

Fall 2016

# Data Limitation? Lack of Access to Data?” Recommendations on Data Compiling for Student Retention at Binghamton University

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## Recommended Citation

Li, Helen, "Data Limitation? Lack of Access to Data?” Recommendations on Data Compiling for Student Retention at Binghamton University" (2016). *Capstone Projects 2015-Present*. 30.  
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# Data Limitation? Lack of Access to Data? Recommendations on Data Compiling for Student Retention at Binghamton University

## Introduction

In the United States, the national freshmen retention rate is currently at 73.3%, while at Binghamton University, the freshmen retention rate is at 91%. While this percentage is already higher than most institutions, the university would like to continue their efforts in looking for new initiatives to help preserve and increase our overall retention rate.

In continuation of the capstone project done last semester, I was provided a data set of non-returning freshmen students from Spring 2016 to identify additional patterns and trends that might emerge. Additional components were included to help supplement and add contrast to the previous capstone project.

## Methodology

This research project analyzed a data set (N=134) of non-returning freshmen student from Spring 2016, included are demographics of academic standing, residency, college, GPA range, and transcript requests. IBM SPSS was used to create decision trees for descriptive and statistical analysis.

Student interviews (N=54) from the data set were conducted and coded according to their responses on their decision to leave the university. Office interviews were conducted to gather information on their students' retention rate and overall programming initiatives (EOP, TRIO/SSS, Discovery, Fraternity and Sorority Life).

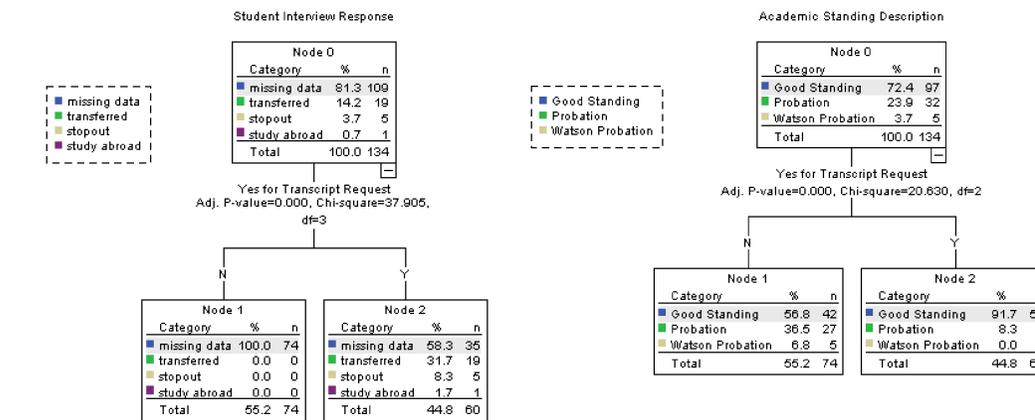
However, due to the lack of data provided by the student interviews (N=54, missing data=109), the findings were not conclusive. This project will now focus on how the university should collect data on students to better analyze student retention in the future.

## Research Objectives

This capstone project was originally created as a segue from the previous student retention capstone. Due to the lack of data, this project will now address how to better collect data for future data compiling on student retention.

1. What data should Binghamton University be collecting on students to be able to analyze student retention better in the future?
2. Is there a type of software or programming available to better compile and gaining access to data on students?
3. How can different offices within the university help in providing information on their students for data compiling?

## Findings



Estimate	Std. Error
.187	.034

Growing Method: CHAID  
Dependent Variable: Student Interview Response

Observed	Predicted				Percent Correct
	missing data	transferred	stopout	study abroad	
missing data	109	0	0	0	100.0%
transferred	19	0	0	0	0.0%
stopout	5	0	0	0	0.0%
study abroad	1	0	0	0	0.0%
Overall Percentage	100.0%	0.0%	0.0%	0.0%	81.3%

Growing Method: CHAID  
Dependent Variable: Student Interview Response

Estimate	Std. Error
.276	.039

Growing Method: CHAID  
Dependent Variable: Academic Standing Description

Observed	Predicted			Percent Correct
	Good Standing	Probation	Watson Probation	
Good Standing	97	0	0	100.0%
Probation	32	0	0	0.0%
Watson Probation	5	0	0	0.0%
Overall Percentage	100.0%	0.0%	0.0%	72.4%

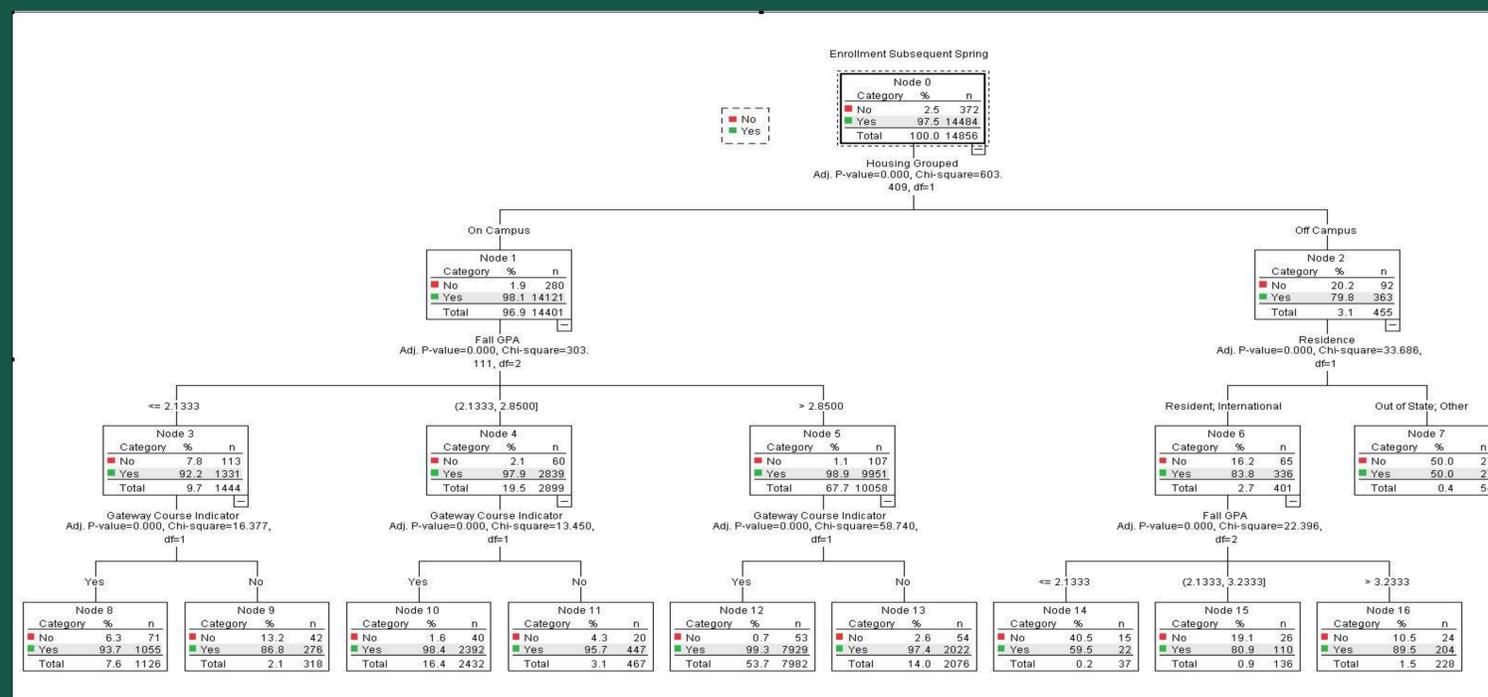
Growing Method: CHAID  
Dependent Variable: Academic Standing Description

## Recommendations

- **SOFTWARE** – Obtaining a location or software to allow access to available data to better compile and gather information on students. Currently, there are several access points that need to be covered in order to obtain all student information. Having a software or system to store all information would be much more accessible in data collecting.
- **IMPLEMENT** – Implement a system where information will be updated continuously on the students most current information. Due to the lack of information from the student interviews, there was more missing data than available data on the student decision to leave the university. By continuously updating information, the university can contact the students more easily and obtain better responses.
- **STUDENT OFFICES** – Cross-checking with student offices for early academic alert on the students' academic standing. Different offices have alerts on how their students are doing academically. This can provide a link to the students' retention and their chances of staying at the university.

## Acknowledgment

Thank you to Professor Pam Mischen, for her guidance and assistance in completing this project. Thank you to Paula Russell, James Pitarresi, Don Loewen, Scott Bennett, Jill Heneghan, and Eduardo Huerta for providing the necessary data for this project.



## Work Cited

Cronk, B. C. (2014). *How to use IBM SPSS statistics: A step-by-step guide to analysis and interpretation*. Glendale, CA: Pyrczak Publishing.

Huerta Soto, J. E. (2016, April). *First semester enrollment trends and patterns: Who stays? and Who leaves the institution?* Poster presented at the capstone poster presentations at the College of Community and Public Affairs, SUNY at Binghamton, Binghamton, NY.

Seidman, A. (2012). *College student retention: Formula for student success*. Plymouth, UK: Rowman & Littlefield Publishers, INC.