
Trinity College Admissions: The Implementation of Predictors of Success

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Ed Studies Senior Research Presentation
Trinity College, Hartford, CT
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Inside Trinity Admissions Process

Student	Numerical Personal Rating	Predictors of Success
1	5	Grit
2	6+	Curiosity, innovation
3	7-	Overcoming adversity

Predictors of Success

Comfort in minority of 1	Innovation
Creativity	Openness to change
Critical thinking	Optimism
Curiosity	Overcoming adversity
Delayed gratification	Persistence
Empathy	Risk taking
Grit	

Research Question

- **What is the relationship, if any, between the predictors of success and the numerical personal ratings assigned to students?**
 - Is the total number of predictors (of any type) assigned to each applicant associated with a higher numerical personal rating?
 - Is the presence of certain predictors associated with higher numerical personal ratings?

Key Findings

- Percentage of enrolled students assigned with predictor(s)
 - 74%: Year 0
 - 36%: Year 1
- Moderate (+) relationship between the number of predictors and numerical personal rating
- Only 3 of 13 statistically associated with higher rating
 - Empathy
 - Overcoming adversity
 - Optimism

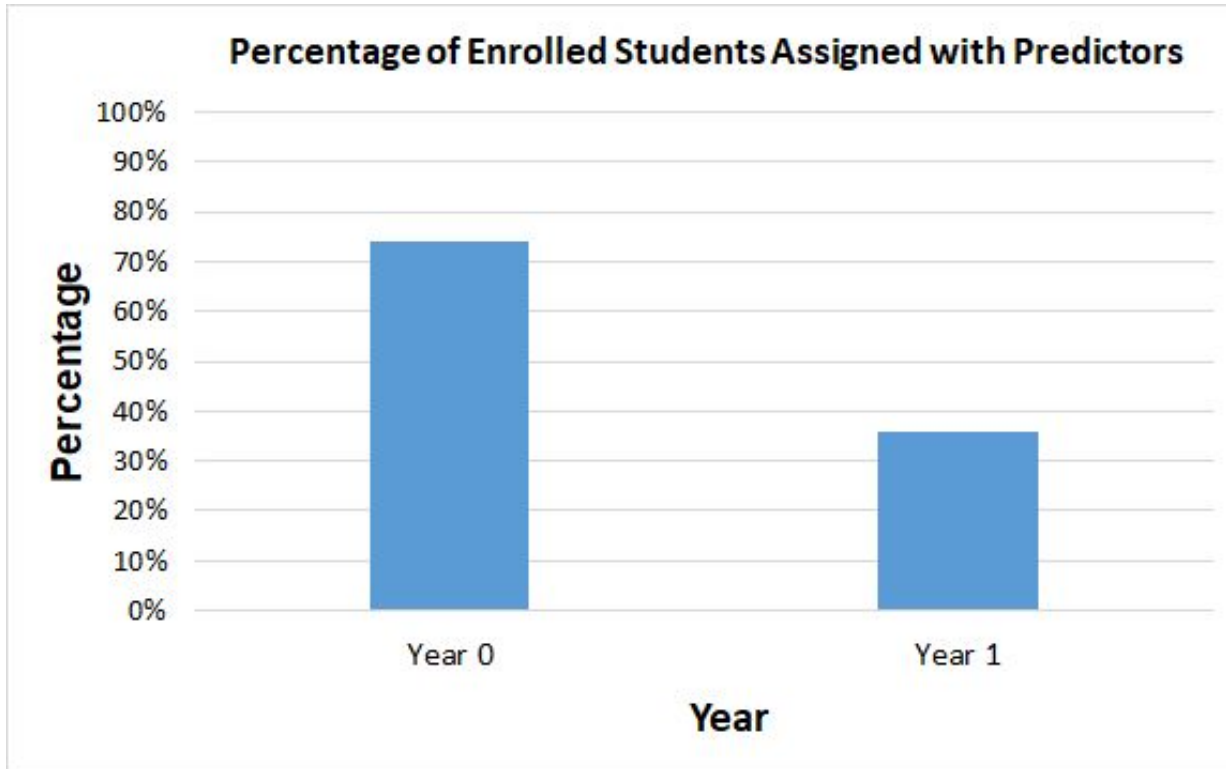
Previous Literature

They Ask	I Ask
<p>Rebecca Zwick (2017): How do we determine how to consistently and systematically measure “noncognitive” behaviors?</p>	<p>Are some noncognitive predictors associated with higher numerical personal evaluations?</p>

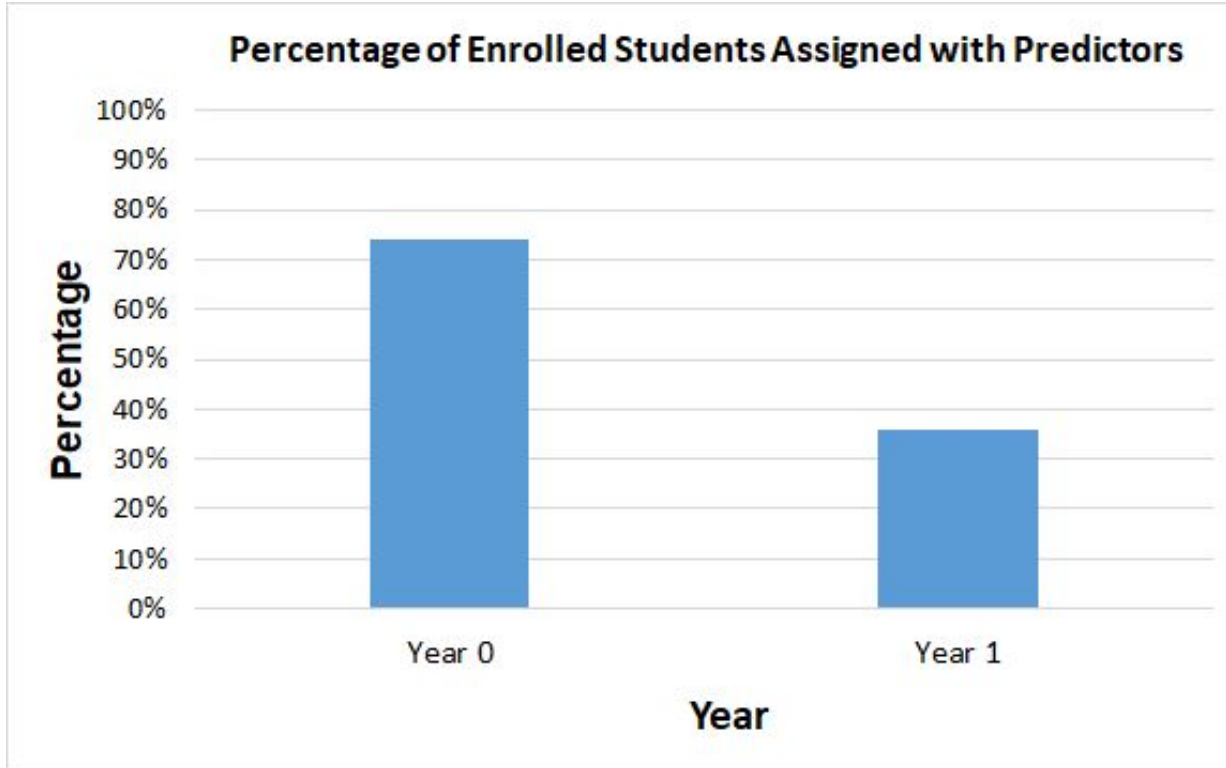
Methodology

- No IRB
- Data cleaning
- Excel → Correlation and Scatterplots
- Stata → Multivariate Regression Analysis

1. Did the Percentage of Enrolled Students with Predictors Rise or Fall?

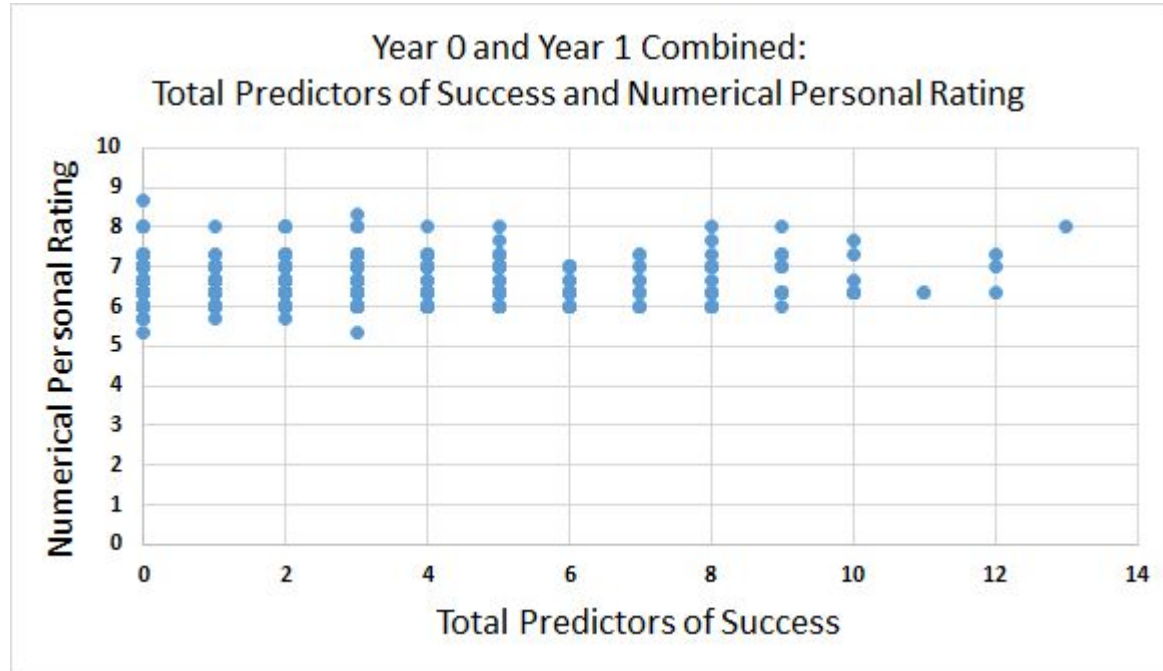


1. Did the Percentage of Enrolled Students with Predictors Rise or Fall?

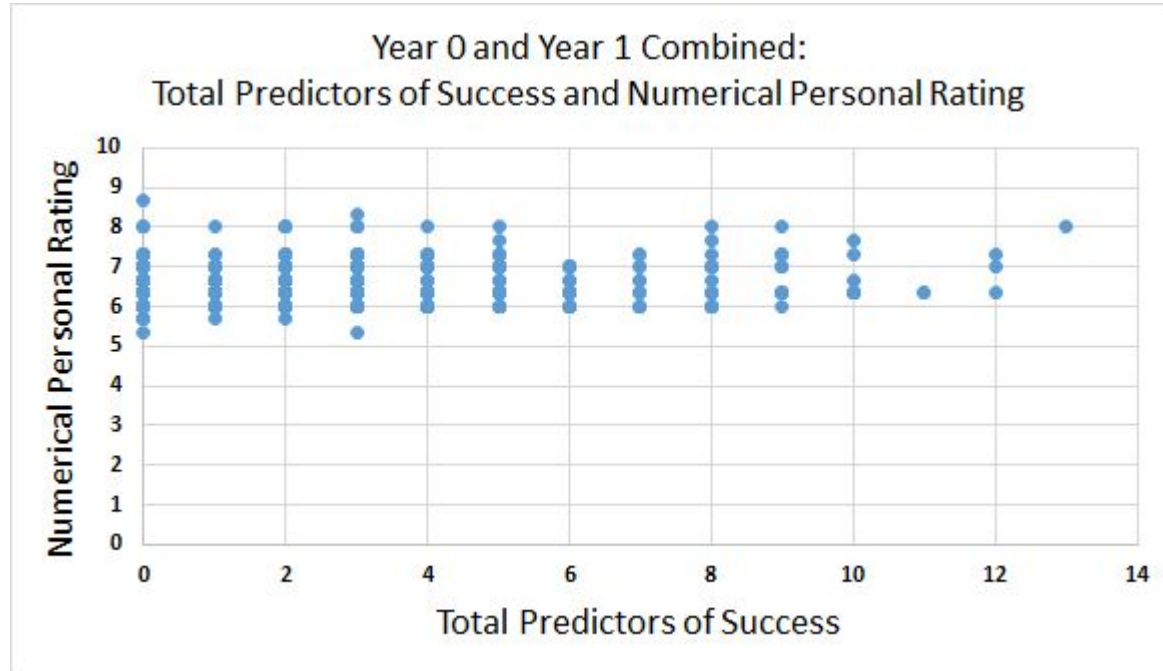


Answer: Fell by 38%

2. Do Number of Total Predictors Influence Personal Ratings?



2. Do Number of Total Predictors Influence Personal Ratings?



Answer: Moderate Positive Correlation: 0.333

3. Which Predictors are Associated with Higher/ Lower Numerical Ratings?

Multivariate Regression

Number of obs = 1,159

F(13, 1145) = 12.35

Prob > F = 0.0000

R-squared = 0.1627

Root MSE = .39629

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
finalperso~g						
comfpredic~r	.0167014	.0556477	0.30	0.764	-.0924814	.1258842
creapredic~r	-.0484366	.0424567	-1.14	0.254	-.1317382	.034865
critpredic~r	.1132943	.0452572	2.50	0.012	.0244979	.2020907
curipredic~r	.0411984	.0408352	1.01	0.313	-.0389219	.1213186
delapredic~r	-.0293327	.0736726	-0.40	0.691	-.1738811	.1152156
empapredic~r	.1264819	.0330496	3.83	0.000	.0616373	.1913266
gritpredic~r	-.022091	.0460209	-0.48	0.631	-.1123857	.0682038
innopredic~r	.1697908	.0821815	2.07	0.039	.0085476	.3310341
openpredic~r	.0110786	.0457749	0.24	0.809	-.0787336	.1008908
optipredic~r	.169511	.0462464	3.67	0.000	.0787738	.2602481
overpredic~r	.2778982	.0451289	6.16	0.000	.1893537	.3664428
perspredic~r	-.0310695	.0421441	-0.74	0.461	-.1137579	.0516189
riskpredic~r	.0239532	.0552762	0.43	0.665	-.0845008	.1324073
_cons	6.220441	.0134396	462.84	0.000	6.194072	6.24681

3a. Which Predictors are Statistically Associated with Higher Numerical Ratings?

Multivariate Regression

finalperso~g	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
empapredic~r	.1264819	.0330496	3.83	0.000	.061637	.1913266
optipredic~r	.169511	.0462464	3.67	0.000	.0787738	.2602481
overpredic~r	.2778982	.0451289	6.16	0.000	.1893537	.3664428

Answer: Empathy, Optimism, Overcoming adversity

3b. Which Predictors are Statistically Associated with Lower Numerical Ratings?

Multivariate Regression

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
creapredic~r	-.0484366	.0424567	-1.14	0.254	-.1317382	.034865
delapredic~r	-.0293327	.0736726	-0.40	0.691	-.1738811	.1152156
gritpredic~r	-.022091	.0460209	-0.48	0.631	-.1123857	.0682038
perspredic~r	-.0310695	.0421441	-0.74	0.461	-.1137579	.0516189

Answer: None

Future Research Possibilities

- Calculate interrater reliability
- Interviews
- Population: All applicants

Special Thanks to...

- Angel Perez
 - *Trinity College Vice President of Student Enrollment and Success*
- Robert Greene
 - *Trinity College Admissions Computing Data Specialist*
- Jack Dougherty
 - *Trinity College Professor of Educational Studies*

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