

Research Methods – Statistics

Semester 2

Learning outcomes

With successful completion of the module students should be able to:

1. Design, implement and statistically analyze quantitative research studies on injury risk factors in soccer
2. Design, implement and statistically analyze quantitative experimental studies in the area of athletic training and sports science in soccer
3. Interpret the results of injury risk factors and experimental research studies on sports training and sports science in soccer

Content

Introduction to writing a research thesis

Statistical significance, effect size, statistical power, sample size.

Introduction to SPSS, descriptive statistics, correlation, mean differences.

Sampling techniques

Designing an injury prevention study

Practical seminars in PAOK FC

Factorial designs, experimental research design

Threats to internal and external validity in experimental research

Logistic regression

Analysis of variance in experimental research

Writing-up a research thesis and abstract

Assessment

Student evaluation will take place through written exams (100%). Exams will take place in Greek.

Bibliography/journals

Howitt, D., & Cramer, D. (2008). SPSS v 16 (Greek Translation)

Vincent, W.J. (1995). Statistics in kinesiology. Champaign, IL: Human Kinetics.

Thomas, J.R., & Nelson, J.K. (1996). *Research methods in physical activity* (3rd ed.). Champaign, IL: Human Kinetics.