



Joseph T. Finke – April 2021

# **An Exploratory Analysis of Enrollment, Persistence, and Experiences of IU's Rural Students**

# Agenda

1. Literature Review
2. Study Design
3. Enrollment
4. Persistence
5. Experiences on Campus
6. Discussion



# Literature Review



## Recruiting in Rural America

University of North Carolina system, among others, has recognized the degree-attainment gap between rural and urban areas of the country, and officials are determining ways to connect with students in the far corners of their state.

By [Greta Anderson](#) // August 12, 2019



## 'Going To Office Hours Is Terrifying' And Other Tales Of Rural Students In College

December 12, 2018 · 6:00 AM ET  
Heard on [Morning Edition](#)



INDIANA UNIVERSITY

## The New York Times

### *Colleges Discover the Rural Student*

## *The Atlantic*

EDUCATION

### The Rural Higher-Education Crisis

When it comes to college enrollment, students in Middle America—many of them white—face an uphill battle against economic and cultural deterrents.

JON MARCUS AND MATT KRUPNICK · SEPTEMBER 27, 2017

## THE CHRONICLE OF HIGHER EDUCATION

### Are Rural Students the Next Priority for Colleges?



Increasing Access &  
Enrollment for Rural  
Students



Improving Success of  
Rural Students



# Rural Students' College Access

- First-generation, low-income, minority, etc.
- Fears, worries, and concerns regarding their ability to attend and be successful in college (Morton et al., 2018)
- Mixed signals of value, opportunity of higher education (Ardoin, 2018)
- Perceptions of local economic conditions (Petrin et al. 2014)



# Rural Students' Enrollment & Completion

- Rural students lag behind non-rural students in college enrollment and degree attainment (Byun et al., 2012)
- But gaps are narrowing (Wells et al., 2019)



# Rural Students On Campus

## Unexpected Emotional and Social Transition

- Limited accurate expectation of the transition (Ganss, 2016)
- Unprepared for the magnitude of change (Schultz, 2004)

## Exposure to Different Forms of Diversity

- Some appreciate the increase in diversity, while others report feeling “different” than peers (Ganss, 2016)
- Some hold different values than other students (Webb, 2019)

## Connecting with Others and Support Structures

- Some struggle to find support systems (Webb, 2019)
- Rural identity can influence students’ sense of belonging (Heinisch, 2018)





# State of Indiana's Rural Students

- **Lower College Enrollment** (ICHE, 2019)
  - 22% of HS grads came from rural HS, with 59% of them enrolling in college, which is lower than the statewide average of 63%
- **Undermatching of Rural Students** (Burke et al., 2015)
  - 1/3 of rural HS grads and 1/4 of nonrural HS grads who enrolled in college chose a college that was less selective than colleges which they were presumptively eligible
  - Similar portions of rural and nonrural HS grads enrolled in college, but the proportion that enrolled in a two-year college was higher for rural students



# Study Design

# Research Questions

1. Which IU campuses do rural students attend?
2. What are the characteristics of rural, urban, and suburban students enrolled at IU?
3. Are there differences in the persistence rates of rural, suburban, and urban students?
4. Are there differences in perceptions of the campus environment at IU between rural, suburban, and urban students?



# Defining Rurality

- Last High School Attended
- Based on NCES Classification

<b>NCES Classification</b>	<b>Classification Used</b>
City, Large City, Midsize	Urban
City, Small Suburban, Large Suburban, Midsize Suburban, Small	Suburban
Town, Fringe Town, Distant Town, Remote Rural, Fringe Rural, Distant Rural, Remote	Rural



# Study Sample

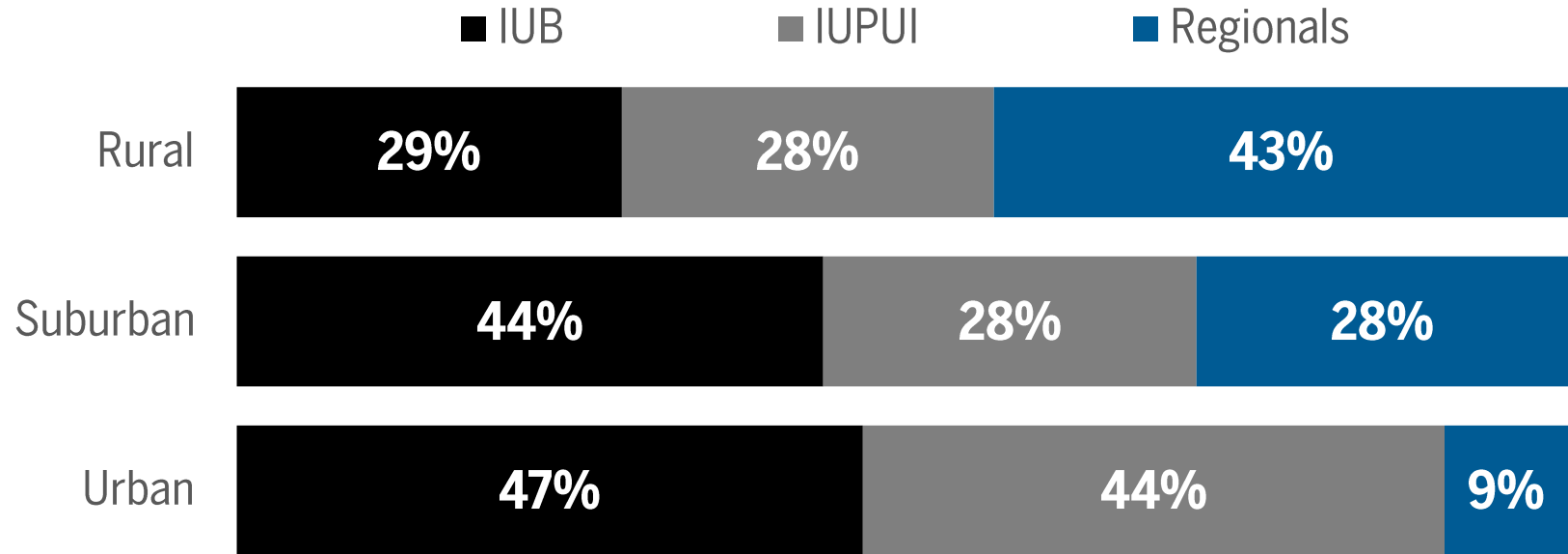
- First-Year Students at IU
  - Began in Summer/Fall 2017
  - All campuses
  - IN Resident & IN High School

	<b>N</b>	<b>%</b>
<b>Rural</b>	<b>3,679</b>	<b>33.8%</b>
<b>Suburban</b>	<b>5,175</b>	<b>47.5%</b>
<b>Urban</b>	<b>2,035</b>	<b>18.7%</b>

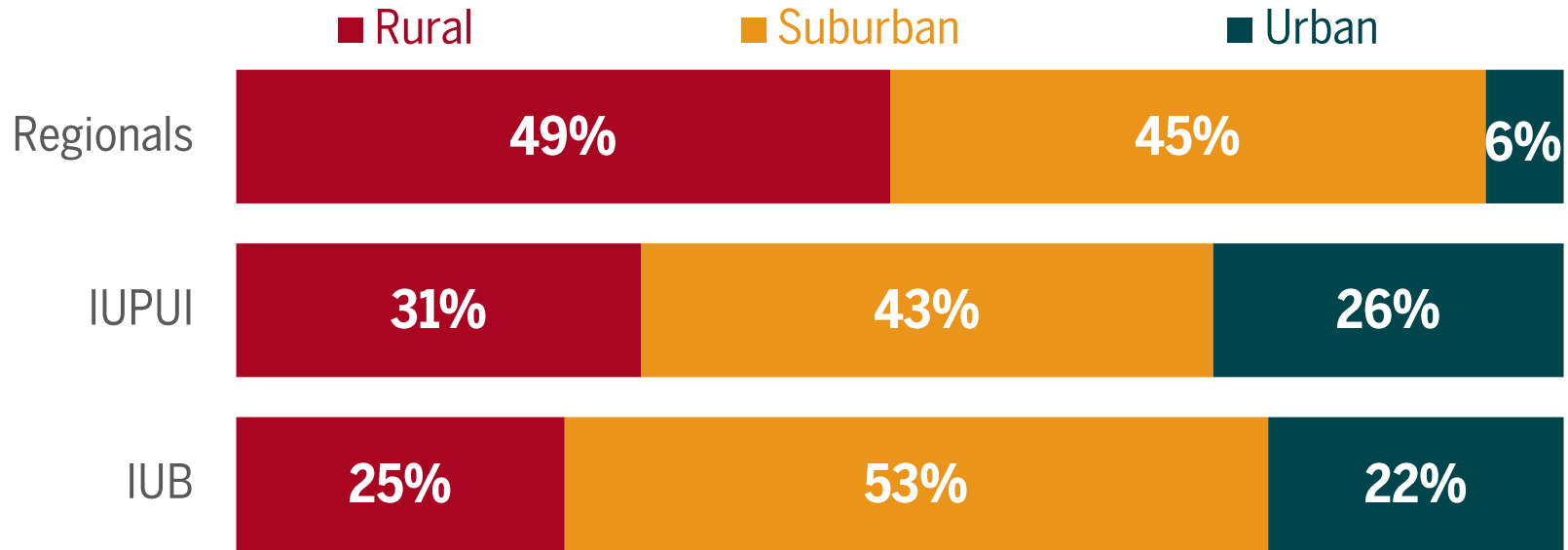


# Enrollment

# Where Students Attend

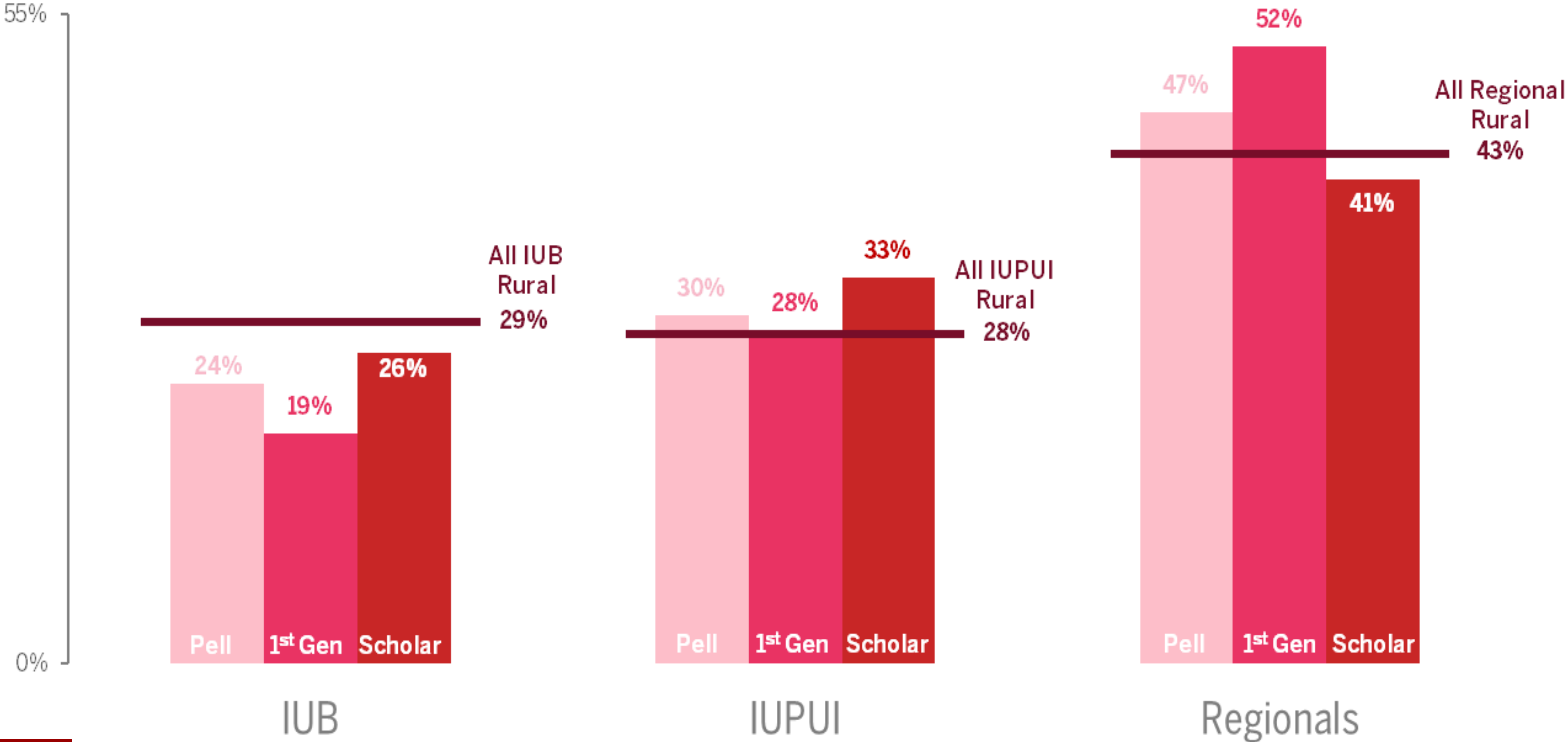


# Who Campuses Serve



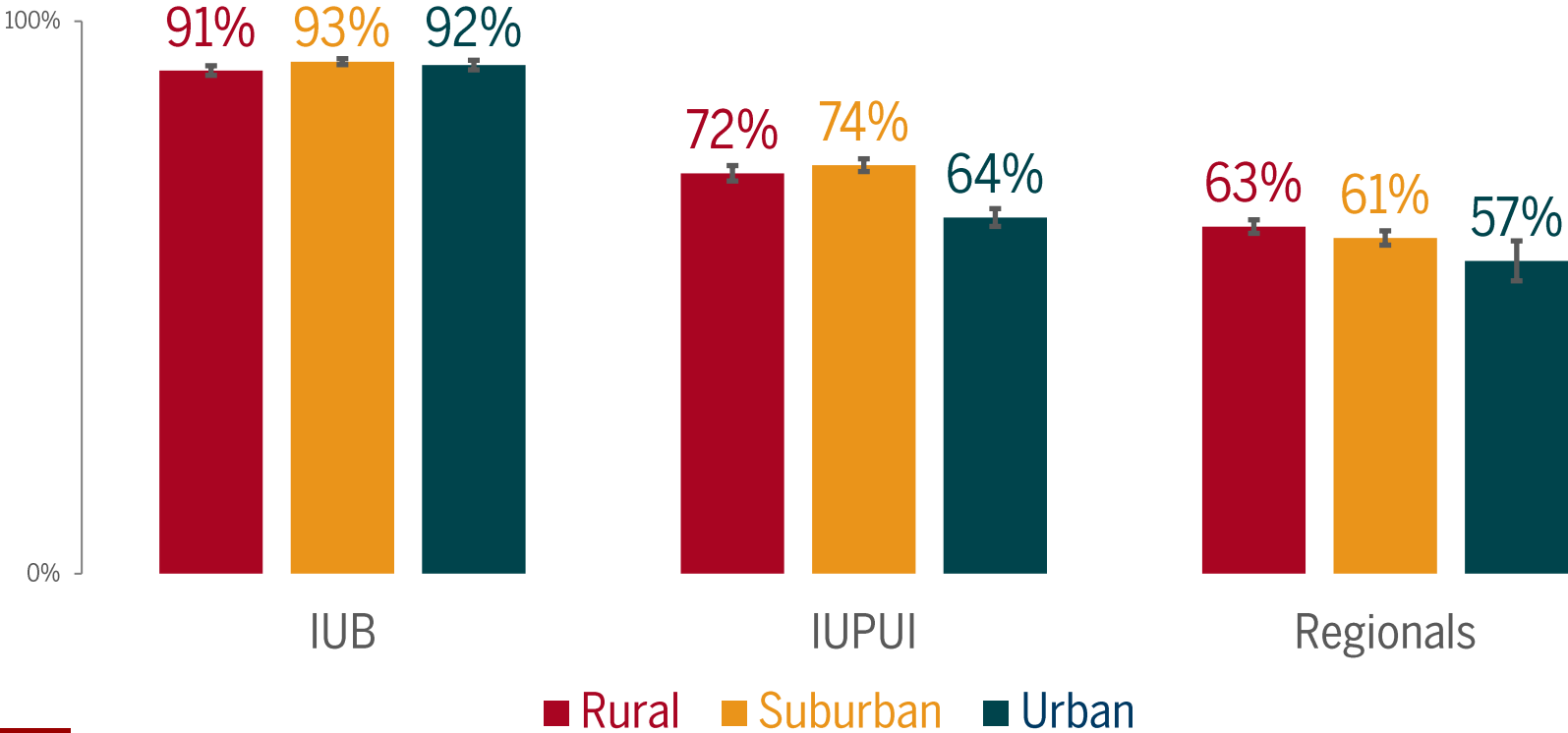


# Subgroups of Rural Students



# Persistence

# Persistence Rates



# Logistic Regression Results

	<b>Coef</b>	<b>Std Err</b>	<b>Z</b>	<b>p</b>
<b>HS Locale</b>	0.038	0.036	1.050	0.292
<b>Campus</b>	-0.271	0.011	-25.320	0.000 *
<b>Pell</b>	-0.246	0.055	-4.470	0.000 *
<b>Sex</b>	0.205	0.049	4.210	0.000 *
<b>Race</b>	0.038	0.022	1.740	0.083
<b>HS Size</b>	0.017	0.033	0.500	0.615
<b>1<sup>st</sup> Gen</b>	-0.337	0.053	-6.360	0.000 *
<b>Scholar</b>	0.015	0.067	0.230	0.822
<b>Constant</b>	2.080	0.172	12.080	0.000 *

Pseudo R-squared: 0.0767      Prob > chi-squared: 0.000



# Experiences on Campus

## Themes from Rural Qualitative Studies

Unexpected Emotional and Social Transition

Exposure to Different Forms of Diversity

Connecting with Others and Support Structures



## NSSE Engagement Indicators

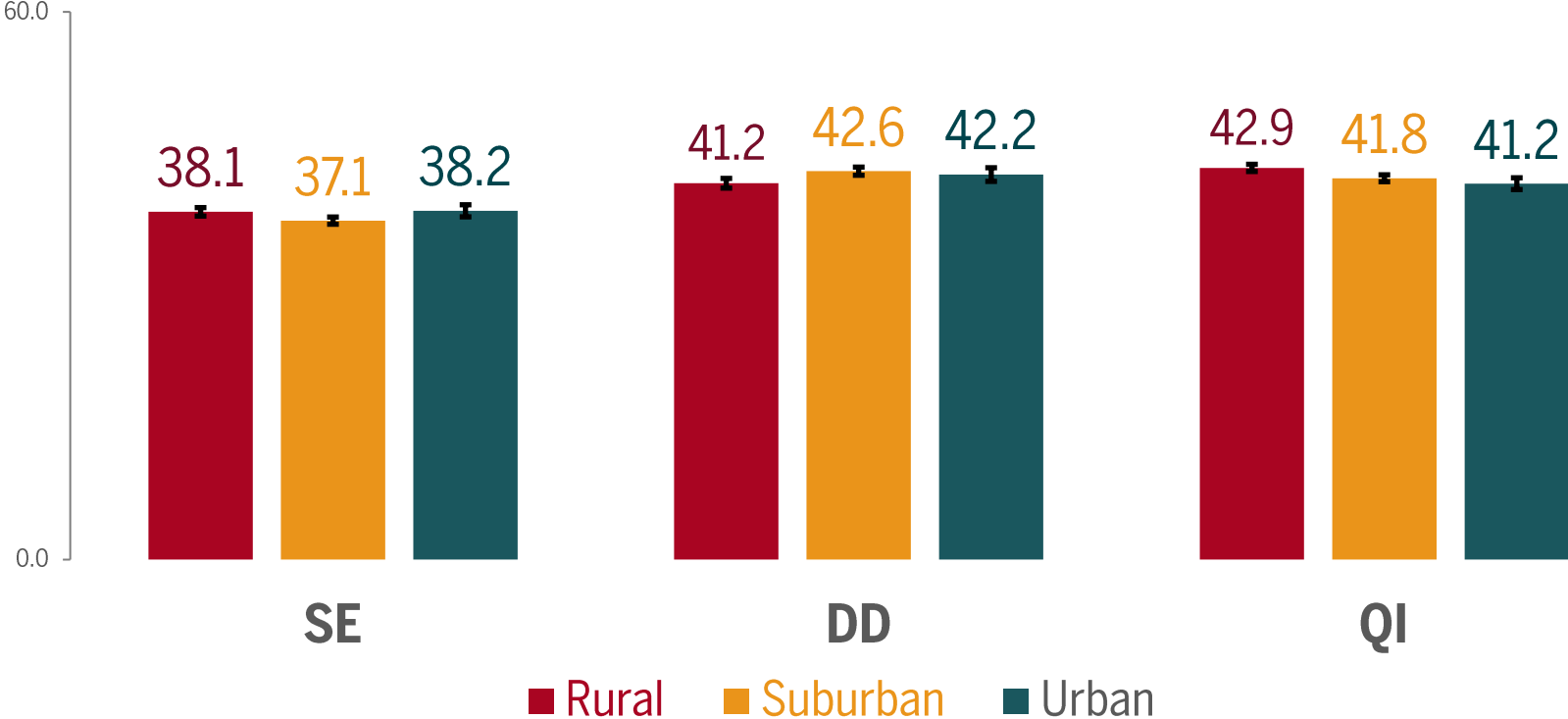
Supportive Environment

Discussions with Diverse Others

Quality Interactions



# NSSE Indicator Scores



# ANOVA Results

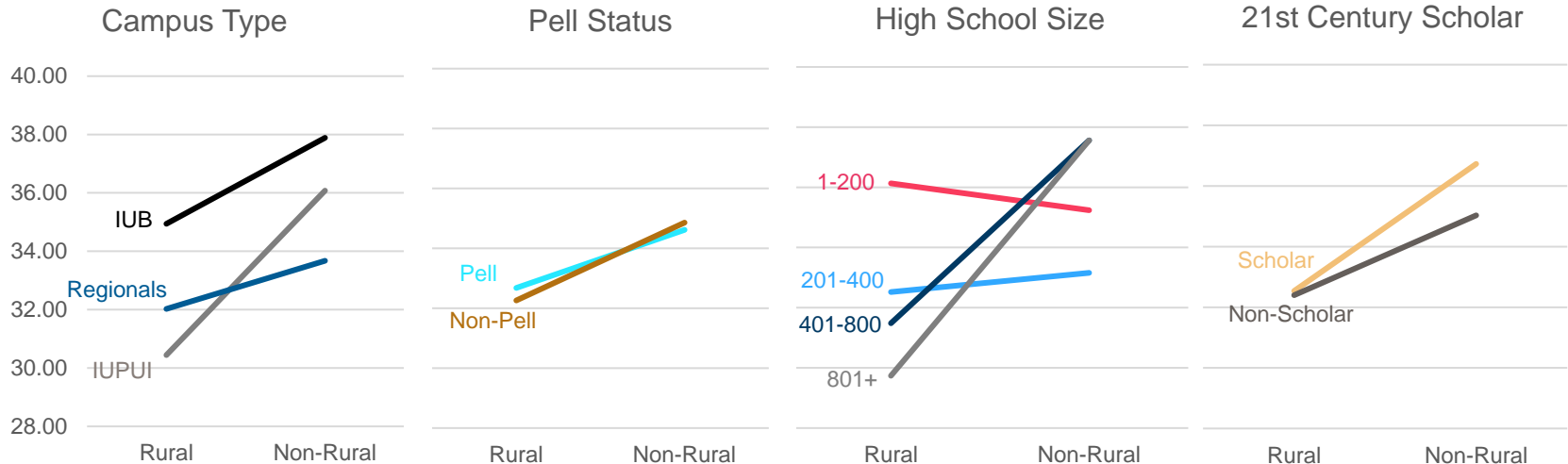
	SE		DD		QI	
	F	Sig	F	Sig	F	Sig
<b>Model</b>	2.94	0.00 *	4.03	0.00 *	1.79	0.02 *
<b>Rurality</b>	1.82	0.18	1.11	0.29	3.99	0.06
<b>Campus lype</b>	8.84	0.00 ^	7.19	0.00 ^	1.05	0.35
<b>Pell</b>	4.73	0.03 *	0.62	0.43	2.35	0.13
<b>Sex</b>	7.36	0.01 *	3.28	0.07	0.72	0.40
<b>Race</b>	1.25	0.29	1.10	0.35	1.62	0.17
<b>HS Size</b>	0.64	0.59	1.08	0.36	0.36	0.78
<b>Living</b>	0.93	0.33	3.03	0.08	0.01	0.92
<b>1<sup>st</sup> Gen</b>	2.18	0.14	1.75	0.19	6.21	0.01 *
<b>Scholar</b>	0.93	0.46	3.19	0.01 *	1.81	0.11
<b>R-squared</b>	.0249		.0340		.0160	



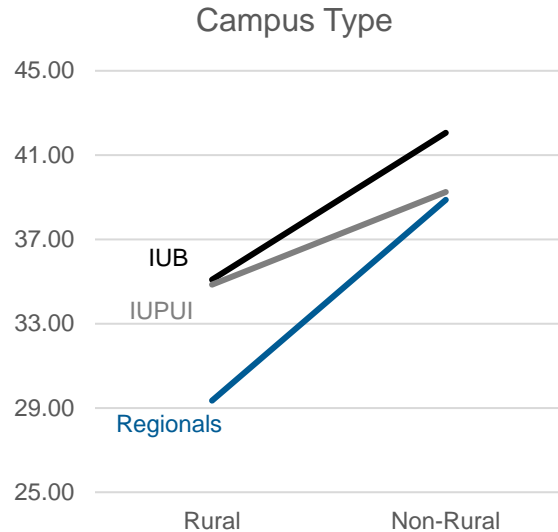
# ANOVA with Interactions Results

	SE		DD		QI	
	F	Sig	F	Sig	F	Sig
<b>Model</b>	2.96	0.00 *	2.99	0.00 *	1.67	0.01 *
<b>Rurality</b>	1.05	0.31	3.43	0.06	2.30	0.13
<b>Campus Type</b>	9.80	0.00 *	8.75	0.00 *	0.77	0.46
<b>Pell</b>	2.42	0.12	0.16	0.69	1.32	0.25
<b>Sex</b>	5.24	0.02 *	1.54	0.21	0.72	0.40
<b>Race</b>	0.52	0.72	1.92	0.10	1.18	0.32
<b>HS Size</b>	1.13	0.34	1.61	0.18	0.55	0.65
<b>Living</b>	0.64	0.42	4.12	0.04	0.00	0.97
<b>1<sup>st</sup> Gen</b>	1.33	0.25	1.54	0.22	4.18	0.04 *
<b>Scholar</b>	1.62	0.15	3.80	0.00 *	1.34	0.24
<b>Rural X Campus Type</b>	3.12	0.04 *	3.61	0.03 *	0.57	0.57
<b>Rural X Pell</b>	4.72	0.03 *	3.09	0.08	1.38	0.24
<b>Rural X Sex</b>	0.72	0.40	1.93	0.17	0.15	0.70
<b>Rural X Race</b>	0.77	0.55	1.65	0.16	0.95	0.43
<b>Rural X HS Size</b>	5.35	0.00 *	1.30	0.27	1.81	0.14
<b>Rural X Living</b>	0.42	0.52	0.75	0.39	0.00	0.95
<b>Rural X 1<sup>st</sup> Gen</b>	0.95	0.33	1.18	0.28	3.25	0.07
<b>Rural X Scholar</b>	3.15	0.01 *	1.56	0.17	1.50	0.20
<b>R-squared</b>	.0480		.0488		.0282	

# Interactions – Supportive Environment



# Interactions – Discussions with Diverse Others



# Discussion

# Key Findings

- A plurality of IU's first-year rural students attends a regional campus, while a plurality of suburban and urban students attends IUB.
- After controlling for variables including campus, there are not statistically significant differences in persistence rates for rural, suburban, and urban students.
- On average, there are not differences between IU's rural, suburban, and urban students' perceptions of feeling supported and encountering diversity on campus.



# Future Research

- Explore undermatching
- Use other definitions of rurality
- Add socioeconomic characteristics



**Comments?**

**Questions?**

