

A Rough Guide to Research

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1

Things to Bear in Mind

- Research is hard!
 - Don't be surprised if you find this tricky
- Research should be interesting
 - Research is just finding things out
 - Behavioral economics has a very broad scope
 - You should be able to find a question that you are at least moderately interested in!
- Don't be overly ambitious
 - I want to see that you can produce a coherent, well thought out research project
 - You don't have to change the world!

2

How to Begin

- Try to find something that you think that is interesting and related to the course
- This could come from
 - 'Real world' problems:
 - "How do people choose their courses at Brown? Do they really think about every single course?"
 - "How do football coaches decide whether to punt on 4th down? It seems that they punt less than they should?"
 - "Why are the queues at Ben and Jerry's so long when they give away free ice cream? Ice cream isn't THAT expensive?"
 - Things that you have learned in other classes where you think the standard model is missing something important
 - "I think people will take the wages of other employees into account when deciding whether to accept a job offer"
 - "I think people rely on their emotions when deciding whether or not to invest in a particular stock"
 - Concepts that we have covered in the course that you would like to explore in more depth
 - "Do people really behave as if they have information costs based on Shannon mutual information?"
 - "Do people perform better in strategic setting when stakes are higher?"

3

Apply Some Theory!

- Most of you will end up with an empirical research proposal
 - E.g. proposing an experiment or collecting some data
- However, the best proposals will think about the problem through the lens of theory
- Many times, you can use theory from the course
 - Think about choice of courses using a search and satisficing model
 - Think about how a model of fairness would affect people's choice of whether or not to accept a job
 - Use the level K model to think about how people's play in games should respond to incentives
- Other times, you may have to go beyond the course
 - How have economists thought about emotions?
- If you are in the mood, you could come up with your own theory (and so write a theoretical research proposal)

4

Come up with a Hypothesis

- A minimum requirement is that your hypothesis is clear
 - My hypothesis is that smarter students will do a more thorough search of available courses at Brown
 - My hypothesis is that people will play games better when the stakes are higher
- Very good dissertations will have a hypothesis which is rooted in theory
 - The optimal search model says that students should search harder when the variance of course quality is larger
 - The level k model says that incentives should NOT affect your type, and so how hard you search

5

Figure out how to test your hypothesis

- The key thing is to figure out how to measure the crucial elements of your hypothesis
 - How am I going to measure search effort?
 - How do I measure smartness?
 - How do I measure 'quality of play'?
 - How do I measure course quality?
- This will determine the type of data that you can use
 - Lab vs Field
- Notice that theory can help here too
 - Search effort = Reservation level
 - Temptation = Time inconsistency/Preference for Commitment
 - Quality of Play = Level K Type

6

Relation to the Literature

- I want you to be able to describe how your work fits in to the related literature
 - Ask me for relevant papers
 - Use Google Scholar
- However, do not worry about having to be too original
- I don't want you to copy someone else's work
- But if you find that someone has done something similar to you that is okay
- Try to put a small 'twist' on your work to make it a bit different

7

Grading

- 15 pts: Does your question that makes sense?
 - i.e. not "is the question original or interesting", but is it a well defined question?
- 20 pts: Does your experimental design that isolates the various effects that you want to measure?
 - eg, have you actually behaviorally identified search effort, temptation, quality of play etc
- 20 pts: Do you have a clear plan for how you will use the data to answer the question that you have posed?
- 15 pts: Have you discussed any confounds in your design
 - i.e. anything that could by driving your results and is not the effect that you are studying
- 20 pts: Is your experiment interesting?
 - Especially, have you managed to use a theoretical model to think about your question?
- 10 pts: Have you related your question to the literature?

8

Finally

- Ask questions!
- Don't be afraid to use John and I as sounding boards
- Better to do this earlier rather than later

9