

**Welcome**

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Critical thinking ability depends on whom you live with.

- Where do students live and why?
- The theory of why students' living situations might impact upon their academic achievement.
- The cognitive impact of a student's living situation
- A brief history of the research in this area
- Socio-economic considerations
- Methodology
- Results and key findings
- Key implications

Where do students live and why?

Commuter

On-campus

Where do students live and why?

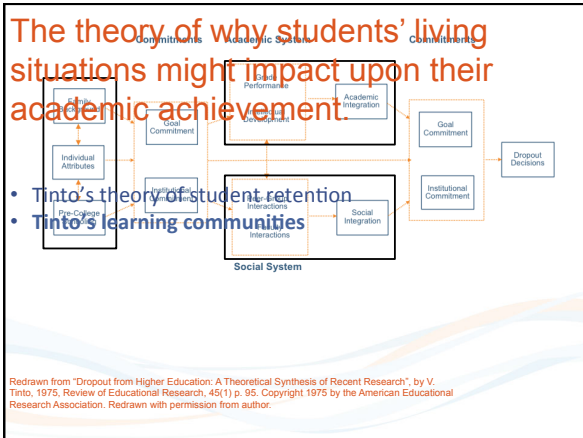
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Where do students live and why?

The theory of why students' living situations might impact upon their academic achievement.

- Tinto's theory of student retention
- Tinto's learning communities



### The cognitive impact of a student's living situation.

- Last study considering intellectual differences due to students' living situations was in 1993.
- This study found that between first year undergraduate students, commuter students had lower critical thinking scores.

(Pascarella et al., 1993)

### Some things to consider.

1990s – 77,000 degrees awarded in the UK  
 2011 – 350,000+ degrees awarded in the UK  
 1993 – 0.3% of the world's population with internet access  
 2015 – 40% of the world's population with internet access  
 2015 – 89.9% of the UK's population with internet access  
 2015 – 86.75% of the USA's population with internet access

(Bolton, 2012; Guiller, Dumdell and Ross, 2008; Şendağa and Odabaşı, 2009; Mendenhall and Johnson, 2010; Petchione, Puanglong, Chajaroent, and Sumalee, 2012; Internet Live Stats, 2015)

### Socio-economic considerations

- What impact could a student's socioeconomic background have on their intellectual ability?
- Students from lower socio-economic backgrounds have been found to lack a sense of belonging while at university
- These students are also likely to choose to commute for financial reasons and restrictions.

(Patrioti and Holdsworth, 2005; Holdsworth, 2006)

### Socio-economic considerations

"Each family transmits to its children, indirectly rather than directly, a certain cultural capital and a certain ethos. The latter is a system of implicit and deeply interiorised values which, among other things, helps to define attitudes towards... educational institutions."

- Pierre Bourdieu

(Bourdieu, 1976, p. 110)

### Methodology

- Online survey
- 45 minutes to complete
- Three sections:  
Demographics, wellbeing, and critical thinking

## Methodology

- **Critical thinking measure**
- Ennis-Weir Critical Thinking Essay Test
- 40 minutes to complete
- Chosen due to its neutral nature and proven reliability in a university population.
- Participants read a fictional letter written to a newspaper editor and respond in nine numbered paragraphs.

(Ennis and Weir, 1985)

## Methodology

- **Definition of living situation**
- Previously defined as students who “live off-campus and commute to university”
- Not applicable within an urban university and potentially overly vague for a British sample.
- Asked about living situation in two distinct ways: with *whom* the student lives, and the student’s *distance* from the university.

(Pascarella et al., 1993 pg. 216)

## Sample

Living arrangement	% of sample	Journey time to class	% of sample
With parents/family	29.5	0-10 minutes	21.9
With students (friends)	48.6	11-20 minutes	22.9
With students (non-friends)	7.6	21-30 minutes	21.0
With non-students (non-friends)	4.8	31-60 minutes	21.0
Lives alone	1.9	More than an hour	12.4

Living arrangement	% of sample
With friends	53.3
With non-friends	9.5

## Results

### Headline Significant Result (i)

Living arrangement	Median Critical Thinking Score (33)	Range	Mean Critical Thinking Score (33)	SD
Friends <sup>ab</sup>	21.3	24.5	20.6	6.19
Parents/Family <sup>a</sup>	18.8	19.5	16.5	6.10
Non-friends <sup>b</sup>	14.5	24.0	13.3	8.37

## Results

### Headline Significant Result (ii)

Parental degree	Median Critical Thinking Score (33)
Any parental degree	20.0
No parental degree	7.5

## Results

### Headline Significant Result (iii)

Parental income	Median Critical Thinking Score (33)
Greater than £125,000	25.25
£50,000 - £124,999	19.5
£0 - £24,999	15.5

## Results

### Details of significant results

Critical Thinking		p	Median	
Students (Friends)	> Parents/Family	.026	20.0	18.8
Parents/Family	> Students (Non-friends)	.029	18.8	13.5
Friends	> Parents/Family	.023	21.3	18.8
Friends	> Non-friends	.024	21.3	14.5
4 <sup>th</sup> Year Student	> 1 <sup>st</sup> Year Student	.036	21.3	18.5
Parent with Degree	> No Parent with Degree	.005	20.0	7.5
Parental Income More than £125,000	> Parental Income £0-24,999	.026	25.25	15.5
Parental Income Between £50,000 and £124,999	> Parental Income £0-24,999	.051	19.5	15.5

## Implications

- Who students live with matters most.

## Implications

- The results of Pascarella et al. (1993) are supported in part.
- Two contrasting findings were that students who lived off-campus did not have the lowest scores, and journey time did not impact upon scores.

## Implications

- Learning communities could be malleable

## Implications

- The presence of parental interaction could be a mediating factor for the development of critical thinking
- Linear relationship emerged for parental income an critical thinking.

## Implications

- Students whose parents have occupations requiring a degree have better critical thinking skills supports the notion that deep rooted values and attitudes towards learning university are passed down.
- Only one parental degree was required to find this effect. What does this imply about the influence of an individual parent?
- This was the largest significant difference that the study found.

### Limitations.

- Unequal representation of academic disciplines
- Quasi-experimental
- Possible cohort effect

### Implications for policy and practice.

- Commuter students face discrimination in regard to places at university halls of residence in several universities across the Scotland. While they can make their own private arrangements, it is unlikely that they will be exposed to as broad a network of student peers as students in halls of residence will be.
- GPA may need to be investigated additionally in order to fully inform governmental policy changes as many policies both in and outside of Scotland depend on this in order to assess financial support (e.g. funding).

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