





**Underprepared College Student Cohort: Study of
Differences in Academic Integration and Social
Integration in Synergy Supportive Learning
Environment**

University of Wyoming

Kim Dickinson
Andrew Linck
Nicole Wardell

Abstract

- Research focused around student success in supportive learning community
- Using Tinto's theory (Tinto, 1993) of student departure or persistence and how it correlates with social integration and academic integration to predict student success
- Discuss how academic integration and social integration are factors of the four different selection cohorts of the University of Wyoming Synergy Program.



Introduction

- Importance of post-secondary education in teaching students who enter with academic deficiencies increasing
- WHY?
 - Due to existing jobs and skill sets needed by employees evolve.
 - Cultural barriers become lowered for individuals traditionally not college-bound



- Supportive services must be created and explored to meet needs
 - 78% of higher education institutions that enrolled first-year students in fall 1995 offered at least one course in basic skills including reading, writing, or mathematics course
 - 29% of first-time first-year students enrolled in at least one remedial reading, writing, or mathematics course in fall 1995

Merisotis, & Phipps, 2000

The Review of Higher Education, p.69





University of Wyoming Synergy Program

- Supportive learning environment
- Serves underprepared college students
- Originally a pilot project
 - Successful
 - Outcome, recommendation that all conditionally-admitted students be required to participate in learning community



- Criterion for being conditionally-admitted
 - In-state students are conditionally-admitted if their high school GPA is below 2.50.
 - Out of state students are conditionally admitted if their high school GPA is below 2.75, or if their ACT score is below 20 and their high school GPA is below 3.0

Synergy Program, 2008



Synergy Program Cohorts – Supportive Learning Community

- Students select Intellectual Community course (meets University Studies requirements)
- This selection identifies their Synergy cohort
- Together as a cohort students move through English 1010, Political Science 1000, and Intellectual Community (UWYO 1450)



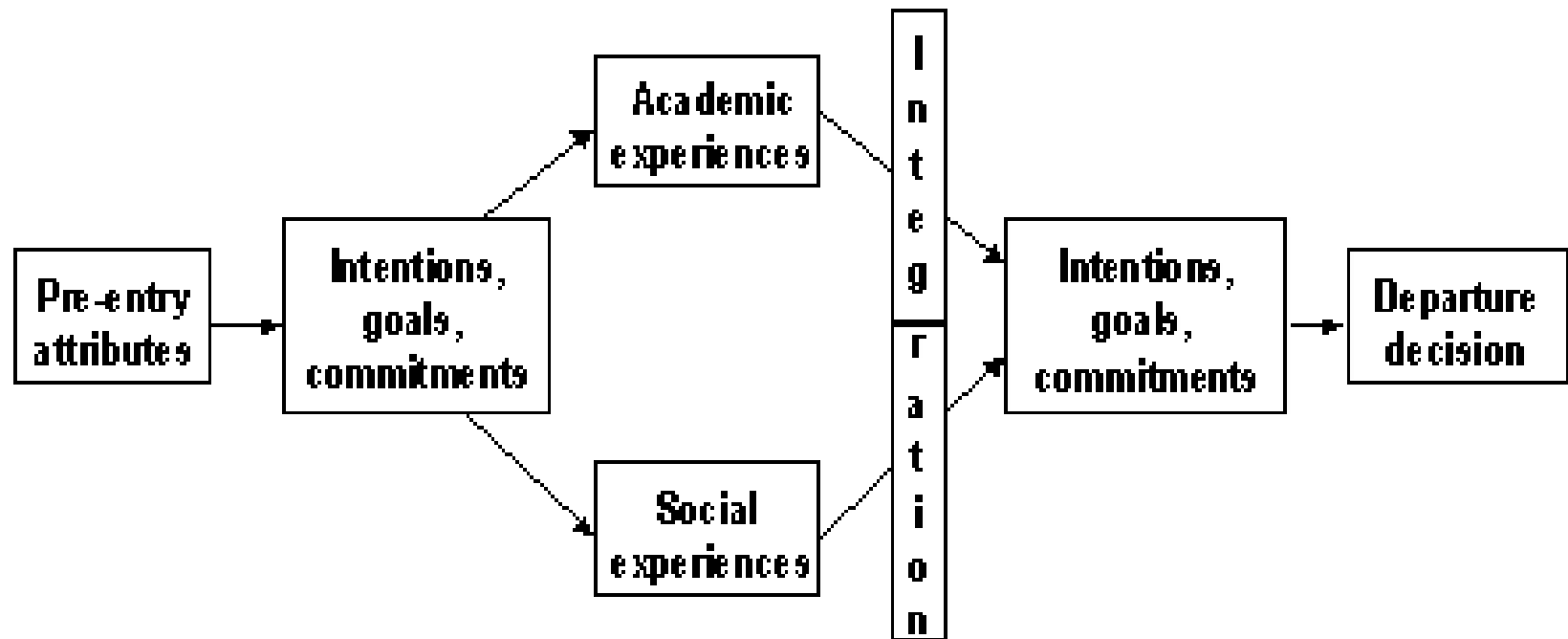
Synergy Program Cohorts – Supportive Learning Community

- Four cohorts studied
- Cohorts are:
 - 1) Critically Thinking About the Media and our World
 - 2) Truth Behind the Hype: Politics and Generation Rx
 - 3) Jobs, Vocations, Careers: Finding the Workplace of Your Own and Science & Literacy: Interpreting the Scientific World Around You
 - 4) Images of a Continent, Old, and New: Exploring African Cultures and Sports and Culture



Theoretical Model

Tinto's model of student departure (simplified)



Yorke, 2003

Tinto's Model – Process that occurs as students integrate into environment

Social Integration (SI)

Occurs when individuals find a means to validate, interact, and connect with one another

May occur by involvement and integration into co-curricular activities, residence hall living, participation in community events, and involvement in peer support groups both formal and informal

Academic Integration (AI)

Occurs when value placed upon what they are learning.

Integration has occurred when there is identification with the specific institutions academic norms and values.



Tinto's Model – process that occurs as students integrate into environment

Social Integration (SI)

Academic Integration (AI)

Academic integration can be measured by identifying self-regulatory learning strategies such as planning, monitoring, and regulating behavior based on goals; and techniques utilized to manage resources such as time and people

(Heaney & Fisher, 2011)



Methods

- Participants
 - Students currently enrolled in the Synergy Program
 - Eliminated students over the age of 24
 - 89 students completed the survey
- Instrument
 - Synergy questionnaire developed in 2008
 - Developed to measure progress of underprepared students



Methods

- Social Integration
 - Question 4d
 - Approximately how many HOURS PER WEEK did you spend doing the following? Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)
 - Question 5b-j
 - About how frequently did you participate/attend any of the following? b. Attending art or theatre events, c. Volunteering or doing service work, d. Participating in physical activities, e. Participating in spiritual activities, f. Going to sporting events, g. Sports (varsity, club, intramural), h. Club, i. Fraternity/Sorority, j. Socializing (parties, spending time with friends)



Methods

- Academic Integration
 - Question 1a-f
 - Please indicate any of the following support services that you used the semester? a. Writing Center, b. Math Lab, c. Student Learning Center (in basement of Washakie), d. Supplemental Instruction in POLS, e. Library research/reference, f. Office hours
 - Question 3
 - Approximately how many classes did you miss this semester? Please consider all of your classes, not just Synergy courses
 - Question 5
 - Approximately how many HOURS PER WEEK did you spend doing the following? a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)



Methods

- Procedure
 - Synergy administered the survey at the end of the Fall 2010 academic semester
- Analysis of Variance
 - Look at the differences between academic and social integration between the four cohorts
- Regression Analysis
 - Look at how social integration and academic integration predict GPA



Results

		Cohort 1	Cohort 2	Cohort 3	Cohort 4	F-Statistic	P-Value
Social Integration							
Question #4d	Mean (Std Deviation)	6.00 (8.41)	5.23 (8.28)	5.61 (8.49)	7.43 (8.31)	0.27	0.85
Question #5b-j	Mean (Std Deviation)	13.50 (4.61)	15.46 (5.24)	13.91 (5.48)	14.52 (5.71)	0.48	0.70
Academic Integration							
Question #1a-f	Mean (Std Deviation)	6.47 (3.42)	7.46 (2.47)	7.55 (5.32)	6.70 (3.82)	0.42	0.74
Question #3	Mean (Std Deviation)	7.47 (5.64)	6.62 (3.82)	6.65 (6.04)	6.09 (5.23)	0.30	0.83
Question #5	Mean (Std Deviation)	7.47 (6.60)	12.15 (7.12)	7.48 (5.58)	9.91 (7.53)	2.00	0.12

Results

Correlations							
		GPA	Social Integration Question #4 (8d)	Sum of Social Integration #5 b-j	Sum of Academic Integration #1 a-f	Academic Integration Question #3 (14)	Academic Integration Question #5 (8a)
GPA	Pearson Correlation	1	.006	-.117	.160	-.401**	.299**
	Sig. (2-tailed)		.958	.273	.136	.000	.004
	N	89	89	89	88	89	89
Social Integration Question #4 (8d)	Pearson Correlation	.006	1	.380**	.152	.088	.057
	Sig. (2-tailed)	.958		.000	.159	.413	.595
	N	89	89	89	88	89	89
Sum of Social Integration #5 b-j	Pearson Correlation	-.117	.380**	1	.174	.061	.090
	Sig. (2-tailed)	.273	.000		.105	.573	.402
	N	89	89	89	88	89	89
Sum of Academic Integration #1 a-f	Pearson Correlation	.160	.152	.174	1	.037	.050
	Sig. (2-tailed)	.136	.159	.105		.733	.640
	N	88	88	88	88	88	88
Academic Integration Question #3 (14)	Pearson Correlation	-.401**	.088	.061	.037	1	-.043
	Sig. (2-tailed)	.000	.413	.573	.733		.686
	N	89	89	89	88	89	89
Academic Integration Question #5 (8a)	Pearson Correlation	.299**	.057	.090	.050	-.043	1
	Sig. (2-tailed)	.004	.595	.402	.640	.686	
	N	89	89	89	88	89	89

** . Correlation is significant at the 0.01 level (2-tailed).

Results

- F-statistic 9.05
- Degrees of Freedom 5
- Significance .00
- The model is significant in showing that academic integration is predictive of GPA outcome.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.596 ^a	.356	.316	.77562

a. Predictors: (Constant), Academic Integration Question #5 (8a), Academic Integration Question #3 (14), Sum of Academic Integration #1 a-f, Social Integration Question #4 (8d), Sum of Social Integration #5 b-j

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.216	5	5.443	9.048	.000 ^a
	Residual	49.330	82	.602		
	Total	76.546	87			

a. Predictors: (Constant), Academic Integration Question #5 (8a), Academic Integration Question #3 (14), Sum of Academic Integration #1 a-f, Social Integration Question #4 (8d), Sum of Social Integration #5 b-j

b. Dependent Variable: GPA

Results

Coefficients a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.354	.296		7.959	.000
	Social Integration Question #4 (8d)	.011	.011	.094	.969	.335
	Sum of Social Integration #5 b-j	-.032	.017	-.175	-1.810	.074
	Sum of Academic Integration #1 a-f	.042	.022	.178	1.965	.053
	Academic Integration Question #3 (14)	-.087	.017	-.462	-5.163	.000
	Academic Integration Question #5 (8a)	.043	.012	.311	3.493	.001

a. Dependent Variable: GPA

References

(2008). *Synergy program report*. 1-4. University of Wyoming.

Cukras, G. (2006). The Investigation of Study Strategies that Maximize Learning for Underprepared Students. *College Teaching*, 54(1), 194-197.

Heaney, A., & Fisher, R. (2011). Supporting conditionally-admitted students: a case study of assessing persistence in a learning community. *Journal of the Scholarship of Teaching and Learning*, 11(1),

Merisotis, J, & Phipps, R. (2000). Remedial education in colleges and universities: what's really going on? *The Review of higher Education*, 24(1), 67-85.

Tinto V (1993). *Leaving college: rethinking the causes and cures of student attrition* [2nd Edition]. Chicago: University of Chicago Press.



