

INSTITUTIONAL PRACTICES IN STUDENT PERSISTENCE:

THE EXPERIENCES OF STUDENTS IN THEIR FIRST, SECOND, OR THIRD YEAR AT A METROPOLITAN UNIVERSITY

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Grappling with Questions

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

- What policies and practices do institutions enact to try to enhance student persistence?
- How do students' experiences with institutional practices influence their success and graduation?



Literature on Institutional Role in Student Persistence



- Many have pointed to the importance of this question
(Braxton, 1999; Hossler, 2005; Perna & Thomas, 2006; Tinto & Pusser, 2006)
- Policy levers
 - ▣ Work identifying pivotal practices
(Braxton, Hirschy, McClendon, 2004; Pascarella & Terenzini, 1991; Stage & Hossler, 2000)
 - ▣ Directions identified through theory and research
(Braxton & McClendon, 2001-2002; Peterson, 1993)
 - ▣ Empirical record remains uneven and focused on the 1st year
(Patton, Morelon, Whitehead, & Hossler, 2006)

College Board Pilot Study on Student Retention

- Students surveyed in Spring 2007
 - In-class paper-and-pencil administration at 3 institutions
 - Primary focus was on first year students
 - At one institution, data collected from upper-class students as well
 - Follow-up data collected from institutions to show enrollment in fall 2007
 - Allows us to look at persistence, comparing between first year and upper class students

- Urban, commuter, research university
 - Cluster sampling of introductory courses
 - Response rate was 43%

Survey Focus on Student Experiences of Actionable Institutional Practices



- Orientation
- First year seminar experience
- Academic support services
- Perception of bias
- Perceptions of diversity
- Interaction with faculty
- Interaction with advisors
- Experiences with financial aid practices

Creation of Policy Lever Factors



- From first pilot study we found we needed more differentiated information on institutional policy levers
- Returned to literature, theory, and professional organizations to develop questions that measured success in meeting outcomes of these levers
 - ▣ For example, Orientation: making social connections, learning where to get assistance, understanding institutional academic context
- Used these questions in factors to develop a more refined understanding of policy levers

Institution-Specific Analyses



- **Descriptive information**
 - Participation in student programs
 - Classroom experiences
 - Time diary items
 - Satisfaction
- **Factor analyses** of student experiences and attitudes
- **Logistic regression** models incorporate variables in 2 blocks:
 - Student background variables: race, gender, financial certainty, SAT
 - Experiences with policy levers: interaction with faculty & advisors, orientation & first-year seminar experiences, perception of diversity & bias, academic and social integration

General Results from Urban University

- Year-to-year persistence rate 88% (first years) -90% (upperclass)
- Logistic regressions showed that persistence models enhanced the prediction of which students did not persist
 - ▣ Blocks including policy levers significantly improved the prediction
- Significant variables had some similarities across class years, but each had a unique model estimation

Model Comparison

Variables	All Students		1st Year Students		2nd/3rd Students	
	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.
Female	0.46	*	0.39		0.51	
Class Year	2.84	***	N/A		1.97	
Advising Frequency'	1.37		1.35		1.94	
Student Interaction'	1.21		0.59		2.60	**
Transition Support	1.39		1.33		1.49	
Significant Connection	1.34		1.27		1.53	
Family Encouragement	2.48	****	3.29	***	2.78	***
Class Absences	0.82		1.04		0.72	
Distance from Campus	1.62	**	2.09	**	1.66	
Friend Network x Age	1.34	*	1.75	***	0.85	
Race x Diversity Perception	0.64		0.94		0.46	*
*p<.10, **p<.05, ***p<.01, ****p<.001						
	N=174		N=171		N=176	
% Non-returners correctly predicted	90%		65%		88%	

1st Year Model Comparison

Variables	1st Year Students		2nd/3rd Students	
	Odds Ratio	Sig.	Odds Ratio	Sig.
Female	0.30	*	0.56	
Under 21 Years Old	6.58	**	1.69	
Attending Office Hours	0.48	**	1.13	
Perception of Bias'	2.85	*	0.75	
Hours worked off campus	0.72		0.99	
Transition Support	2.17	**	1.24	
Friend Network	0.42	**	0.67	
Significant Connection	1.91	*	2.26	
Family Encouragement	2.82	***	2.17	**
Class Absences	0.70		0.73	
*p<.10, **p<.05, ***p<.01, ****p<.001				
		N=174	N=181	
% Non-returners correctly predicted	90%		56%	

Upperclass Model

Variables	2nd/3rd Students	
	Odds Ratio	Sig.
Female	0.51	
Class Year	1.97	
Advising Frequency'	1.94	
Student Interaction'	2.60	**
Transition Support	1.49	
Significant Connection	1.53	
Family Encouragement	2.78	***
Class Absences	0.72	
Distance from Campus	1.66	
Friend Network x Age	0.85	
Race x Diversity Perception	0.46	*
*p<.10, **p<.05, ***p<.01, ****p<.001		
		N=176
% Non-returners correctly predicted	88%	

Summary Findings

- Patterns of persistence vary, even within institutions
 - Factors were quite similar across groups
 - 1st year students at this institution qualitatively different in terms of retention patterns
 - Self selection may lead to some of the changes
 - E.g. Office hours or Perception of Bias
- Support critical at all levels
 - Family Encouragement
 - Social Support Systems (Friend Network)

IUPUI Findings



- Age (under 21) +
- Family Encouragement +
- Perception of Bias +
- Rating of Support for Transition +
- Hours worked off campus -
- Use of Academic Support Services -

Age (Under 21) [+]



- Several years ago older adult learners had higher retention and graduation rates than traditional-age students
- Our own research shows this relationship has changed as the entering class has become more traditional
- **Conclusion:** IUPUI needs to reevaluate how it serves older adult learners

Parental Encouragement [+]



- The finding of this study is consistent with research by Terenzini and his colleagues showing that parents of first-generation students may inadvertently hinder student success
- **Conclusion:** Given that retention and graduation rates are lower for first-generation students, IUPUI needs to examine how we communicate the need for support and encouragement to parents

Perception of Bias [+]

- IUPUI has a very active Black Student Association that has been bringing issues of bias to the attention of the campus
- This measure may well be a proxy for engagement
- **Conclusion:** IUPUI needs to do more to foster engagement (hopefully around more positive topics)

Support for Transition [+]



- Research at IUPUI indicates that orientation programs, such as the Summer Bridge Program and Themed Learning Communities, have a positive impact on student success
- Although most students participate in learning communities, participation in Summer Bridge is lower, particularly among at risk students
- **Conclusion:** IUPUI needs to expand the Summer Bridge program for at-risk students

Hours Worked Off Campus [–]

- A consistent finding of our research is that students who work *off campus* are disadvantaged, whereas students who work 20 hours or less *on campus* are advantaged
- Too many offices on campus do not utilize student workers
- **Conclusion:** IUPUI needs to do much more to hire part-time student workers

Academic Support Services [–]

- Students' academic skills are an important element in student success at IUPUI
- The negative effect for use of academic support services appears to represent the presence of skill deficits, rather than the ineffectiveness of the services *per se*
- **Conclusion:** IUPUI should continue to evaluate its admission standards to ensure students can be successful (and to develop an early warning system)

Summing Up



- Understanding institutional contexts for student success
 - Further research on commuter institutions
 - Experiences beyond just those of first-time first-year students

- Uses for Institutions
 - Empirical evidence grounded both in theory and in responses from students at the individual institution
 - An external source of additional information for institutions that are already looking into these questions

Implications, Questions, Next steps

- Insights from results
 - ▣ Extending the empirical record on institutional policies and practices: the role of family and work
- Methodological points
 - ▣ Extending applied research in this area
 - Potential sampling and nonresponse issues
 - Exploring complexity in a theoretically grounded way
 - ▣ Need for collaboration
 - Researchers conducting studies on retention
 - Institutional researchers



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Supplemental Slides

College Board Pilot Study on Student Retention

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Factors

Factor Name	Variables	Reliability	
Factor_FYE	FYE_ACAD	All Students	0.857
	FYE_SUCC	1st Years	0.802
	FYE_FIN	2nd/3rd Years	0.898
	FYE_HLTH		
	FYE_FRND		
Factor_Orient	OR_HLTH	All Students	0.780
	OR_SUCC	1st Years	0.734
	OR_ACAD	2nd/3rd Years	0.787
	OR_FIN		
	OR_FRND		
Factor_AdvisFreq	FBK_ADV	All Students	0.901
	SUP_ADV	1st Years	0.880
	IMP_ADV	2nd/3rd Years	0.914
	ADV_ADV		
Factor_AdvisQual	ADV_DEG	All Students	0.866
	ADV_CRSE	1st Years	0.849
	ADV_GOAL	2nd/3rd Years	0.878
	CN_ADVIS		
	ADV_PROF		
Factor_AcRegs	FAIR_GR	All Students	0.446
	CN_INCMP	1st Years	0.505
	CL_CHEAT	2nd/3rd Years	0.391

Factor Name	Variables	Reliability	
Factor_FacInt	FBK_INST	All Students	0.819
	SUP_INST	1st Years	0.826
	IMP_INST	2nd/3rd Years	0.802
	ADV_INST ¹		
Factor_StuInt	ADV_STUD	All Students	0.877
	SUP_STUD	1st Years	0.882
	IMP_STUD	2nd/3rd Years	0.863
Factor_SocInt	CONNECTN	All Students	0.825
	SA_SOC	1st Years	0.791
	AG_NTWRK	2nd/3rd Years	0.839
Factor_DivrPer	OF_DIVER	All Students	0.765
	OF_CONT	1st Years	0.775
	OF_MULTI	2nd/3rd Years	0.751
	OF_BACK		
Factor_BiasPer	OF_HARAS3	All Students	0.799
	OF_HARAS2	1st Years	0.805
	OF_HARAS1	2nd/3rd Years	0.798
Factor_FinAid	CN_AIDK	All Students	0.710
	SA_AID	1st Years	0.700
	CN_AIDT	2nd/3rd Years	0.707
	CN_FUND		

¹ Not included in factor for 2nd/3rd Year Students