

Determinants of Teacher Evaluation Results at EAFIT University

Research Practise 2: Project proposal presentation

Mónica Gómez - Lopera

TUTOR: Francisco Zuluaga - Díaz

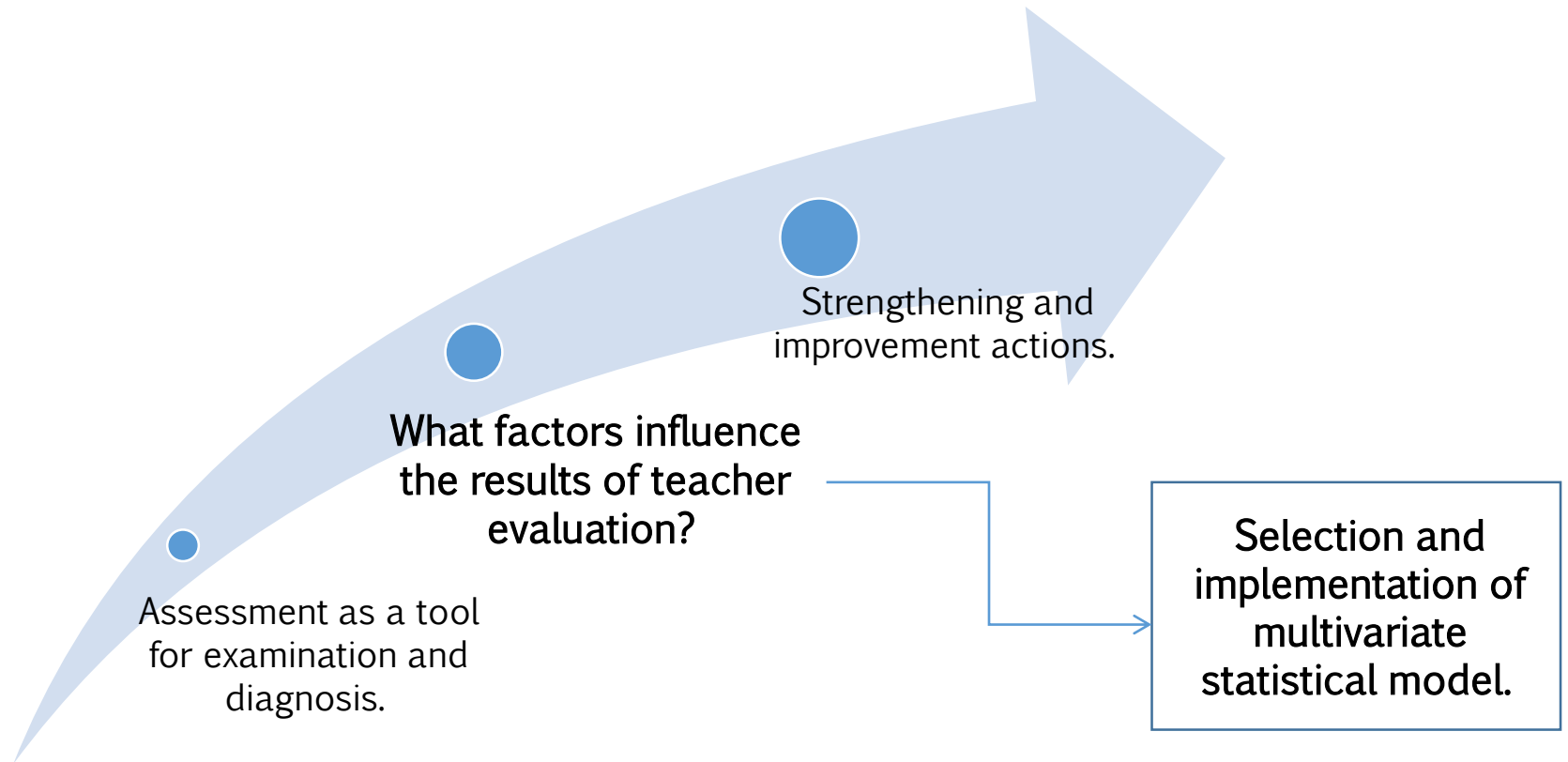
CO-TUTOR: Alberto Jaramillo - Jaramillo

EAFIT University

Mathematical Engineering

March 4, 2016

Problem Formulation



Objectives

SPECIFIC OBJECTIVES

GENERAL OBJECTIVE

Identify the factors that influence teachers evaluation by students from School of Science of EAFIT University during semester 2015-1.

Making a framework of previous studies conducted on teacher evaluation.

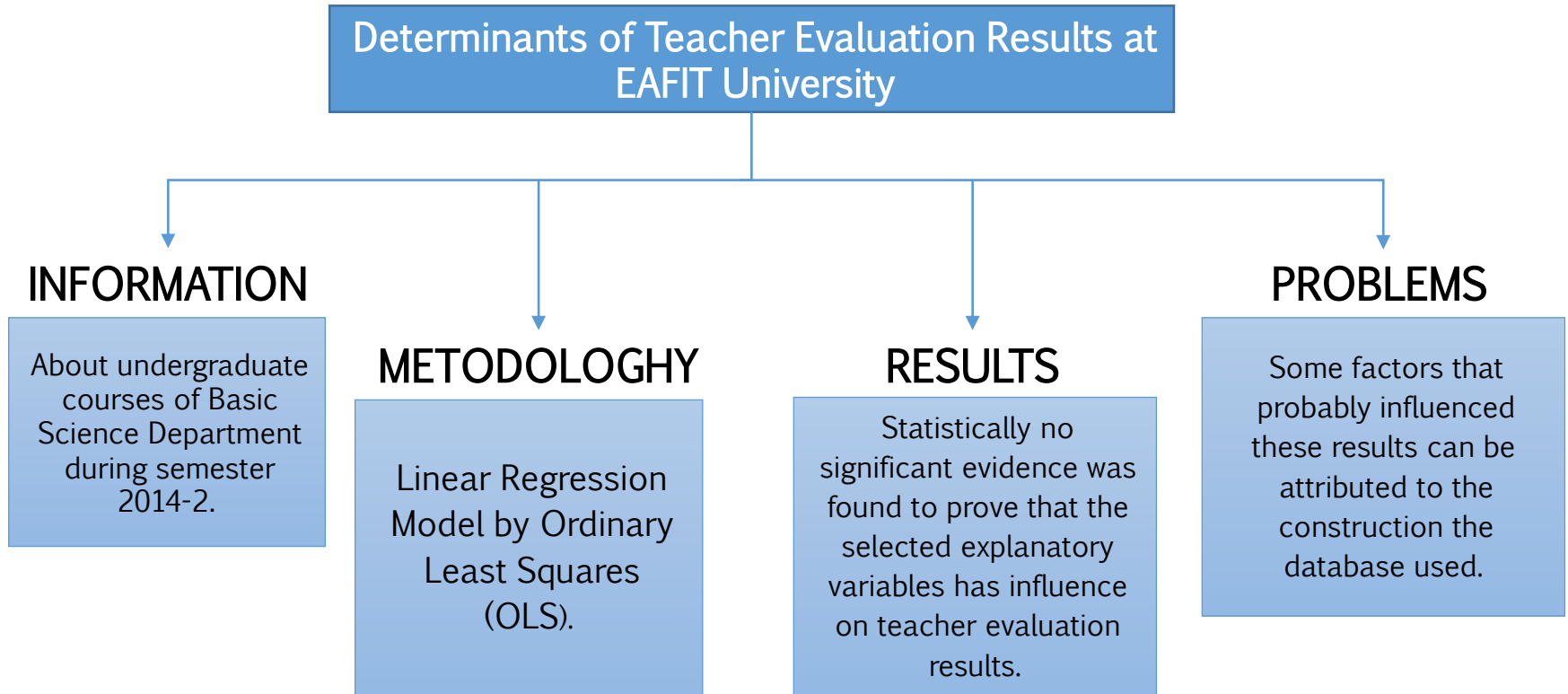
Organizing database of teachers evaluation in 2015-1 and variables to consider in statistic model that will be selected.

Analyzing using descriptive statistics the results of the teacher evaluation by students from School of Science at EAFIT University in 2015-1.

Implementing a multivariate statistical model to explain the relationships between different explanatory variables and teacher evaluation results.

Preceding Work

In Research Practise 1



Preceding Work

Literature Review

Determinants of teacher evaluation: The case of Universidad de los Andes. GAVIRIA Y HOYOS, 2006



Regression model with fixed effects.

Factors affecting university teaching competence ACEVEDO, 2007



Hierarchical Linear Model.

Teacher behavior and student outcomes: Results of a european study. PANAYIOTOU, 2014



Techniques with structural equation modeling.

Scope

- The teacher evaluation at EAFIT University is designed under four components: evaluation by students, teachers' self-evaluation, evaluation by academic peers and supervisor evaluation.
- The scope of this study will be focused on the students evaluation component in undergraduate courses of School of Science.
- The School of Science has an important impact on the different undergraduate programs at the University.
- The semester 2015-1 was chosen because is the last one with the possibility of access to complete information from institutional databases.

Methodology

Dependent variable	Average per group of teacher evaluation of the courses of the School of Science at semester 2015-1
Explanatory variables	
Average grade	Average final grade students of the course (depend to availability information)
Teacher contract type	Full Time or parttime
Service	Management and Economics, Engineering, Science, Humanities
Schedule	Morning, Afternoon or Evening
Level	Basic (1 st -3 th semester), Profesional (4 th -7 th semester), Elective(8 th -10 th semester)
Class size	Number of students for each group
Student attendance	<ul style="list-style-type: none"> • Less than 20% • 20- 50% • 50-70% • Over 70%

Methodology

1. Calculate descriptive information about average value, standard deviation, variation coefficient, quartiles, skewness and kurtosis coefficients.
2. Implement the linear regression model estimated by ordinary least squares method.
3. Select the most appropriate multivariate statistical model to meet the objective of this proposal.
4. Implement the selected model and interpret the results obtained.

References

- R. Acevedo Álvarez (2007). Factores que inciden en la competencia docente universitaria un modelo jerárquico lineal. PhD thesis. Universidad Complutense de Madrid.
- D. Ballou and M. G. Springer (2015). Using student test scores to measure teacher performance some problems in the design and implementation of evaluation systems," Educational Researcher, vol. 44, no. 2, pp. 77-86.
- Expósito, E. G., and de la Iglesia Villasol, C. (2005). Sobre la opinión que los alumnos tienen de la efectividad de la docencia. Una primera exploración con encuestas en Teoría Económica. Revista Iberoamericana de educación, 37(4), 8.
- Gaviria, A., and Hoyos, A. (2008). Determinantes de los resultados de las evaluaciones de profesores: el caso de la Universidad de los Andes. Revista Desarrollo y Sociedad.

References

- Gómez, M., Zuluaga, F., and Jaramillo, A. (2015). Determinantes de los resultados de la evaluación a los docentes en la Universidad EAFIT.
- Hallinger, P. R. H. Heck, and J. Murphy (2014). Teacher evaluation and school improvement: An analysis of the evidence," Educational Assessment, Evaluation and Accountability, vol. 26, no. 1, pp. 5-28.
- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (1998). Teachers, schools, and academic achievement (No. w6691). National Bureau of Economic Research.
- Martínez, J. (2013). Combinación de mediciones de la práctica y el desempeño docente: consideraciones técnicas y conceptuales para la evaluación docente," Pensamiento Revista de Investigación Educativa Latinoamericana, vol. 50, no. 1, pp. 4-20.

References

- McPherson, M. A. Determinants of how students evaluate teachers. *The Journal of Economic Education* 37, 1 (2006), 3-20.
- Panayiotou, L. Kyriakides, B. P. Creemers, L. McMahon, G. Vanlaar, M. Pfeifer, G. Rekalidou, and M. Bren (2014). Teacher behavior and student outcomes: Results of a european study," *Educational Assessment, Evaluation and Accountability*, vol. 26, no. 1, pp. 73-93.
- Romer, D. (1993). "Do students go to class? should they?" *The Journal of Economic Perspectives*, vol. 7, no. 3, pp. 167-174.
- Rockoff, J. E. The impact of individual teachers on student achievement: Evidence from panel data. *American Economic Review* (2004), 247-252.

Thanks for your
attention

QUESTIONS