

Determining Factors that Affect Student Retention:

A comparison of students with close friends that will attend

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INTRODUCTION

- ▶ Purpose
- ▶ Research Questions
- ▶ The Model
- ▶ The Methods
- ▶ Data Analyses
- ▶ Findings
- ▶ Conclusion
- ▶ Limitations
- ▶ Comments

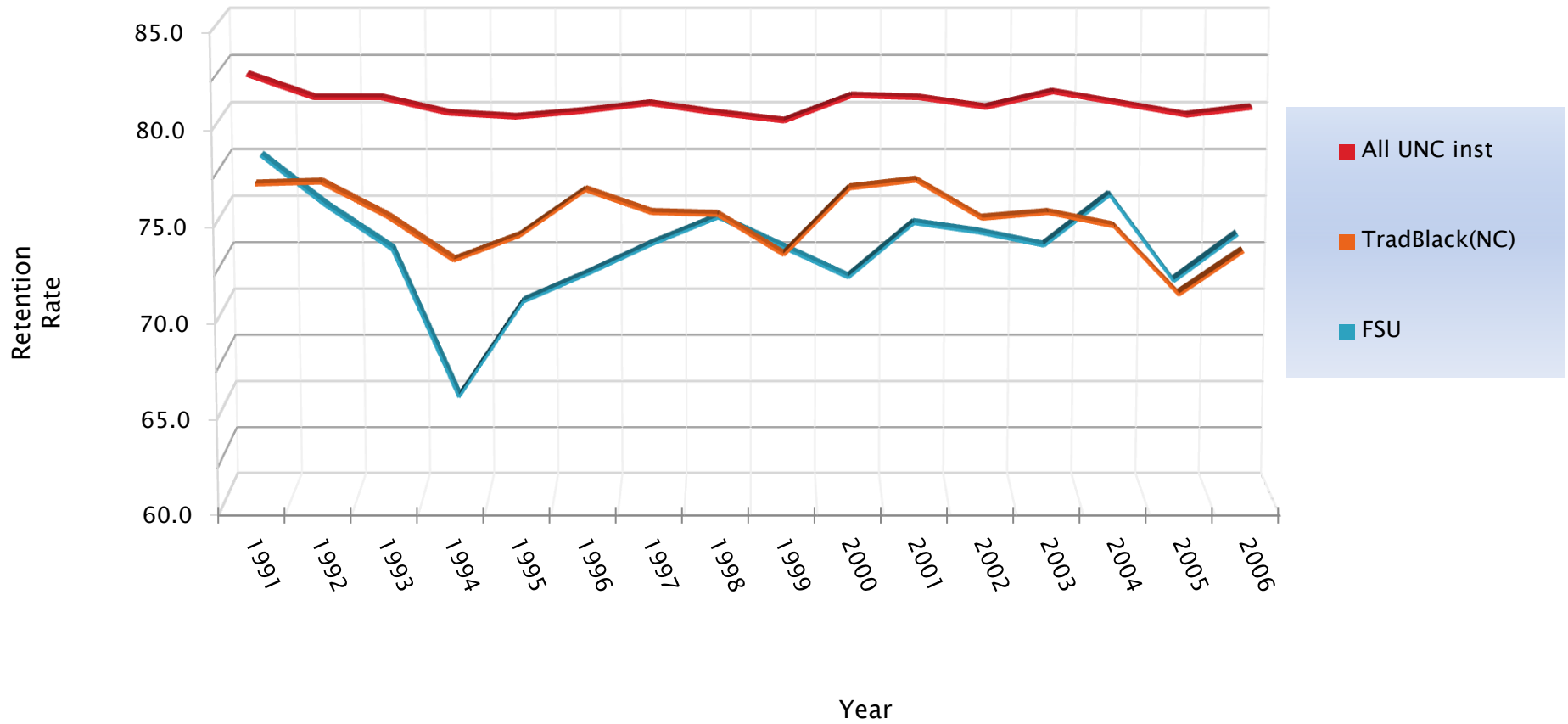
PURPOSE

- ▶ To identify and compare retention factors of students with close friends that will attend a institution to those who do not have close friends that will attend the same institution

RESEARCH QUESTIONS

- ▶ Do students with close friends attending an institution have a higher retention rate than those without close friends?
- ▶ Are the significant factors different for students that have close friends that will attend the same institution?

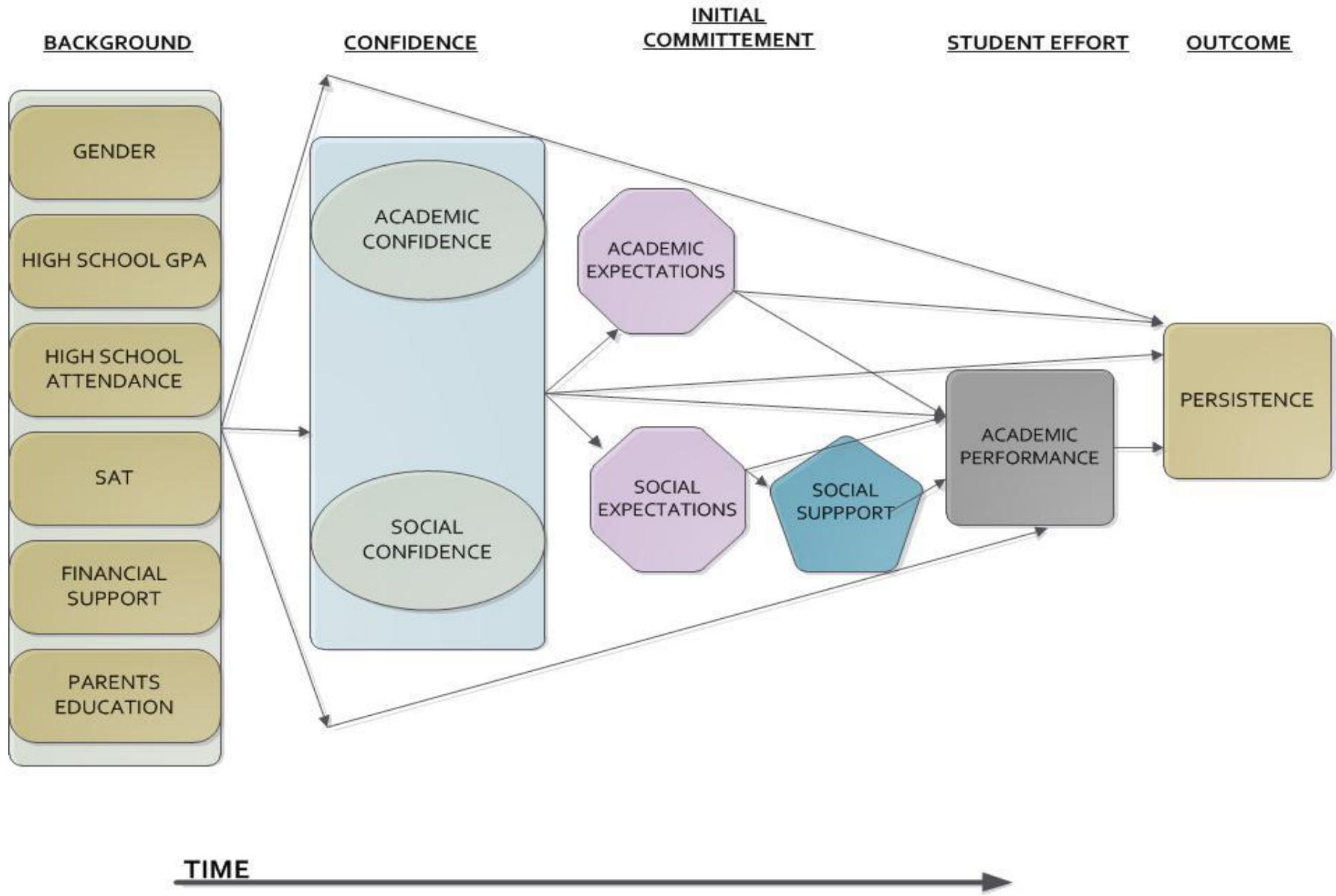
Comparison of Retention Rates



THE MODEL

- ▶ Applies a cross-sectional longitudinal approach based on Tinto's student interaction model and Allen's Model
- ▶ Focuses on Background variables, confidence, expectations, and performance.

FIGURE 1. HYPOTHESIZED MODEL



METHODS

- ▶ Cohorts (2007, 2008, 2009, 2010) from a Historical Black University in the Southeast
- ▶ Sampled (First-time, full-time freshmen)
- ▶ Includes students that participated in the Beginning College Survey of Student Engagement (BCSSE)

METHODS

Table 1. Sample Comparisons (Grand Cohorts: 2007 to 2010)

	Sample	BCSSE	W/Friends	W/o Friends
Measures	(N = 2676)	(N=1871)	(N=1229)	(N=642)
Gender (percent female)	62.1	65.8	63.4	70.6
HS GPA	2.83	2.81	2.78	2.88*
SATV	420.75	413.56	408.16	423.9*
SATM	434.25	428.57	426.25	433.02*
First Term GPA	2.39	2.45	2.35	2.63*
Persistence	0.70	0.73	0.74	0.72

METHODS

Listing and Definition of Variables

Variables	Source	Definition
1. Persistence	Student Data File	1=Enrolled after 1 year, 0=Dropped
2. Acad Performance	Student Data File	First Semester GPA
3. Social Support	BCSSE	Composite of 4 items [Alpha = 0.855] 1=Not Important, 6=Very Important
4. Soc Expectation	BCSSE	Composite of 3 items [Alpha = 0.818] 1=Never, 4=Very Often
5. Acad Expectation	BCSSE	Composite of 7 items [Alpha = 0.860] 1=Never, 4=Very Often
6. Acad Confidence	BCSSE	Composite of 6 items [Alpha =0.887] 1=Not at All Certain, 6=Very Certain
7. Social Confidence	BCSSE	Composite of 6 items [Alpha =0.874] 1=Not at All Prepared, 6=Very Prepared
8. HSGPA	Student Data File	High School GPA
9. SAT Combined	Student Data File	Combined SAT Score
10. HS Attendance	BCSSE	1=Never missed a day of school, 4=Very Often Missed School
11. Parents Education	BCSSE	Composite of mother and father's education
12. Financial Support	BCSSE	Composite of 4 items [Alpha =0.813] 1=None, 5=Nearly All
13. Friends Attend	BCSSE	1=None of your close friends will attend, 2= close friends will attend
14. Gender	Student Data File	1= Male 2=Female

METHODS

	Correlations												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Persistence	1	0.351	0.021	-0.014	0.004	0.022	-0.006	0.092	-0.005	-0.112	0.023	-0.049	0.015
2. Acad Performance	0.351	1	0.022	0.075	0.017	0.043	0.023	0.447	0.192	-0.094	-0.043	-0.101	-0.135
3. Soc Support	0.021	0.022	1	-0.084	0.312	0.450	0.354	0.040	-0.041	-0.034	-0.071	0.046	0.029
4. Soc Expectation	-0.014	0.075	-0.084	1	-0.109	-0.202	-0.175	0.056	-0.006	-0.004	0.047	0.000	-0.089
5. Acad Expectation	0.004	0.017	0.312	-0.109	1	0.371	0.274	-0.001	-0.020	-0.023	-0.046	-0.066	-0.026
6. Acad Confidence	0.022	0.043	0.450	-0.202	0.371	1	0.657	0.074	0.064	-0.049	-0.083	0.011	-0.023
7. Social Confidence	-0.006	0.023	0.354	-0.175	0.274	0.657	1	0.044	0.103	-0.008	-0.078	-0.008	0.015
8. HSGPA	0.092	0.447	0.040	0.056	-0.001	0.074	0.044	1	0.418	-0.066	-0.047	-0.093	-0.092
9. SAT Combined	-0.005	0.192	-0.041	-0.006	-0.020	0.064	0.103	0.418	1	0.022	-0.086	-0.078	-0.107
10. HS Attendance	-0.112	-0.094	-0.034	-0.004	-0.023	-0.049	-0.008	-0.066	0.022	1	-0.031	0.013	0.055
11. Parents Education	0.023	-0.043	-0.071	0.047	-0.046	-0.083	-0.078	-0.047	-0.086	-0.031	1	0.051	0.046
12. Financial Support	-0.049	-0.101	0.046	0.000	-0.066	0.011	-0.008	-0.093	-0.078	0.013	0.051	1	0.040
13. Friends Attend	0.015	-0.135	0.029	-0.089	-0.026	-0.023	0.015	-0.092	-0.107	0.055	0.046	0.040	1

DATA ANALYSES

- ▶ Structural Equation Modeling
 - SPSS generated exploratory factor analysis used to estimate the model
 - Binary Logistic Regressions were used to determine significant factors
 - Hypothesized casual model will be estimated

Table 2. Parameter Estimates for Students without close Friends

Measures	ACAD CONF.	SOCIAL CONF.	SOCIAL EXPECT.	ACADEMIC EXPEC.	ACADEMIC PERFOR.	PERSISTENCE
GENDER	*0.143	0.132	0.113	0.077	0.067	0.157
HSGPA	0.083	0.061	0.156	-0.055	**0.72	-0.055
HS ATTENDANCE	-0.019	-0.005	0.119	-0.010	-0.117	** -0.444
SAT COMBINED	0.000	0.001	0.000	0.000	0.000	-0.002
FINANCIAL SUPPORT	-0.021	0.051	0.018	**0.093	*0.094	-0.065
PARENTS EDUCATION	0.043	0.062	*-0.100	0.008	0.019	-0.044
ACADEMIC CONFIDENCE			** -0.239	**0.205	0.006	0.028
SOCIAL CONFIDENCE			*-0.148	**0.077	-0.013	*-0.281
ACADEMIC EXPECTATIONS					-0.044	-0.053
SOCIAL EXPECTATIONS					-0.001	*-0.212
SOCIAL SUPPORT					0.016	0.041
ACADEMIC PERFORMANCE						**0.717
PERSISTENCE						

p<.01** p<.05*

Table 3. Parameter Estimates for Students with close Friends

Measures	ACADEMIC CONF.	SOCIAL CONF.	SOCIAL EXPECT.	ACADEMIC EXPECT.	ACADEMIC PERFORM.	PERSISTENCE
GENDER	**0.282	**0.277	0.100	0.048	0.095	-0.169
HSGPA	-0.032	** -0.155	0.132	-0.013	**0.796	-0.292
HS ATTENDANCE	*-0.105	-0.028	-0.104	-0.010	*-0.124	*-0.291
SAT COMBINED	*0.001	0.001	-0.001	0.000	0.000	-0.001
FINANCIAL SUPPORT	0.005	*0.077	0.051	*0.040	0.011	*0.192
PARENTS EDUCATION	0.037	*0.055	-0.017	0.008	0.028	-0.018
ACADEMIC CONFIDENCE			** -0.233	**0.231	0.018	0.115
SOCIAL CONFIDENCE			-0.051	-0.006	0.006	-0.020
ACADEMIC EXPECTATIONS					0.044	-0.060
SOCIAL EXPECTATIONS					*0.058	-0.027
SOCIAL SUPPORT					-0.022	0.054
ACADEMIC PERFORMANCE						**0.980
PERSISTENCE						
	p<.01**	p<.05*				

FINDINGS

Table 4. Findings Comparison of Groups		
	W/Friends	W/o
Measures	(N=1229)	(N=642)
Gender (percent female)	63.4	70.6
HS GPA	2.78	2.88*
SATV	408.16	423.9*
SATM	426.25	433.02*
First Term GPA	2.35	2.63*
Persistence	0.74	0.72

FINDINGS

► Impacts on Persistence

- High School attendance, academic performance was significant for both groups.
- Social Confidence and Social Expectation has a negative influence on persistence for students without close Friends that will attend

► Impacts on Academic Performance

- High School GPA significantly influence Academic Performance for both groups
- Social Expectation has a significant positive influence on Academic Performance for students with Friends
- Financial Support has a positive influence on Academic Performance for students without Friends

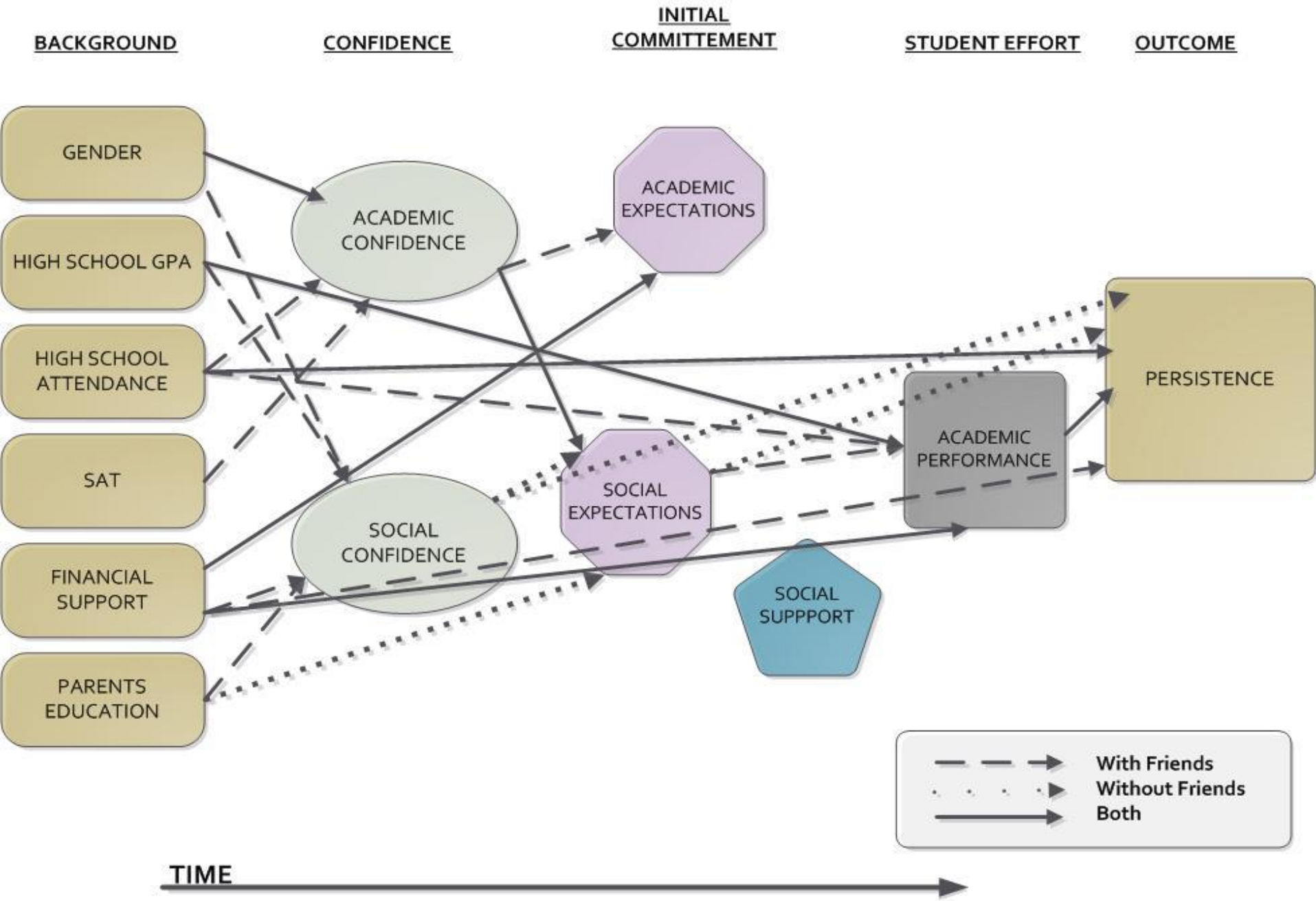
► Impacts on Academic Expectations

- Financial Support and Academic Confidence are both significant in both groups

► Impacts of Social Expectations

- Students with close friends, Parents Education, Academic Confidence, and Social Confidence were significant
- Students without close friends, Academic Confidence was significant

FIGURE 2.SIGNIFICANT FACTORS



CONCLUSION

- ▶ Students with close friends that will attend the university came less academically prepared but had higher retention rates
- ▶ High School Attendance and Academic Performance were significant for both groups
- ▶ Social Expectations has a positive influence on Academic performance for students with friends but has a negative influence on persistence for students without friends

LIMITATIONS

- ▶ Single institution focus
- ▶ ??

COMMENTS, QUESTIONS AND SUGGESTIONS

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THANKS!!!!

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