 – 1990
- Four parts of the survey:
 - Demographics
 - Expectations of students before enrolling in studies and what is achieved of these expectations
 - Student satisfaction with studies for every semester
 - Assessment of gained knowledge, or things they can do

Satisfaction of students

- Are you employed?

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Expectations of the studies

- Expectations of studies before enrolling

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 1. Various statistical topics (from economy, mathematics, social sciences...)
 2. Professors from different faculties
 3. Mathematical basis for every statistical procedure
 4. Knowledge how to apply learned statistical procedures
 5. Large number of practical examples
 6. Student practice
 7. Training how to perform whole research

Expectations of the studies

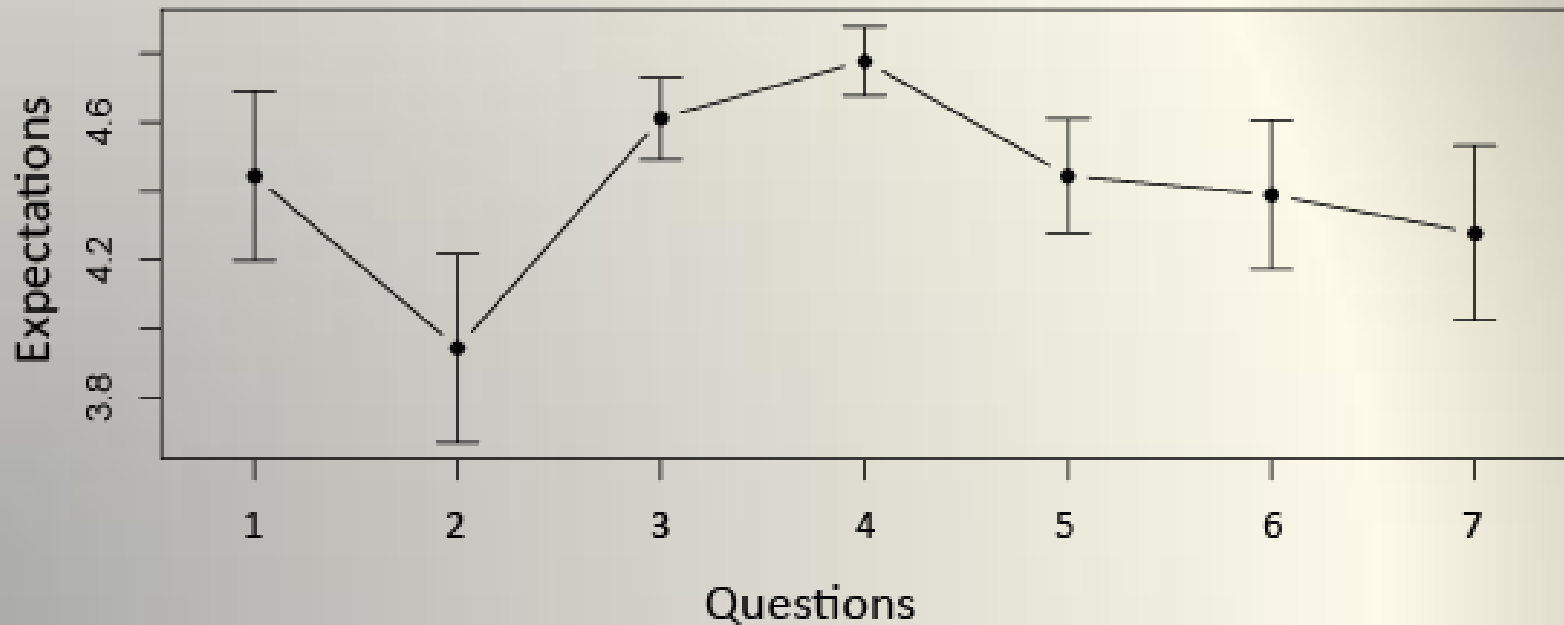
Expectations of studies before enrolling

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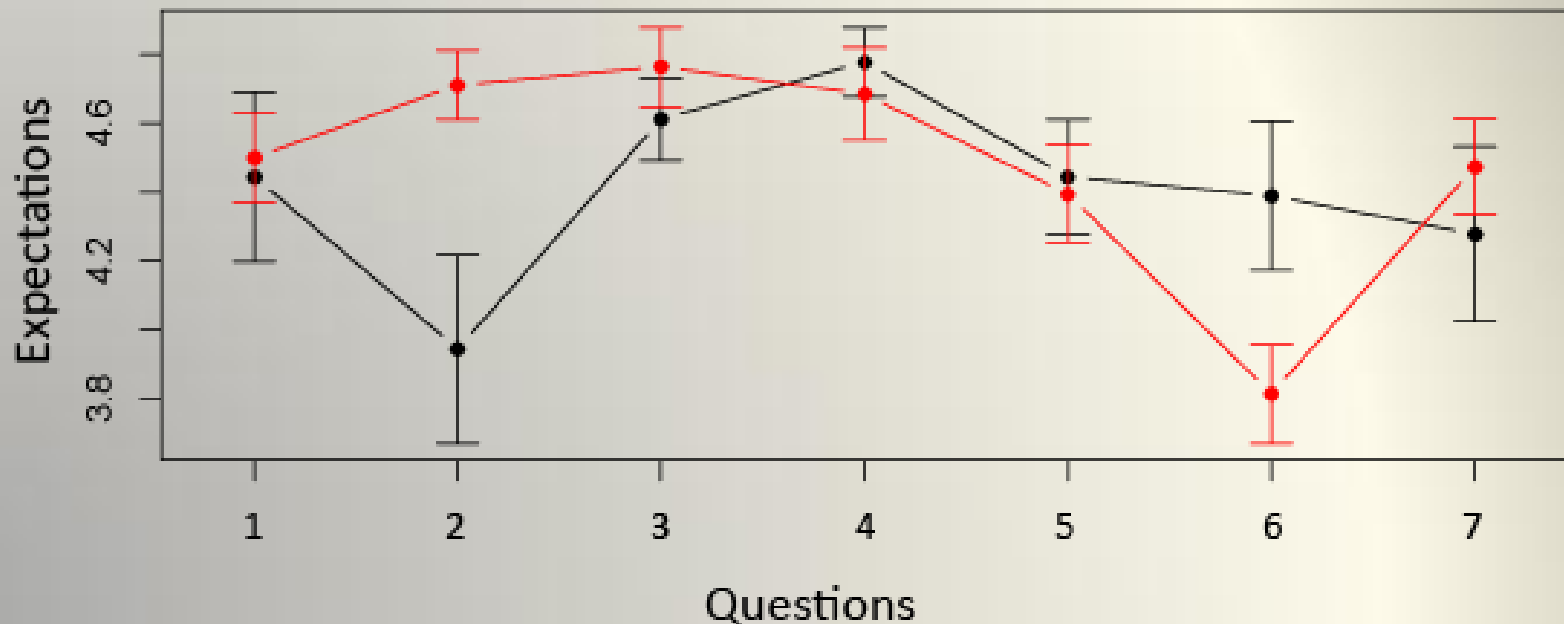
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Expectations of the studies

What was achieved of these expectations

1. Statistical topics
2. Professors
3. Mathematical basis
4. Application
5. Practical examples
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7. Research training



Satisfaction of students

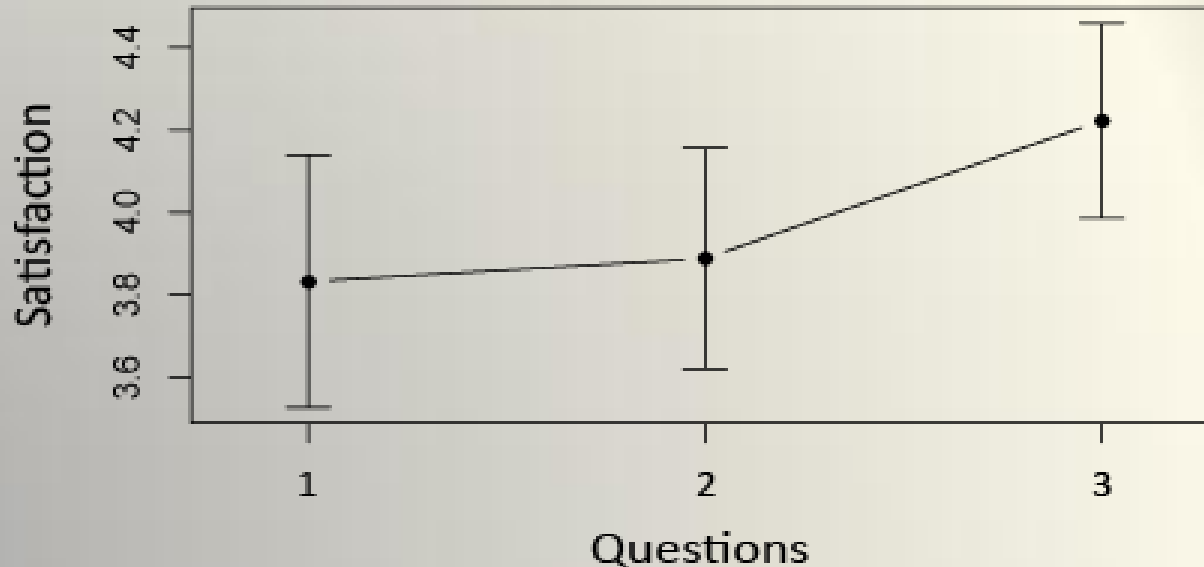
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Satisfaction of students

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 1. Gained knowledge
 2. Organization of lectures
 3. Organization of exams
- For the first semester:

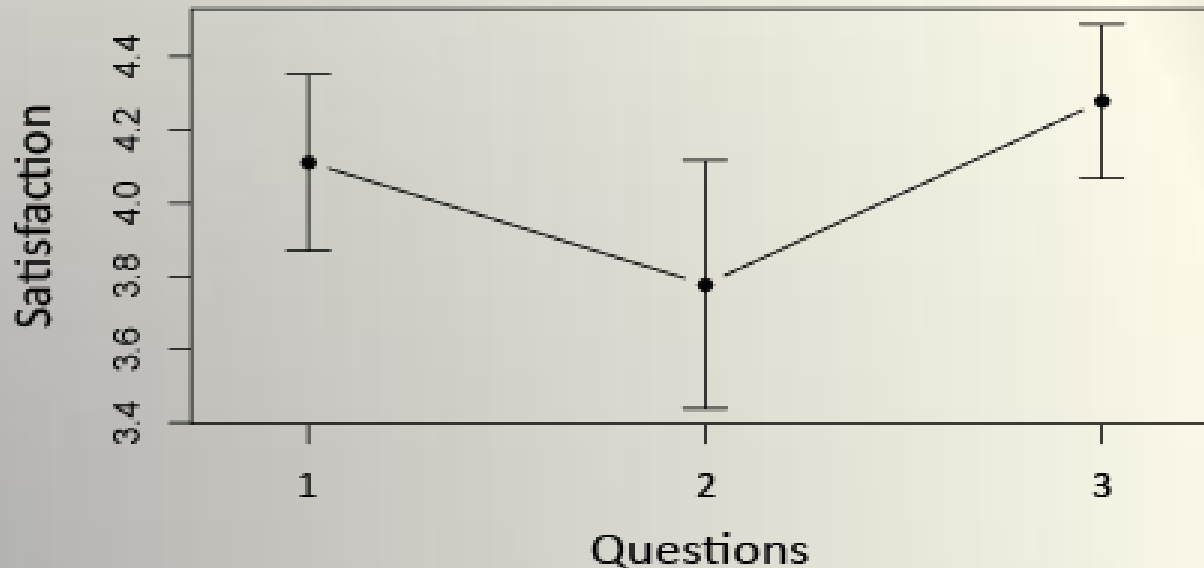
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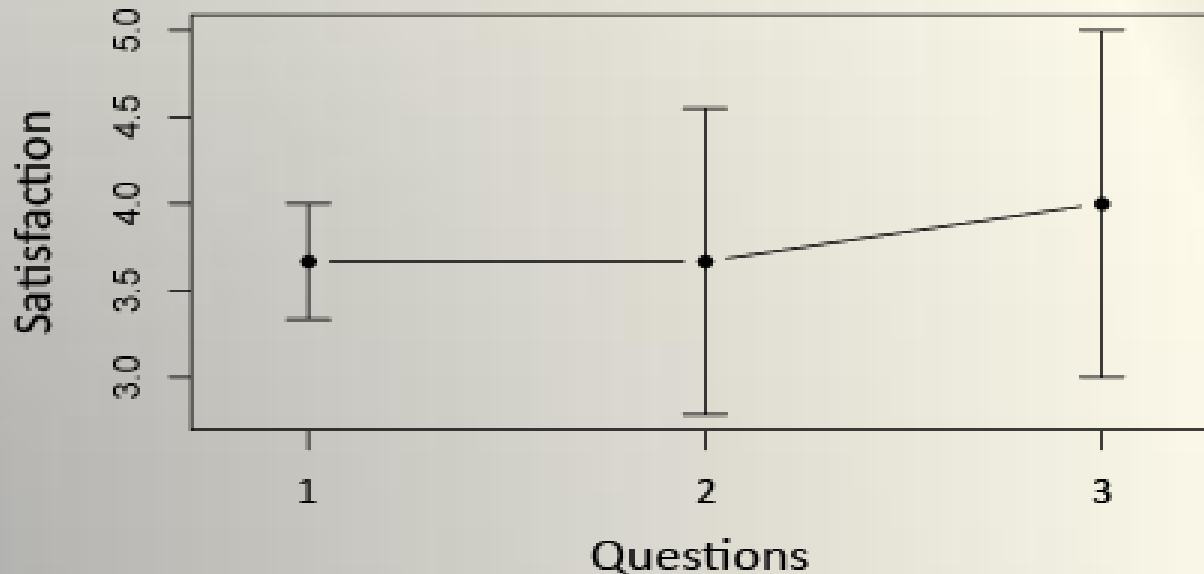
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- For the second semester:



Satisfaction of students

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 3. Organization of exams
- For the third semester:



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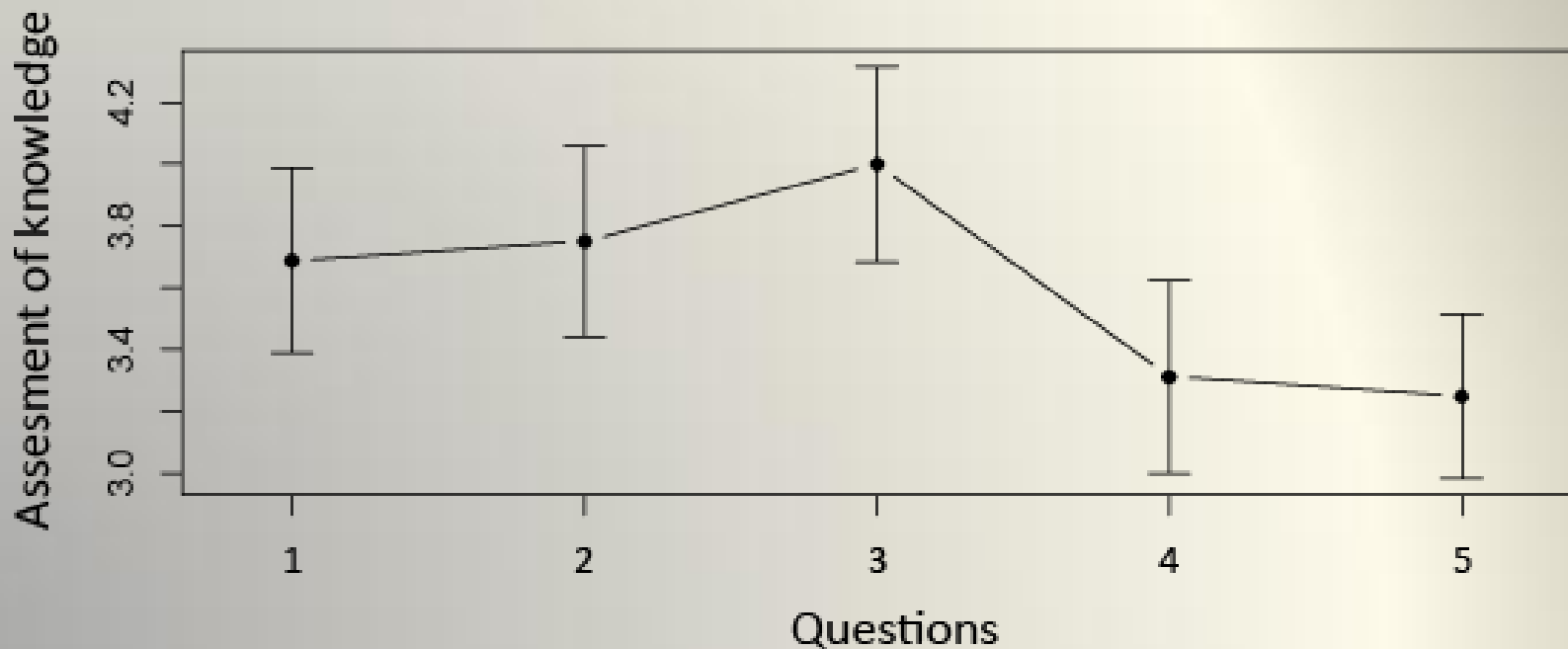
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2. Better defined dates for exams and lectures
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The main benefits were:

1. Lectures that are held in blocks
2. Quality of the professors
3. Additional lectures (Professors from Slovenia and IPSOS strategic marketing)

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- Additionally, large number of topics in statistics are covered (from classical „ frequentist“ statistics to bayesian statistics)
- Furthermore, results from survey are showing that expectations of students are satisfied almost on each dimension

Conclusion

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- Finally, students tend to have optimistic assessment of the gained knowledge
- If we take information about the studies and results from a survey, we can see that small number of people are enrolled every year. But, these people have high motivation for dealing with scientific problems in statistics and other scientific fields

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- Results are, also, showing that there are things to improve
- As for now, these studies are offering and producing skilled and motivated future statisticians

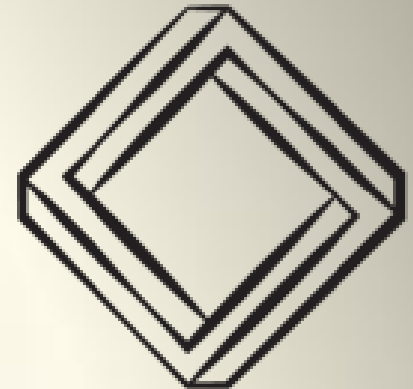
Thank you!



University center for applied statistics



University of Novi Sad



Laboratory for Experimental Psychology