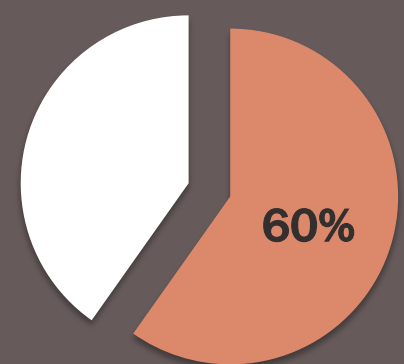


Loneliness in College Students

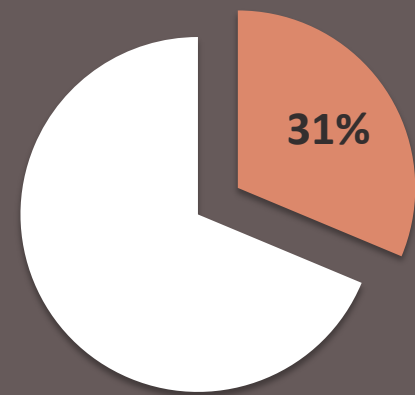
Katy Roat
Dept. of Economics

The Problem:

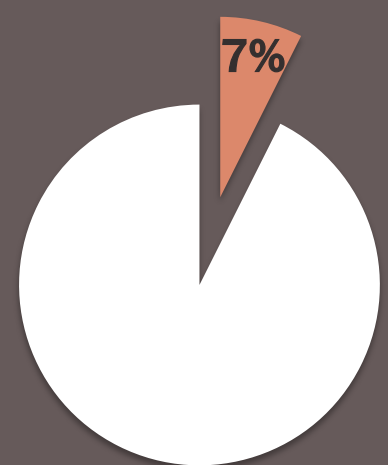
"Felt very lonely"



"Felt so depressed it was difficult to function"



"Seriously considered suicide"



Data from 2013 National College Health Assessment

The Objective:

Question: Which personal, academic, and social factors affect loneliness in college students?

Hypothesis: Activities that encourage direct collaboration & student interaction (such as study groups, club involvement, work on campus, etc.) will decrease student loneliness

The Data:

	Coef.	Std. Err.	t	P > t
online	1.14	.583	1.97	0.049
socialmedia	1.44	.628	2.29	0.022
gaming	3.47	.838	4.15	0.000
clubs	-2.39	.831	-2.88	0.004
friends	-2.51	.497	-5.04	0.000
studygroup	-1.21	.455	-2.66	0.008

online- "most of the time" or "always" playing games online; not in person
socialmedia- "almost always" on social media
gaming- spends 11+ hours gaming online/wk
clubs- involved in 4+ clubs on campus
friends- claims 11+ friends in building of residence
studygroup- spends >25% of study time with a regular study group

Results:

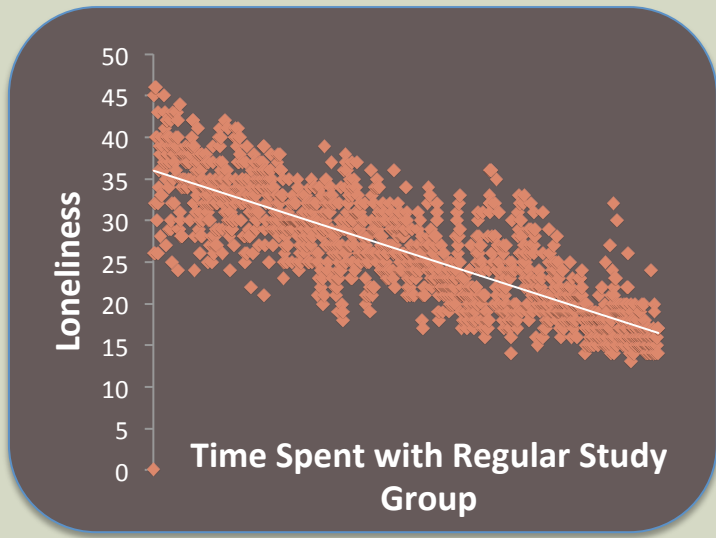
Loneliness

Decrease Loneliness:

- Having several friends in dorm/appt. (-2.51)
- Being involved in clubs on campus (-2.39)
- Having a regular study group (-1.21)

Increase Loneliness:

- Spending 11+ hrs./wk. gaming (3.47)
- Constantly using social media (1.44)
- Gaming online, not in person (1.14)



Friendship

Increase Friendships*:

- Participating in residence hall activities (.365)
- Being Greek (.296)
- Living on campus (.169)
- Gaming with others in person (.094)
- Having a regular study group (.071)

*friendships within building of residence

Process:

- Conducted literature review
- Created survey based on lit review, including UCLA Loneliness Scale (Version 3)
- Distributed survey to 10,000 random ISU undergraduates through Qualtrics
- Received 1,376 responses over 2 weeks
- Created dummy variables for regressors
- Ran multiple linear regressions using Stata
- Conducted t-tests and adjusted models accordingly

The Study:

- 1,376 survey responses
- Survey originally sent via email to 10,000 random ISU undergraduates
- Questions regarding:
 - Demographics
 - Living arrangement
 - Study habits
 - Group work
 - Involvement on campus
 - Social media use
- UCLA Loneliness Scale

Models:

$$\Omega: \beta_1 + \beta_2 \text{talktofriends} + \beta_3 \text{alcohol} + \beta_4 \text{greek} + \beta_5 \text{midwest} + \beta_6 \text{socialmedia} + \beta_7 \text{online} + \beta_8 \text{inperson} + \beta_9 \text{gaming} + \beta_{10} \text{job} + \beta_{11} \text{clubs} + \beta_{12} \text{clubhrs} + \beta_{13} \text{reshall} + \beta_{14} \text{lactive} + \beta_{15} \text{friends} + \beta_{16} \text{oncampus} + \beta_{17} \text{overachiever} + \beta_{18} \text{chosengrp} + \beta_{19} \text{regstudygrp} + \beta_{20} \text{highstudy} + \beta_{21} \text{studyalot} + \beta_{19} \text{transfer} + \beta_{20} \text{highgpa}$$

$$H_0: \beta_1 = \beta_2 = \beta_3 = \dots = \beta_{20} = 0 \quad t_{1356,025} = 1.97 \quad \text{If } |t| < 1.97, \text{ reject } H_0$$

$$\omega: \beta_1 + \beta_6 \text{socialmedia} + \beta_7 \text{online} + \beta_9 \text{gaming} + \beta_{11} \text{clubs} + \beta_{15} \text{friends} + \beta_{19} \text{regstudygrp}$$

$$H_0: \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_8 = \beta_{10} = \beta_{12} = \beta_{13} = \beta_{14} = \beta_{16} = \beta_{17} = \beta_{20} = 0$$

$$F_{12,1356} = 1.75 \quad F^0 = \frac{[R^2(\Omega) - R^2(\omega)]/q}{[1 - R^2(\Omega)]/(n-k)} = 1.765$$

$$\text{Loneliness} = 26.56 + 1.44 \text{socialmedia} + 1.14 \text{online} + 3.47 \text{gaming} - 2.39 \text{clubs} - 2.51 \text{friends} - 1.21 \text{regstudygrp}$$

Acknowledgements:

Project Advisor: Dr. Betsy Hoffman, Dept. of Economics
Funding: Dr. Peter Orazem & the Koch Foundation
Loneliness scale: Developed by Dr. Dan Russell