

Project #1:

- A. Interest 10/10**
- B. Research Questions 10/10**
- C. References 5/5**
- D. Sampling Frame 8/8**
- E. Target Population 8/8**
- F. Mode of Data Collection 5/5**
- G. Important Variables 4/4**

Feels like quite an improvement to me! You've got a better set of research questions now, and you have some good thoughts about sampling frame, target pop, and so forth.

Project #2:

- A. Interest 10/10**
- B. Research Questions 10/10**
- C. References 5/5**
- D. Sampling Frame 8/8**
- E. Target Population 8/8**
- F. Mode of Data Collection 5/5**
- G. Important Variables 4/4**

This also looks good. Please see my specific comments about under- and over-coverage, and modes of data collection below.

Research Proposal: Are we paying too much for textbooks?

Team members: Shu Wang, Yijia Zhou, Silvia Manolache, Nicholas Thieme

A.

As the costs of attending college increase, the price of textbooks has skyrocketed as well over the past decade. We will attempt to study the relative prices of school books offered at the CMU Bookstore in comparison to the same books offered at both online retailers such as Amazon, as well as other “brick and mortar” retailers such as Barnes and Noble in order to study the prices at CMU and compare them to the national average.

10/10

B.

cost

We want to study not only the relative ~~expensiveness~~ of books in the CMU Bookstore as opposed to other sources of purchasing the same books, but also in what fields the price discrepancies occur most. For instance, are books published by professors at CMU more or less expensive than other textbooks? Or, how do the prices of history books used by CMU compare to those of math books? In essence, we hope to find relationships that will lead to knowledge of which books are vastly overpriced and which are slightly overpriced (we expect all the books to cost more at the Bookstore, of course, since it cannot compete with online retailers such as Amazon). However, we may uncover sources, specific publishers, or departments at CMU that are using books which are vastly overpriced at the Bookstore, and our results may be used to ameliorate the situation by finding cheaper alternatives with similar content. We will also observe if books that are only suggested, but not required by classes, are more or less expensive (in percentage over the ‘outside market’ price) than those required. Lastly, we will observe if the prices are ‘fairer’ considering that books at CMU can be bought back, and whether the ability to purchase used books make the prices at the Bookstore ‘fairer’.

10/10

feels like a much more interesting set of research questions

C.

The following is a list of research done on the topic:

5/5

(1)

Book Overcharging article

http://articles.orlandosentinel.com/2006-11-25/news/COLLEGEBOOKS25_1_overcharged-follett-college-students

Pedro Ruz Gutierrez

November 26th 2006

Orlando Sentinel

Two Daytona Beach Community College Students sued their college as well as book provider for 5 million dollars because of overcharging on book sales as well as underpayment on book buy backs. This demonstrates that the concept of book overcharging for profit does exist, and is a topic that is worth exploring for current students.

(By Nicholas Thieme)

(2)

Affordability of College Textbook

<http://www.bsa.ca.gov/pdfs/reports/2007-116.pdf>

The survey focused on University of California, CSU and California Community Colleges. Regarding the fact that textbook prices have increased tremendously that outpaced median household income. The result of the survey shows that a potential cost saving can be up to 32 percent if purchasing through a third party rather than through the campus bookstore, and campus bookstores have inconsistent strategies over buyback price of used textbooks that only 4 out of 9 stores implements around 50% buyback price of the initial price of the textbook.

(By Yijia Zhou)

(3)

An Investigation of the Rising Costs of Textbooks

<http://www.lib.umich.edu/files/SPOTextbookBackground.pdf>

- The report contains figures on the annual increase in textbook and tuition for college students as well as investigating the factors that lead to the (drastic) increase in prices year after year. Also suggests solutions such as electronic textbooks, laws to control prices, and open access textbooks. This research is useful because we may ask questions relating to what students think is a viable alternative to purchasing books at the CMU Bookstore.

(By Silvia Manolache)

(4)

How Much Will Students Really Save Using Amazon's E-Textbooks?

<http://moneyland.time.com/2011/07/21/how-much-will-students-really-save-using-amazons-e-textbooks/>

Kayla Webley

July 21, 2011

In this article, the author talked about that Amazon is offering e-textbook rentals, which can reduce as much as 80% off textbook prices. Moreover, the e-book can be read not only on the kindle, but also on smartphones and tablets run on various operating systems.

(By Shu Wang)

D. Our frame will be the list that the Bookstore has of the books ordered this semester.

8/8

E. The target population is all books required and recommended this semester at CMU for all departments, and the prices at the Bookstore of both the used and new versions (if offered).

8/8

We are subject to coverage error because clearly some books may be sold out at the Bookstore when we conduct our survey. There isn't much we can do about this error.

✓

Other errors that may occur are the over-representation of subjects which require multiple books per class (for instance many history classes require a few books, but most math classes require one). We will use weighting to try to fix this problem. We will also have a type of nonresponse error when the Bookstore is not carrying a book that is on its list. Hypothetically, if they have a record of the price at which it was being sold, etc., we may be able to piece this information together without seeing the actual book.

good
thoughts

F. We plan on asking the Bookstore for a list of the books ordered this semester, and then to choose randomly from this list. If a book is not currently in stock, but was ordered for the semester, it will count as a non-response unless we are able to get the information about price, whether a used version was offered and at what price, which department it was for, etc. from the Bookstore without the actual physical copy.

5/5

G. We will measure the following variables: price, availability of used version (and price of used version), department the book is ordered for, whether the book is required or recommended, the price of the book (both used and new prices) at Amazon, Ebay, Barnes and Noble, the Pitt Bookstore (if available there), publisher, edition (newest, old edition), price it can be sold back to the Bookstore for, paperback or hardback available, whether the author is a professor at CMU.

4/4

Project Proposal for Parking

Team members: Shu Wang, Yijia Zhou, Silvia Manolache, Nicholas Thieme

A.

The city of Pittsburgh has recently increased the rates at the parking meters on Frew and Tech Streets. They have also increased the hours at which the meters must be paid: until 10pm on all days except Sunday. However, this has created a lot of problems for the users of these spaces – the students, staff, and faculty at CMU. We want to implement a survey in order to understand what the effect of this policy on the community at CMU. It is possible that there are better, more efficient ways for the parking on Frew and Tech Streets to be handled, either by CMU or by the city of Pittsburgh. For instance, if nobody parks behind on these streets any longer, the city loses revenue instead of gaining revenue as expected. ✓

B.

10/10

can you expand to all meters on campus? did the same thing happen to meters in schenley park (where many CMU folks also park)?

The basic question we wish to analyze is how satisfied are members of the CMU community with the parking conditions on Frew Street, and what kinds of alternatives would they find more satisfactory. We will ask questions such as, (we can also use anchoring vignettes!) how much inconvenience does it cause you that the only method of payment at the meters is quarters? We will also ask how much more convenient various alternatives would be, such as offering a day pass for parking at a meter, or lowering the price at the meters.

neat, if it works out!

C.

A good bit of research, from parking rates and meter use to consumer perceptions of parking, has been done. The research on this topic is presented below:

5/5

(1)

Financial Analysis of Parking Assets of the Public Parking Authority of Pittsburgh-

<http://www.city.pittsburgh.pa.us/council/assets/parkingassets/meterstudy.pdf>

This contains a range of details about parking in Pittsburgh, including comparisons of its meter costs with other US cities, graphs of peak times that meters are used, and historical revenues due to parking. It could be used to suggest price ranges that may seem fair to our sample, and to compare the use of meters now with previous meter use.

(By Silvia Manolache)

(2)

Parking Research

http://www.city.pittsburgh.pa.us/council/assets/parkingassets/Final_Report_Sept_22.pdf

Finance Scholars Group

September 24th 2010

This is a report regarding monetizing Pittsburgh's parking assets completed by a

professional finance consulting firm. It describes a number of different ways to increase revenues from parking. This is a relevant document as it describes a number of different methods that are currently being used in Pittsburgh, as well as methods which could be implemented but are not that may potentially make the parking system more efficient (By Nicholas Thieme)

(3)

On-Street Parking Meter Behavior

<http://141.213.232.243/bitstream/2027.42/64/2/74189.0001.001.pdf>

The study included both an analysis of historical data and a survey of selected on-street parking meter sites in Ann Arbor area, and the objective of the study is to examine the questions of parking behavior, trying to understand the violation conditions and law enforcement results. The studies found that 1/3 of parking vehicles violate meter regulation while only 5.9 % was issued a citation.

(By Yijia Zhou)

(4)

University Parking Survey

<http://facweb.knowlton.ohio-state.edu/jevanscowley/crp852/survey.pdf>

In this survey, the University District randomly asked residents their household's parking habits, work and commute characteristics, parking problems and improvements they would like to see so that they could determine the current parking situation and improve it in the future. They found that the most frequent improvements noted are: improved safety, more parking lots, more parking spaces and improved transit.

(By Shu Wang)

D.

For our study, the sampling frame is people whose e-mail address can be found in the c-book or on the CMU website directory. (We may have a problem using the directory because of its disclaimer not to use the directory for solicitation of information)

8/8

yes, the cmu web directory should not be used. cbook is a bit more tedious but quite servicable

E.

The target population is going to be students and faculty members of CMU who own a car and have utilized the parking spaces on Frew Street at least once since the beginning of the Fall 2011 semester. Our sampling frame is larger than the target population since we may reach people who don't have a car or have not parked on Frew Street since the start of the fall 2011 semester. Thus, we have over-covered our target population. As we mention below, we can reduce this error by standing on Frew Street and attempting to survey people who we observe parking there. Or, we may leave a survey in the windshields of cars parked on the street and request that it be returned to us in the UC. Since by leaving surveys we will have reduced our frame substantially (and biased our sample because people who have already parked on

Overall I like your reasoning here. It might be useful to do some "on the street" interviewing or windshield cards as a supplement to your main survey, but [see next page]

Frew Street may have done so because they are less annoyed than others by the parking conditions), we feel it is important to also send emails. Duplication can occur if we send emails to the same people who we contact on Frew Street. This can be reduced if we ask participants on Frew Street whether they have filled out our survey before.

...but your main survey shld be a random sample from cbook. we can talk about dealing with the overcoverage problem...

F.

We have chosen to use email as our mode of reaching our sample, but we are also considering leaving surveys on windshields or conducting in person surveys by standing on Frew Street. We will make final decisions regarding this depending on whether we may use the directory to reach faculty and staff or not. If we cannot use the directory, we will probably leave surveys on windshields. Email is the only way we can reach a fair number of dissatisfied and satisfied people without risking bias, which is why it is our first choice. However, if we cannot reach faculty in this way, because they are a large part of our target population, we will amend our technique.

Undercoverage of faculty etc by cbook is a good point. There are dept faculty lists that you might want to use to supplement the cbook frame.

G.

Satisfaction score (outcome variable, range from 1 to 10)

Several indicator variables are:

Hours (On average how many hours per week do you park in the certain area?)

Availability (What percent of the time can you find a parking spot easily?)

Quarters (Do you always carry enough quarters to pay?)

Tickets (How often do you get tickets?)

Length (On average how long do you park there at a time?)

Satisfaction with various methods of fixing the parking situation, such as allowing meters to take credit cards, lowering the price, allowing purchase of a daily parking pass, etc.

5/5

4/4