

INSTITUTIONAL FACTORS THAT CONTRIBUTE TO STUDENT PERSISTENCE

Views from Three Campuses

John Moore
Don Hossler
Mary Ziskin
Phoebe Wakhungu

Indiana University

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Overview: The Research Questions

The limits of current theories and research on student persistence provide the backdrop

- 1) How can campuses intervene to positively influence persistence?
- 2) What are the links between campus initiatives and persistence?
- 3) How well do the study's methodological techniques work in both instrument design and revision?

Overview: Review of the Literature

- Many have pointed to the importance of this question
- Policy levers
 - ▣ Work identifying pivotal practices
 - ▣ Directions identified through theory and research
 - ▣ Empirical record remains uneven

Policy Levers

- Recruitment practices
- Alleviating racial discrimination
- Applying fair academic regulations
- Academic advising
- Active learning strategies
- Stress management and career planning
- Orientation and residential life practices
- Need-based financial aid

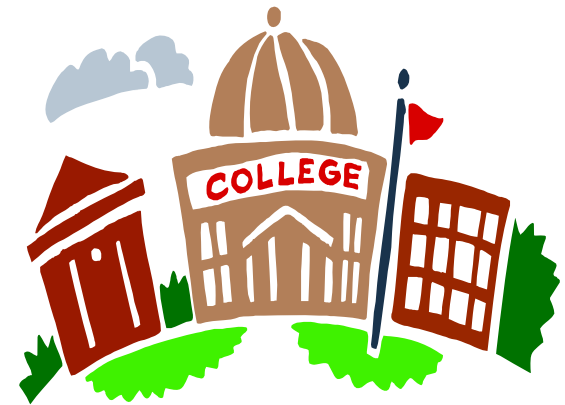
Methods: The Process



- A survey of first-time, full-time, first-year students
- Surveyed at end of first year (spring 2007)
 - In-class, paper-and-pencil administration
- Response rates
 - 43% (UU)
 - 45.3% (RC)
 - 60% (CU)
- Follow-up data collected for fall 2007 enrollment

Methods: The Campuses

- Represent three states, different student populations, and different retention issues
 - 1 Western public commuter institution: Coastal University (CU)
 - 1 Midwest urban public institution: Urban University (UU)
 - 1 Eastern residential HBCU institution: Residential University (RU)



Methods: The Policy Lever Factors

- From first pilot study we needed more detailed information on institutional policy levers
- Used literature, theory, and professional organizations to refine questions about levers
 - ▣ Ex: Orientation: making connections, finding assistance, understanding institutional academic context
- Used these questions in factors to develop a more refined understanding of policy levers

Analysis

- **Logistic regression** models added variables in two blocks (started with full model and pared down from there)
 - Dependent: Retained/not retained
 - Block 1: Student background variables
 - Race
 - Gender
 - Financial certainty
 - SAT scores
 - Block 2: Experiences with policy levers
 - Interaction with faculty and advisors
 - Orientation and first-year seminar experiences
 - Perception of diversity and bias
 - Academic and social integration

Results: General Findings

- Year-to-year persistence rates from 88% to 96%
- Logistic regressions showed that persistence models enhanced the prediction of which students did not persist
 - ▣ Blocks with policy levers significantly improved prediction
- Significant variables had some similarities across campuses, but each institution had a unique model estimation
 - ▣ Factors, however, held together across institutions

Results: Urban University

Variables	Odds Ratio	Sig.
Female	0.26	*
21 years old or older	6.51	**
Academic support'	0.43	*
Perception of bias'	3.08	*
Hrs worked off campus	0.65	**
Transition support	2.34	**
Friend network	0.42	**
Significant connection	1.69	
Family encouragement	3.14	***
Class absences	.68	
	N=184	
' Represents a factor	Nagelkerke R ² = .37	

- Fairly diverse population
- Lowest retention rate
- Highest number of significant items
- Classified 84% of nonpersisters correctly

Results: Coastal University

Variables	Odds Ratio	Sig.
Race (White)	0.34	*
Female	1.82	
Certainty of funding	1.09	
SAT (in thousands)	1.85	**
Orientation'	1.11	
Advisor interaction'	1.21	
Faculty interaction'	1.08	
Student interaction	1.15	
Perception of bias'	2.11	**
Financial aid'	0.93	
Perception of bias'	2.11	**

Variables	Odds Ratio	Sig.
Financial aid'	0.93	
Diversity perception'	1.27	
Social networking'	0.65	
Family encouragement	4.58	****
Transition satisfaction	2.54	**
Late assignments	0.64	
Resp. for students	0.73	
N=350		
' Represents a factor Nagelkerke R ² = .31		
*p<.10, **p<.05, ***p<.01, ****p<.001		

- Diverse Campus
- High retention rate
- Fewer significant items
- More predictive ones
- Classified 83.3% of nonpersisters correctly

Results: Residential College

Variables	Odds Ratio	Sig.
Certainty of funding	1.58	
First-year experience	0.44	
Academic support'	1.59	
Family encouragement	2.94	**
Late assignments	0.48	*
Transition support	0.51	
Significant connection	2.09	
Class absences	0.68	
N=262		
' Represents a factor		Nagelkerke R ² = .198
*p<.10, **p<.05, ***p<.01, ****p<.001		

- Few significant predictors
- Smaller model
- Homogeneous in race, gender, SAT
- Highest retention rate
- Classified 80% of nonpersisters correctly

Implications: Institutions

- Each campus had unique cluster of predictive variables
- Some relatively consistent predictors
 - ▣ Family encouragement
 - ▣ Perception of bias
 - ▣ Transition support
- Findings for Practice
 - ▣ Involve parents in transition process
 - ▣ Students' ability to recognize/deal with bias important
 - ▣ Orientation/FYE not the only sources of transition support

Implications: Research

□ Challenges in studying retention

□ Complexity of models

- Indirect/marginal effects
- Small effects

□ Lack of variation on shared experiences

□ Multiplicity of experiences

- Students (race, age, etc.)
- Institutions (size, mission, etc.)
- Requires larger sample sizes

□ Importance of institutional role

- Self-selection of schools
- Individual characteristics/background

□ Structure of research

- Limited theories
- Assessing levers
 - Operationalization
 - Quality v. satisfaction
- Limits of correlation research

Concluding Remarks

- A policy-oriented survey that can help campus policy makers
 - ▣ The survey helps identify key policy levers relevant to the particular dynamics of student retention in an individual campus context
 - ▣ Nonsignificant findings do not necessarily mean a program or policy has no impact on persistence, but the survey does tell us where changes may have the greatest impact on student retention



Results: Predictive Factors

Urban University	Coastal University	Residential College
Academic Support	Orientation	Academic Support
Perception of Bias	Advisor Interaction	FYE Seminars
	Faculty Interaction	
	Student Interaction	
	Perception of Bias	
	Financial Aid	
	Social Activities	
	Perception of Diversity	
	Quality of Advising	

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Contact Us



Project on Academic Success

1900 E. Tenth Street
Eigenmann Hall, Suite 630
Bloomington, IN 47406-7512
(812) 855-0707
<http://pas.indiana.edu>