

Academic Benefits of Living On Campus: A Look At Peer Influences and Utilization of University Provided Resources

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Purpose

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How does living on campus influence academic performance?

- Quantify the impact of living on campus on students' Grade Point Average (GPA).

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Campus Resources

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Are differences in GPA due to greater utilization of resources?

Do on-campus students...

- use university academic resources (libraries, computer technology) more often?
- use university provided exercise facilities more often?
- use tutoring services more often?
- go to professors' office hours more often?

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Peer Influences

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Are differences in GPA due to differences in peer influences?

Are on-campus students...

- more likely to study with roommates and/or classmates?
- more likely to join university-sponsored extracurricular activities?
- less likely to engage in drugs and alcohol?
- less likely to have roommates engaging in drugs and alcohol?

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Policy Significance

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Policy Questions

- 1 Can changing residence hall resources and/or residence hall policies effect academic performance?
- 2 If so, *how*?

Search for Causation

- Instrumental Variable Regression: statistical technique used to determine causation.
- Essential for policy implications.

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Scholarly Significance

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On Campus Residence

- Positive impact on academics: Thompson, et. al. (1993).
- No difference: Delucchi (1993).
- Critical thinking skills: Pascarella et. al. (1993):
- Social development skills: Flowers (2004).

Peer Influences

- Positive influences are dominant: Henderson et. al. (1978).
- Negative influences carry through college: Betts and Morell (1999).
- "Average" students most susceptible to peer influence: Zimmerman (2003).

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- Find evidence of causation.
- Investigate the *channels* of dormitory influences.
- Changes in student characteristics and features of higher learning likely changes how students learn: Pascarella and Terenzini (1991).

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Methodology

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Stage 1: Instrumental Variable Regressions

- Explanatory Variables: Dormitory + Background characteristics (Table 1).
- Dependent Variables: Resource Utilization and Peer Influences (Table 2).

Stage 2: Regression

- Explanatory Variables: Resource Utilization and Peer Influences
- Dependent Variable: Academic Performance (GPA).

Traces (and quantifies) the *channel* in which living on campus influences academic performance.

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Questions?

► Answers

Additional Information

- Data [▶ GO](#)
- Table 1: Background control variables [▶ GO](#)
- Table 2: Intermediate variables [▶ GO](#)
- Instrumental Variable Regression [▶ GO](#)

Data

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Population

- Undergraduate students at Indiana University Purdue University - Indianapolis.
- Approximately 19,700 students under age 25.
- Extremely limited on-campus housing capacity: 1,107.
- No on-campus housing requirements.

Sample

- Electronic survey given to 6,000 undergraduate in Fall 2008.
- 363 completed questionnaire [see Sax et. al. (2003)]
- Questions included: living situation, social life, study habits, campus resource utilization, cultural background, academic background.

Background Characteristics

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- High School GPA.
- ACT/SAT percentile.
- Number of college credits earned.
- Non-traditional student.
- Gender.
- Ethnicity.
- Parents income.
- International student.

Intermediate Variables

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Utilization of University Resources

- Hours per week spent studying.
- Hours per week using library, campus technology.
- Hours per week using campus fitness facilities.
- Hours per week attending professors' office hours.
- Hours per week using tutors.

Peer Influences

- Hours per week studying with classmates / roommates.
- Involvement in university sponsored extracurricular activities.
- Drug and alcohol use.
- Peer drug and alcohol use.

Instrumental Variable Regression

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Sample Selection Bias

- Subjects *are not randomly* put into treatment and control groups.
- More highly motivated students *may choose* to live in dorms.
- Comparing on-campus students to off campus students may amount to simply comparing highly motivated students to less motivated students.

Instrumental Variables

- Find variable(s) *unrelated to academic performance* that help(s) determine treatment/control assignment.
- Instruments: distance of hometown from school, denied housing due to space limitations.

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