Abstract

With high rates of poverty in the United States in mind, two key research questions were considered. The first was how teaching about poverty varies across different social science disciplines. The second question was what effect this teaching has on students’ knowledge and attitudes toward poverty. Three intro-level social science classes at Northwestern (Sociology, Macroeconomics, American Government and Politics) were studied to see how they approached poverty. I found that the sociology class discussed poverty most broadly, while political science and economics hardly addressed poverty or inequality at all. I also examined changes in student knowledge and attitudes toward poverty by distributing a survey before and after the course. The survey indicated that NU students are generally high-SES and liberal. They overestimate the annual poverty wage, and tend to blame poverty on structural deficiencies rather than individual failings. Thus, they prefer educational remedies, such as improving public schools and funding job programs. While there were no large-scale changes in student attitudes after taking the courses, support for a few key policies did change, especially in the economics and sociology classes where specific policies were mentioned. Sociology students increased support for public housing and subsidized daycare, while economics students decreased support for tax credits for the poor and increasing the minimum wage. This suggests that while courses may not have an effect on students’ general political views, mentioning specific policies in class may affect students’ attitudes toward those policies and others that are similar.
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Acknowledgements

Thank you to my friends and family for moral support as I conducted my research. Big thanks to all the friends who kept me company in the library at all hours of the night. I also want to thank my roommates, who took the time to check on me when I didn’t get home until the wee hours of the morning. Of course, thanks to my parents for getting me here. Also, thank you to Heather Madonia and Mara Suttmann-Lea for their advice on how to approach my data analysis and do appropriate regressions. Finally, I owe Professor Ben Page a huge thank you for all of his help in guiding this project. From perfecting the research design to editing the thesis drafts, I could not have done all of this without his help.
Introduction

According to the official measures used by the U.S. Census Bureau, the number of Americans living in poverty as of 2011 is 46.2 million, or 15% of the population. This was the highest the number has been since 1993 (U.S. Census Bureau 2012). And this official measure may not even account for all Americans living in poverty. A follow-up report from the Census Bureau in late 2012 used a new supplemental measure to calculate the poverty rate, and estimated that the actual number of poor Americans is closer to 49.7 million people.\(^1\) This is 16%, or 1 in 6 Americans living in poverty (U.S. Census Bureau 2012). These numbers reflect a larger trend. The number of Americans living in poverty rose steadily from 2008 to 2011.

With more people living in poverty, the topic has seen a resurgence of attention in national political discourse. A recent Gallup poll found that a stunning 70% of Americans are either somewhat or very dissatisfied with the nation’s efforts to deal with poverty (Gallup Poll 2013). These numbers are troubling in the face of rising poverty. Moreover, the combination of rising poverty and public dissatisfaction with poverty policy underscores the importance that understanding poverty policy will have if these trends continue along their current path.

With these facts in mind, I have chosen to examine how poverty is treated in an academic setting. I see understanding academic treatments of poverty as important for two main reasons.

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\(^1\) The official measure of poverty used by the Census was developed in 1963. Under the assumption that Americans spent about one-third of their income on food, the poverty line is calculated by multiplying the cost of a minimum food diet by three. The minimum food items have not been updated since 1963, but the threshold is updated by using the most recent Consumer Price Index value of the food items. The threshold is adjusted only for family size, composition, and household head’s age; it only includes pre-tax cash income and not any in-kind assistance. The new supplemental measure is much more comprehensive. The threshold is calculated using the 33rd percentile of expenditures on food, clothing, shelter, and utilities multiplied by 1.2 (adjusting for children). It also makes geographical adjustments for cost of living, and includes in-kind benefits while excluding medical costs, work expenses and taxes. The threshold is updated using a five-year moving average of these costs (U.S. Census Bureau 2012).
First, trends in academic discourse may tend to frame political discourse. Academia provides some of the foundational knowledge that underlies policy discussions. Secondly, and perhaps more significantly, today’s students are the ones who will shape future politics. Some will go on to be policymakers, and nearly all will be constituents, voters, and volunteers. In all of these roles, the students of today become the shapers of political discourse tomorrow. It is thus important to understand what they are taught about poverty, and how their knowledge and attitudes toward this important issue are shaped by their education.

It makes sense that the disciplines that deal most with poverty in an academic setting are the social sciences—especially economics, sociology, and political science. On one hand, one might expect that the three disciplines deal with poverty relatively similarly, as a discussion of important social issues might seem to necessitate an examination of poverty. On the other hand, the three are founded on different theoretical frameworks—with arguably different ideological underpinnings—such that their examinations of poverty might differ significantly. For example, sociology might view poverty as a collective problem, while economics might frame it as an individual one. I want to learn more about the lenses through which each discipline views poverty, and see whether and how these frameworks impact students’ knowledge of and opinions about the issue. I hope to answer two key research questions. The first is how teaching about poverty varies across different social science disciplines. The second question is what effect this teaching has on students’ knowledge and attitudes toward poverty.
Americans’ views of poverty, inequality, and redistribution are shaped by a national narrative and discourse whose values are simultaneously egalitarian and unequal. Whether Americans prefer equality or inequality depends partly on the social context of what is being discussed. In a 1978 study, Jennifer Hochschild found that American people’s distributive judgments could best be categorized by looking at how they apply distributive norms to different domains of life (Hochschild 1981, 81). The domains spanned three major social categories: politics, socialization, and economics. Hochschild found that in the domains of politics and socialization, people “usually start from a principle of equality, and use mainly egalitarian norms” (Hochschild 1981, 81). The political domain encompasses political and civil rights, while the socialization domain encompasses home, school, and community (Hochschild 1981, 181, 106). In the domain of economics however, people “usually start from a principle of differentiation, and apply mainly differentiating norms” (Hochschild 1981, 82). These norms are based on the prevailing idea that economic success is a function of productivity and merit—Hochschild calls this “a norm of results” (Hochschild 1981, 141). Thus, economic inequality becomes more acceptable than inequality in other domains, because the norm of results makes it inevitable.

The norm of results combined with people’s emotions provokes a complex response to the subject of poverty. Hochschild found that many respondents “abandon[ed] their principle of differentiation…, since they do not believe the poor are responsible for their fate,” which is likely due to the “deep” sympathy for the poor displayed by both rich and poor respondents (Hochschild 1981, 143). But this sympathy does not translate into a complete abandonment of the results norm. Hochschild found that “running through the deep sympathy and distress about
objectionable circumstances is … a thread of ascriptive blame” (Hochschild 1981, 143). Respondents alluded to the inevitability of a working class, and saw the very poor as “members of an alien race, culture, and style of life, which they neither [understood] nor approve[d] of” (Hochschild 1981, 143). The differentiating norm of results prevailed, along with a desire to distance themselves from extreme poverty despite outward displays of sympathy.

Though Hochschild’s study involved in-depth interviews with only a few individuals in New Haven, CT, the norms of distributive justice that she described appear to hold true for the broader public. McCloskey and Zaller’s public opinion research from the mid-1980s found attitudes toward social, political, and economic justice that were consistent with Hochschild’s work. In terms of society, McCloskey and Zaller found that 78% of Americans thought that it was important to “recognize [ ] that all people are equally worthy and deserve equal treatment” (McCloskey and Zaller 1987, 66). Questions about political equality produced similar results, with an overwhelming 95% of people agreeing that “every citizen should have an equal chance to influence government policy” (McCloskey and Zaller 1987, 74). Economic questions led to responses consistent with the norm of results—71% of people thought the fairest way to allocate wages was to pay based on “how hard [someone] works” and 85% of people thought that “giving people the same income regardless of [their] work…would destroy the desire to work hard and do a better job” (McCloskey and Zaller 1987, 84). These norms have persisted over time. A 2008 Yale/George Mason University survey found that 61% of people strongly or somewhat agreed with the statement that “People should be allowed to make as much money as they can, even if it means some make millions while others live in poverty.” This suggests that the notions of economic justice found by Hochschild and McCloskey and Zaller are still pertinent in the American poverty narrative today.
Section II: Poverty Knowledge and the Social Sciences

The narrative and discourse that has led to dominant norms in the realm of economics and poverty is closely related to trends in the social sciences over the past few decades. The body of social scientific knowledge about poverty, or poverty knowledge, has undergone a fundamental shift over the past 50 years. From its liberal, reform-minded origins in the 1960s, poverty knowledge today has become characterized by its “technical language and decontextualized, rational choice models of human behavior” (O'Connor 2001, 5). Alice O’Connor argues that since the 1980s, “poverty knowledge has been profoundly shaken by the rise of the political Right, with its ideological…approach to knowledge and its extraordinary success in keeping the locus of discourse away from the economics of rising inequality and centered on…the decline of personal responsibility” (O'Connor 2001, 10). This shift helped to “usher [] in the end of welfare while wholeheartedly embracing the private market as the ultimate arbiter of individual well-being and the common good” (O'Connor 2001, 10). The shift in poverty knowledge also reflects one of the tensions at its core—“whether [inequality] is best understood and addressed at the level of individual experience or as a matter of structural and institutional reform” (O'Connor 2001, 9). The answer to this question has changed over time as the result of “an ongoing process of negotiation and debate,” that is continually shifting (O'Connor 2001, 9). The current consensus represents a resolution “in favor of the individualist interpretation” that reflects the ideological leanings that currently dominate political discourse (O'Connor 2001, 9).

Despite these overall trends, the three fields of sociology, political science, and economics still tend to have somewhat varied understandings and approaches to poverty based on the ideological underpinnings of each discipline. Michael Burawoy explains that “the standpoint of economics is the market…, and the standpoint of political science is the state and
the guarantee of political stability, then the standpoint of sociology is civil society and the
defense of the social” (Burawoy 2005, 24). Burawoy defines civil society as “associations,
movements and publics that [are] outside both state and economy” (Burawoy 2005, 24). The
disciplines are not rigidly restricted in what they study (e.g. sociology only studies civil society),
but rather each discipline examines social phenomena from its particular standpoint—whether it
is the market, the state, or civil society (Burawoy 2005, 24). I want to see how these standpoints
to inform treatments of poverty in each discipline, and I hope to determine if and how the
academic standpoint impacts students’ views.

Section III: The Effects of Education

Literature on the effects of education falls under two main categories: political
socialization and higher education. Political socialization literature mainly focuses on younger
adolescents, but higher education literature suggests that many of the educational determinants of
high-school students are applicable to undergrads as well. One of the earliest and most
provocative political socialization studies was conducted by Edgar Litt, who examined the
differences in civic education between secondary schools of differing socioeconomic statuses—
upper middle class, lower middle class, and working-class (Litt 1963, 70). He compared the
political attitudes of the students to a control group with similar characteristics who had not been
exposed to a civics class. Litt found that while the basic egalitarian principles about democracy
taught were the same across curricula, each civics class ultimately functioned to reinforce the
political norms of its community (Litt 1963, 74). Those in the upper middle class were taught the
most insights and nuances about the political system, while the working-class students were
taught to play a primarily passive role (Litt 1963, 74).

British sociologist Adrian Furnham more specifically examined the role of political
socialization as it related to adolescent views of poverty. He compared the attitudes of boys in
elite private schools and less selective public schools. He found that private school students were more likely to overestimate the income of a person in poverty, and were more likely to focus on individual failings as the cause of poverty (Furnham 1982, 144). In contrast, the public school students provided income estimates for a poor person that were closer to reality, and cited structural causes as explanations for poverty Furnham’s explanation for this focused on two factors, class educational differences and socialization differences (Furnham 1982, 144). He hypothesized that the students’ different personal experiences with money informed their understandings of poverty. However, in Furnham’s study SES and education were confounded, and he found it difficult to attribute differences in adolescent attitudes toward one particular variable (Furnham 1982, 145).

SES continues to be an important determinant of learning as students grow older. Several studies have found that students with different socioeconomic backgrounds have different educational outcomes in their college careers. A 2003 study found that “low SES students have lower incomes, lower levels of educational attainment, and lower levels of educational aspirations than their peers from higher social strata” (Walpole 2003, 63). There are many additional determinants of changes in knowledge, attitudes, and related educational outcomes. One of the most important is how classes and assignments are structured. As educational sociologists Arum and Roska put it, “students learn what they study” (Arum and Roska 2011, 93). They found that “having demanding faculty who include reading and writing requirements in their courses…is associated with improvements in students’ critical thinking [and] complex reasoning” (Arum and Roska 2011, 93). They found this to be true for students regardless of a student’s socioeconomic background, or even the type of institution they attended (i.e. for both public and private universities). Interestingly, some factors that one might think would be
important have been found to have little effect on learning. Arum and Roska found that “interaction with faculty outside the classroom was less important” for learning outcomes—what really mattered was interaction with course material (Arum and Roska 2011, 95). In addition, a professor’s political leaning has little effect on the attitudes of his or her students. A study by Mariani and Hewitt found that “faculty political orientation at the institutional level does not significantly influence student political orientation” (Mariani and Hewitt 2008, 779). This holds true even for student perceptions of professors’ political views—Woessner et al. concurs that shifts in students’ political attitudes “appears to be unrelated to either the instructor’s actual political loyalties, or to the student’s perception of the professor’s partisan preferences” (Woessner and Kelly-Woessner 2009, 343). With all these factors in mind, my research attempts to observe how they interact and affect students in a classroom setting.
Chapter 2: Methodology

Section I: Overview

In my research, I hoped to answer two key research questions. The first was how teaching about poverty varies across different social science disciplines. The second question was what effect this teaching has on students’ knowledge and attitudes toward poverty. To answer these two questions, my research method included two main components. The first was an analysis of the course content of three different introductory-level social science classes at Northwestern: Soc 110 (Intro to Sociology), Econ 201 (Intro to Macroeconomics), and PS 220 (American Government and Politics). The first two classes were analyzed in fall 2012, while the latter was analyzed in winter 2013. These classes were chosen because I expected that an intro-level curriculum will likely be similar across many universities, and thus studying these classes at Northwestern provides somewhat generalizable results. Professors were approached via email and granted permission to attend lectures and observe their course material. Importantly, professors were not informed that my research specifically addresses poverty, as I did not want to inadvertently influence any of their teaching behaviors. The course analysis examined the content of textbooks, syllabi, lectures, and assessments. The number of mentions of poverty and inequality in each course’s main textbook were counted. I also qualitatively analyzed the context in which poverty was addressed. In addition, I attended selected lectures to see how the topic of poverty was addressed by each professor in class. Finally, I examined the types of assignments and assessments in each class to determine how much each course pushed students to have critical engagement with the text.

The second component of my research was a poverty attitude survey that was distributed to students before and after taking the course. With professors’ permission, I obtained students’ email addresses either through Blackboard (Econ and PS) or directly from the professors (Soc).
distributed the survey link electronically to students during the second week of the course. I then electronically distributed a follow-up survey link to them during reading week at the end of the course. The survey contained questions about different aspects of poverty (to be discussed in the next section), as well as demographic questions to help sort and classify responses. I offered students the opportunity to win a $25 Amazon gift card as incentive to complete the survey. Participation in the survey was voluntary, and identifying information was not collected. A full copy of the survey may be found in Appendix 1.

Section II: Operationalization

Course content was measured both quantitatively and qualitatively. The most basic method I used to analyze course material was to count the number of mentions of the words “poverty” and “inequality” in each course’s main textbook. I then looked qualitatively at the context in which poverty was discussed in each textbook. I also attended selected lectures that dealt with themes relating to poverty and inequality in each course. In those classes, I qualitatively observed how the professor addressed the topic, and how students reacted to the material being presented. Finally, I attempted to measure critical engagement with course material. This was done by looking at how many critical thinking assignments each course required (e.g. writing assignments or essay exams as opposed to multiple choice or numerical tests).

Students’ attitudes toward poverty were measured using my survey, which was distributed to students at the beginning and end of the courses I observed. Survey questions focused on four key aspects of poverty:

1. Causes of poverty: I hoped to find out whether students believe that poverty is the result of societal shortcomings (i.e. lack of opportunities for education, jobs, etc.) or individual shortcomings (i.e. laziness, poor money management, etc.).
2 Remedies for poverty: This section of the survey focused primarily on policy remedies. I hoped to find out whether students prefer more aggressive government intervention or not.

3 Importance of poverty: I hoped to find out how important students believe poverty is in the US today. This will be achieved by asking students to rank certain issues based on importance.

4 Nature of poverty in the US: Questions that were addressed include: How many people are poor in the US? Who is poor—what demographic groups? How do poor people live? How does this affect their well-being?

I saw these four facets as the most important areas to address when measuring students’ knowledge and attitudes. I used them to create a more systematic approach to measuring public opinion about poverty, making analysis and comparisons of data easier.

Section III: Variables

My research measured three main independent variables that might be related to changes in students’ knowledge or opinions. The first independent variable was the disciplines of the three courses. I observed the effect of discipline on course material, which in turn affects student attitudes. The next independent variable was course material. It functioned as both an independent and dependent variable (see below). It was a factor I expected to influence changes in student knowledge and opinions. The final set of independent variables was the personal characteristics of the students who participated in the survey. The characteristics I measured were year in school, gender, liberal-conservative self-rating, party ID, and family income. These independent factors also played a role in influencing students’ knowledge and attitudes.

There are two main sets of dependent variables that I examine. First are aspects of the course material of each of the three classes. Although these are independent variables in that they influence student knowledge and opinions, they are going to differ by discipline. In their relationship with discipline, course materials and their treatment of poverty are a dependent variable. The second set of dependent variables is the changes in student knowledge and opinion
over time. This is measured by comparing student survey responses before and after taking each course in each of the four aspects of poverty addressed by the survey. This is the dependent variable that will be influenced by both course material and demographics.

Section IV: Potential Problems

I have attempted to address and eliminate potential problems with my method as best as I can. One potential issue is a voluntary response bias in my survey responses, since responding to the survey was voluntary. I tried to overcome this by offering gift cards as incentives to encourage as many students as possible to complete the survey. This was mostly successful, although the sample size for the “after” sociology survey was unfortunately quite small (to be discussed further in the Results section). Another potential issue is measurement bias in the survey questions, a potential issue with any survey study. I did my best to avoid this by using survey questions taken from the iPOLL database from the University of Connecticut. The questions on my survey have all been used by major US polling firms. By using questions that have been vetted by experts, I expect that measurement bias will be kept to a minimum.

My study design, unfortunately, did not permit measuring the change in individual students before and after the course. Because I could not collect any identifying information from survey respondents, I had to rely chiefly on average responses from each sample to reach my conclusions. In my analysis, I compare groups that have the same demographic characteristics in order to try to overcome this difficulty. Moreover, the before and after samples from each class had very similar demographic characteristics, which strengthens the comparisons between the two. Finally, I recognize that there are many outside factors that influence learning that I do not include in my study. These include previous experiences, other classes, and outside learning experiences. There is little I can do to control for these; however, they are kept in mind as I attempt to find patterns in my data.
Chapter 3: Hypotheses

Section I: Disciplines
i. Econ will take a market-based approach to poverty, and focus on individualism. (norm of differentiation)

ii. Political Science approaches from a state perspective, more moderate. (norm of equality)

iii. Sociology approaches from the perspective of civil society, so it is most structural. It will also discuss poverty the most. (norm of equality)

Because of the ideological standpoints of each discipline (relying mainly on Burawoy), I expected that distributive justice norms underlying approaches to poverty will be consistent with the norms Hochschild found in public opinion domains of politics, economics, and society. Sociology would come from an ideological perspective that is most focused on highlighting inequality, so it would have the most discussion of poverty.

Section II: Demographics
iv. Northwestern students tend to be high SES.

v. Northwestern students will tend to be more liberal than the general public.

vi. Sociology and political science students may be more liberal and economics students more conservative, self-selecting more liberal/conservative classes based on their initial beliefs.

As part of an elite private university, I hypothesized that Northwestern students would tend to come from high socioeconomic backgrounds. I expected that both the mean and median incomes of survey respondents will be higher than national averages. I also expected that Northwestern students will tend to be more liberal than the American public. The root of this expectation is from previous survey evidence that college students are generally more liberal
than the general public. However, it is also based on Northwestern’s specific demographics, geography, and history, as well as on my personal perceptions of the general political climate of the school. Finally, I expected to see that students in sociology and political science will be more likely to self-identify as liberals. As I expected these courses to take the most liberal stances on social issues, I hypothesized that the students who choose to take these courses will self-select courses that match their interests. Conversely, I expected more conservative students to take economics, as it is the most conservative discipline of the three.

**Section III: Influences**

vii. Mentions of poverty and critical engagement with course material will be associated with increases in knowledge and perceived importance

viii. Opinion changes will decrease with stronger views on either end of political spectrum.

ix. Opinion change decreases with age. Students with more course experience are expected to be less influenced by their classes

x. Individualistic vs. Structural preferences for causes and remedies will be associated with the norms presented in classes

I expect that more mentions of poverty in a class will lead to increases in knowledge and importance of poverty after taking the course. In accordance with Arum and Roska, I also expect that more critical engagement with course material will lead to increases in knowledge and importance, because more critical thinking will lead students to learn more about the subject of poverty. I also hypothesize that students who self-identify as political moderates will exhibit the greatest changes due to course material, as they may be less set in one group of political beliefs. I also expect for older students to exhibit less change than younger ones. A single class may have less effect on an upperclassman with more class experience than on a younger student who has...
not been exposed to as many courses. Finally, I expect that student opinion changes will reflect
the distributive norms that are presented to them in each course. At the end of each respective
course, students in sociology may show a preference for more structural causes and remedies for
poverty, while econ students’ preferences may tend toward individualism.
Chapter 4: Who took each course? Initial demographic and belief patterns

Section I: Demographic Characteristics

Of 209 students enrolled in Intro to Sociology in fall 2012, 58 responded to the initial survey distributed to them at the beginning of the course. This was a 28% initial response rate. The response rate for the economics course was similar. Of 228 students enrolled in Intro to Macroeconomics in fall 2012, 71 responded to the initial survey distributed to them at the beginning of the course, for a 31% initial response rate. The political science course had the best initial response rate. The survey was sent to 124 total students in American Government and Politics in winter 2013.² Of these 124 students who received the initial survey, 67 responded, for a response rate of 54%. Information about each class’s demographic characteristics is below.

Table 4.1: Gender of initial respondents by course

<table>
<thead>
<tr>
<th></th>
<th>Sociology</th>
<th>Economics</th>
<th>Political Science</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>33%</td>
<td>57%</td>
<td>35%</td>
<td>42%</td>
</tr>
<tr>
<td>Female</td>
<td>67%</td>
<td>43%</td>
<td>65%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Table 4.2: Income of initial respondents by course

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Sociology</th>
<th>Economics</th>
<th>Political Science</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $50,000</td>
<td>14%</td>
<td>7%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>$50,000-$100,000</td>
<td>19%</td>
<td>25%</td>
<td>17%</td>
<td>20%</td>
</tr>
<tr>
<td>$100,000-$200,000</td>
<td>19%</td>
<td>28%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>$200,000-$500,000</td>
<td>27%</td>
<td>22%</td>
<td>26%</td>
<td>25%</td>
</tr>
<tr>
<td>Over $500,000</td>
<td>7%</td>
<td>7%</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Don’t know/Prefer not to answer</td>
<td>14%</td>
<td>11%</td>
<td>14%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Table 4.3: Party ID of initial respondents by course

<table>
<thead>
<tr>
<th>Party ID</th>
<th>Sociology</th>
<th>Economics</th>
<th>Political Science</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democrat</td>
<td>57%</td>
<td>60%</td>
<td>76%</td>
<td>64%</td>
</tr>
<tr>
<td>Republican</td>
<td>21%</td>
<td>17%</td>
<td>8%</td>
<td>15%</td>
</tr>
<tr>
<td>Libertarian</td>
<td>2%</td>
<td>4%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>None</td>
<td>20%</td>
<td>19%</td>
<td>16%</td>
<td>19%</td>
</tr>
</tbody>
</table>

² I excluded students who had been in Intro to Sociology or Intro to Macroeconomics to ensure the students had no prior knowledge of the survey.
Using the results from the initial surveys, I observed several demographic patterns. One observation of note is that the overall demographic breakdowns of each course were fairly similar, especially between sociology and economics. Both had large numbers of freshmen (Table 4.5), similar proportions of Democrats and Republicans (Table 4.3), similar incomes (Table 4.2) and similar spreads around liberal-conservative self-rating—most self-identified as moderate (Table 4.4). One exception to these similarities is that the economics course had a significantly larger proportion of males than either sociology or political science (Table 4.1). I tested the significance of this gender difference using simple t-test of difference of means between two groups, economics students and others (sociology and political science students). The results showed that the gender difference was in fact highly statistically significant, with a p-value of 0.00. This indicates that the larger number of males in economics was not just due to chance, but instead was a statistically significant pattern among those students.

Political science students resembled sociology and econ students in income, but varied greatly in age, party ID, and liberal-conservative self-rating. Intro-level political science students were more evenly spread across year in school than economics or sociology students, which were mostly freshmen (Table 4.5). The political science and sociology courses also had similar

<table>
<thead>
<tr>
<th>Very Liberal</th>
<th>Social Science</th>
<th>Economics</th>
<th>Political Science</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>17%</td>
<td>8%</td>
<td>15%</td>
<td>13%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liberal</th>
<th>Social Science</th>
<th>Economics</th>
<th>Political Science</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>26%</td>
<td>29%</td>
<td>47%</td>
<td>34%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Moderate</th>
<th>Social Science</th>
<th>Economics</th>
<th>Political Science</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>50%</td>
<td>27%</td>
<td>39%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conservative</th>
<th>Social Science</th>
<th>Economics</th>
<th>Political Science</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>11%</td>
<td>9%</td>
<td>12%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Very Conservative</th>
<th>Social Science</th>
<th>Economics</th>
<th>Political Science</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.5: Year in school of initial respondents by course

<table>
<thead>
<tr>
<th>Year</th>
<th>Social Science</th>
<th>Economics</th>
<th>Political Science</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>79%</td>
<td>71%</td>
<td>26%</td>
<td>58%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>9%</td>
<td>22%</td>
<td>45%</td>
<td>26%</td>
</tr>
<tr>
<td>Junior</td>
<td>9%</td>
<td>7%</td>
<td>24%</td>
<td>13%</td>
</tr>
<tr>
<td>Senior</td>
<td>3%</td>
<td>0%</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Using the results from the initial surveys, I observed several demographic patterns. One observation of note is that the overall demographic breakdowns of each course were fairly similar, especially between sociology and economics. Both had large numbers of freshmen (Table 4.5), similar proportions of Democrats and Republicans (Table 4.3), similar incomes (Table 4.2) and similar spreads around liberal-conservative self-rating—most self-identified as moderate (Table 4.4). One exception to these similarities is that the economics course had a significantly larger proportion of males than either sociology or political science (Table 4.1). I tested the significance of this gender difference using simple t-test of difference of means between two groups, economics students and others (sociology and political science students). The results showed that the gender difference was in fact highly statistically significant, with a p-value of 0.00. This indicates that the larger number of males in economics was not just due to chance, but instead was a statistically significant pattern among those students.

Political science students resembled sociology and econ students in income, but varied greatly in age, party ID, and liberal-conservative self-rating. Intro-level political science students were more evenly spread across year in school than economics or sociology students, which were mostly freshmen (Table 4.5). The political science and sociology courses also had similar
proportions of men and women (Table 4.1). In addition, they were quite a bit more liberal than students from the other two courses. Three-fourths of them self-identified as Democrats (Table 4.3). Approximately half self-identified as liberal, while in sociology and economics close the number of moderates was closest to half (Table 4.4). Because of the large differences in party ID between the courses, I performed an additional t-test to see whether the large number of Democrats in political science was statistically significant. This tested the difference of means between political science students and the others. The t-test showed that the large proportion of Democrats in political science was statistically significant, with a p-value of 0.01. This indicates that political science students significantly tended to be more Democratic than sociology and economics students.

There was also evidence to suggest that Northwestern students are in fact more liberal than the general public. Although the most common response to the liberal-conservative self-rating was to identify as moderate, the overall percentage of students who rated themselves as “very liberal” or “liberal” was much higher than those who chose to rate themselves as “very conservative” or “conservative” (Table 4.4). In addition, in all courses there were fairly large majorities of Democrats, suggesting that the students are somewhat more liberal than the general public. All three had initial proportions of Democrats over 55% (Table 4.3). If the latest presidential election is any indication, the current actual proportion of Democrats in the U.S. is closer to 51% (Blake 2012). Northwestern students are somewhat more Democratic than the public as a whole, which lends support to my initial hypothesis.

Northwestern students also tended to have higher family incomes than the American general public (Table 4.2). In each course, the majority of students reported family incomes of over $100,000 (54% in sociology, 57% in economics, and 58% in political science). This is a
great deal higher than the U.S. median household income, which was reported to be $52,762 in 2011 (U.S. Census Bureau 2013). This supports my hypothesis that Northwestern students tend to come from high socioeconomic backgrounds.

Section II: Initial views of Poverty

Students’ initial views of poverty were relatively similar in all three classes. A summary of these initial views are below.

Table 4.6: Estimations of the poverty threshold by class

<table>
<thead>
<tr>
<th></th>
<th>Sociology</th>
<th>Economics</th>
<th>Political Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty Line (average)</td>
<td>$31,332</td>
<td>$30,611</td>
<td>$33,371</td>
</tr>
<tr>
<td>Min</td>
<td>$5000</td>
<td>$1000</td>
<td>$500</td>
</tr>
<tr>
<td>Max</td>
<td>$80,000</td>
<td>$75,000</td>
<td>$80,000</td>
</tr>
</tbody>
</table>

Table 4.6 shows the average estimates from each class of the official annual poverty threshold for a family of four. The actual poverty threshold is $23,550. Students from each course tended to greatly overestimate the poverty line. Economics students were closest, on average, to the actual poverty line. All courses had a rather large spread of responses, with the maximum estimate in each course up to nearly four times as high as the actual poverty rate and the minimum estimates incredibly low.

Table 4.7: Most common causes of poverty by class

<table>
<thead>
<tr>
<th>Most commonly named cause of poverty</th>
<th>Sociology</th>
<th>Economics</th>
<th>Political Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shortage of jobs (67% major cause)</td>
<td></td>
<td></td>
<td>Poor quality of public schools (76% major cause)</td>
</tr>
<tr>
<td>Shortage of jobs (64% major cause)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor quality of public schools (76% major cause)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.7 shows the causes of poverty that students in each class ranked as a “major cause” most often. Both sociology and economics students named shortage of jobs as a major cause of poverty most often, while political science students saw poor quality of public schools as the most major cause of poverty. In all three classes, structural failings were seen as major causes of poverty more often than individual failings.
Table 4.8 shows which remedies for poverty had the most support in each of the three classes. Large majorities of students in sociology, economics, and political science supported improving public schools in low-income areas as a remedy for poverty—in fact, this policy had near-universal support in all three classes. Again, students tended to prefer structural remedies over individualistic ones, just as they chose structural causes as major most often.

Section III: Variations in initial beliefs

I also examined how students' initial knowledge and opinions about poverty varied based on their personal characteristics. To do this, I aggregated the data from all the initial surveys and performed multivariate robust regressions for their responses to each survey question. In each regression, the dependent variable was the response to a particular survey question, while the independent variables were the various personal characteristics I measured: liberal-conservative self-rating, party ID, gender, income, and year in school. Liberal-conservative self-rating was coded on a scale of 1-5, where 1 was “Very Liberal” and 5 was “Very Conservative.” Thus, a lower score indicates more liberalism, and a higher score indicates more conservatism. Gender was coded as 0 for males and 1 for females, so the regression measured the effect of being a woman on responses. Similarly, party ID was also coded on a 0-1 scale, where 1 was a Democrat and 0 was anyone who was not a Democrat. This was done because of the overwhelming preponderance of Democrats (nearly 2/3 of respondents), so it was easiest to measure the effect of being a Democrat in the regression. Year in school and income were coded on scales of 1-4 and 1-5 respectively, where each represented increasing age or increasing income. P-values of 0.05 or less were considered significant. A sample regression output is found below.
Table 4.9: Sample regression output for responses to the question “For each of the following, please tell me if this is a major cause of poverty, a minor cause of poverty, or not a cause at all...Poor people lacking motivation.”

|       | Regression coefficient | Standard error | t     | P>|t| | [95% conf. interval] |
|-------|------------------------|----------------|-------|-----|----------------------|
| year  | -.19                   | .05            | -3.56 | .000| [-.303, -.087]       |
| gender| .06                    | .11            | -0.61 | .545| [-.289, .153]        |
| libcons| .16                   | .07            | 2.26  | .025| [.021, .308]         |
| partyid| -.28                  | .15            | -1.83 | .070| [-.578, .023]       |
| income| -.01                   | .04            | -0.86 | .864| [-.092, .077]       |
| _cons | 2.19                   | .31            | 6.12  | .000| [1.58, 2.80]        |

Table 4.9 shows the regression output of one of these regressions. In this regression, the dependent variable was the average response to a question that asked students to say whether poor people lacking motivation were a major cause of poverty, a minor cause of poverty, or not a cause at all. Responses to the question were coded monotonically on a scale of 3 to 1. A negative regression coefficient indicates that responses tended to be lower, or saw poor people lacking motivation as a less major cause of poverty. In this regression, both year in school and liberal-conservative self-rating were statistically significant. Year in school had a negative regression coefficient, meaning that as students’ age increased, they significantly rated poor people lacking motivation as a less major cause of poverty. Liberal-conservative self-rating, on the other hand, had a positive coefficient, meaning that as students rated themselves as more conservative, they tended to rank poor people lacking motivation as a major cause more often. I performed similar regressions for all the initial survey responses, changing the dependent variable each time to a different response to a survey question. Many regressions did not produce statistically significant results. Each personal characteristic was significant in at least one regression output. Liberal-conservative self-rating was significant most often. Summaries of selected statistically

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3 The same scale was used for responses to questions asking students to rank importance of issues, or their support/opposition for a specific policy (with negative coefficients indicating less perceived importance or less support).
significant independent and dependent variables, along with their regression coefficients and p-values are below.

_A: Liberal Conservative Self-Rating_

**Table 4.10: Selected issues that statistically significantly differed in perceived importance by liberal conservative-self rating**

<table>
<thead>
<tr>
<th>Issue Importance</th>
<th>Regression coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate</td>
<td>-.15</td>
<td>0.036</td>
</tr>
<tr>
<td>Child Poverty</td>
<td>-.18</td>
<td>0.001</td>
</tr>
<tr>
<td>Healthcare</td>
<td>-.13</td>
<td>0.012</td>
</tr>
<tr>
<td>Loss of traditional values</td>
<td>.28</td>
<td>0.000</td>
</tr>
</tbody>
</table>

This table shows some of the statistically significant differences in what issues students initially perceived as important based on their liberal-conservative self-rating. Liberal-conservative self-rating was significantly associated with how respondents ranked the importance of climate, child poverty, healthcare, and loss of traditional values. The negative coefficients associated with climate, child poverty, and healthcare meant that as students’ beliefs became more conservative, they placed less importance on these three issues, to varying degrees. In contrast, more conservative students found loss of traditional values to be of greater importance than liberal students.

**Table 4.11: Selected statistically significant responses to where government spending should be increased, differing by liberal-conservative self-rating**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Regression coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social security</td>
<td>-.20</td>
<td>0.001</td>
</tr>
<tr>
<td>Job programs</td>
<td>-.17</td>
<td>0.002</td>
</tr>
</tbody>
</table>

This table shows some of the statistically significant responses to the question about where students thought the federal government should increase its spending. Liberal-conservative self-rating was negatively associated with social security spending and job programs—more conservative students wanted these to be cut back.
Table 4.12: Selected statistically significant causes of poverty, differing by liberal-conservative self-rating

<table>
<thead>
<tr>
<th>Cause</th>
<th>Regression coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drugs</td>
<td>.15</td>
<td>0.031</td>
</tr>
<tr>
<td>The welfare system</td>
<td>.29</td>
<td>0.000</td>
</tr>
<tr>
<td>Poor people lacking motivation</td>
<td>.16</td>
<td>0.025</td>
</tr>
<tr>
<td>Decline in moral values</td>
<td>.14</td>
<td>0.025</td>
</tr>
<tr>
<td>Poor quality of public schools</td>
<td>-0.12</td>
<td>0.049</td>
</tr>
</tbody>
</table>

Table 4.12 shows some of the statistically significant characteristics that affected what students initially saw as causes for poverty. Liberal-conservative self-rating was positively associated with naming drugs, the welfare system, poor people lacking motivation, and decline in moral values as major causes of poverty, meaning more conservative students saw these as more important causes. It was negatively associated with blaming poor quality of public schools for poverty. Conservatives saw this as a more minor cause, while liberals ranked it as a major one. These results make sense, as conservatives were significantly more likely to blame poverty on individualistic failings like poor people lacking motivation, while liberals saw structural failings like poor schooling as a more important cause of poverty.

Table 4.13: Selected statistically significant remedies of poverty, differing by liberal-conservative self-rating

<table>
<thead>
<tr>
<th>Remedy</th>
<th>Regression coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing cash assistance for families</td>
<td>-0.10</td>
<td>0.049</td>
</tr>
<tr>
<td>Expanding tax credits for poor people</td>
<td>-0.09</td>
<td>0.014</td>
</tr>
<tr>
<td>Expanding public employment programs</td>
<td>-0.11</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Table 4.13 shows some of the statistically significant factors that affected some of the remedies to poverty that students supported. Liberal-conservative self-rating was negatively associated with support for increasing cash assistance for families, expanding tax credits for poor people, and expanding public employment programs meaning conservatives were more likely to oppose these policies.
Table 4.14: Issues that statistically significantly differed in perceived importance by party ID

<table>
<thead>
<tr>
<th>Issue Importance</th>
<th>Regression Coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy supply</td>
<td>.32</td>
<td>0.006</td>
</tr>
</tbody>
</table>

Table 4.14 shows the sole issue where party ID was statistically significant in affecting perceived importance. Party affiliation was strongly positively associated with ranking energy as an important issue. Democrats found this issue more important than non-Democrats.

Table 4.15: Statistically significant responses to where government spending should be increased, differing by party ID

<table>
<thead>
<tr>
<th>Issue</th>
<th>Regression Coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aid to education</td>
<td>.17</td>
<td>0.042</td>
</tr>
<tr>
<td>Health care</td>
<td>.36</td>
<td>0.011</td>
</tr>
<tr>
<td>Food stamps</td>
<td>.37</td>
<td>0.001</td>
</tr>
<tr>
<td>Environmental protection</td>
<td>.27</td>
<td>0.049</td>
</tr>
</tbody>
</table>

Table 4.15 shows some of the statistically significant responses to where government spending should be increased. Party played a major role in these responses. It was positively associated with aid to education, health care, food stamps, and environmental protection. This meant that Democrats were more likely to say they supported expanding government spending on these issues.

Table 4.16: Statistically significant causes of poverty, differing by party ID

<table>
<thead>
<tr>
<th>Cause</th>
<th>Regression Coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too many jobs being part time or low wage</td>
<td>.31</td>
<td>0.033</td>
</tr>
</tbody>
</table>

This table shows the only cause of poverty where party ID was a statistically significant factor in responses. Party was fairly largely positively associated with naming too many jobs being part time or low wage as a major cause for poverty. Democrats were statistically significantly more likely to name this structural failing as a major cause of poverty.

Table 4.17: Selected statistically significant remedies for poverty, differing by party ID

<table>
<thead>
<tr>
<th>Remedy</th>
<th>Regression Coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expanding subsidized daycare</td>
<td>.26</td>
<td>0.003</td>
</tr>
<tr>
<td>Increasing the minimum wage</td>
<td>.19</td>
<td>0.054</td>
</tr>
<tr>
<td>Making food stamps more available to poor people</td>
<td>.24</td>
<td>0.017</td>
</tr>
</tbody>
</table>
Table 4.17 shows some responses about remedies to poverty where party ID was statistically significant. Party was positively associated with support for expanding subsidized daycare, increasing the minimum wage, and making food stamps more available to poor people, meaning Democrats were more likely to support these more structural remedies for poverty.

C: Gender

Table 4.18: Selected statistically significant responses to where government spending should be increased, differing by gender

<table>
<thead>
<tr>
<th>Issue</th>
<th>Regression coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defense spending</td>
<td>.20</td>
<td>0.021</td>
</tr>
<tr>
<td>Homeland security</td>
<td>.18</td>
<td>0.047</td>
</tr>
</tbody>
</table>

Table 4.18 shows some of responses to the question about where government spending should be increased that were statistically significant by gender. Gender was positively associated with both defense spending and homeland security, meaning women were more likely to respond that they wanted more spending on these issues. This appears to contradict the traditional idea that women are more liberal about military spending than men, suggesting that they instead are more supportive of spending on security than one might think. Gender was not significant in affecting perceived importance of issues.

Table 4.19: Statistically significant causes of poverty, differing by gender

<table>
<thead>
<tr>
<th>Cause</th>
<th>Regression coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too many single-parent families</td>
<td>-.31</td>
<td>0.001</td>
</tr>
<tr>
<td>The welfare system</td>
<td>.24</td>
<td>0.018</td>
</tr>
</tbody>
</table>

Table 4.19 shows some of the statistically significant characteristics that affected what students initially saw as causes for poverty. Interestingly, gender was a statistically significant factor for two of these causes: too many single-parent families, and the welfare system. Women ranked the prevalence of single-parent families as a more minor cause of poverty, but tended to see the welfare system as a more major cause.
Table 4.20: Selected statistically significant remedies for poverty, differing by gender

<table>
<thead>
<tr>
<th>Remedy</th>
<th>Regression coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expanding subsidized daycare</td>
<td>0.15</td>
<td>0.012</td>
</tr>
<tr>
<td>Putting more police in low-income areas</td>
<td>0.19</td>
<td>0.015</td>
</tr>
</tbody>
</table>

Table 4.20 shows some of the statistically significant factors that affected some of the remedies to poverty students supported. Gender was positively associated with support for both expanding subsidized daycare and putting more police in low-income areas. Women were more likely to support these two policies. This is in line with earlier trends of women being supportive of security policies, but also helping families.

D: Income

Table 4.21: Selected statistically significant responses to where government spending should be increased, differing by income

<table>
<thead>
<tr>
<th>Issue</th>
<th>Regression coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social security</td>
<td>-0.15</td>
<td>0.000</td>
</tr>
</tbody>
</table>

This table shows the only time income was statistically significant—in response to the question about where government spending should be increased. Social security spending was negatively associated with income, meaning that wealthier students were more likely to favor cutting it. This suggests that higher-income students may be more conservative, at least on this issue.

E: Year in School

Table 4.22: Issues that statistically significantly differed in perceived importance by year in school

<table>
<thead>
<tr>
<th>Issue Importance</th>
<th>Regression coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of traditional values</td>
<td>-0.13</td>
<td>0.042</td>
</tr>
</tbody>
</table>

Year in school was not statistically significant often, but it did prove significant in some interesting instances. Table 4.22 shows that year in school was negatively associated with the perceived importance of loss of traditional values. Older students tended to think this was not as important an issue. Year in school was not significant in the case of government spending.
Table 4.23 shows where year in school was significantly associated with certain causes of poverty. It was negatively associated with seeing poor people lacking motivation and decline in moral values as major causes for poverty. As students got older, they saw these causes as more minor, suggesting that older students were more liberal than the younger ones.

Table 4.23: Statistically significant causes of poverty, differing by year in school

<table>
<thead>
<tr>
<th>Issue</th>
<th>Regression coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor people lacking motivation</td>
<td>-0.20</td>
<td>0.000</td>
</tr>
<tr>
<td>Decline in moral values</td>
<td>-0.14</td>
<td>0.011</td>
</tr>
</tbody>
</table>

Table 4.24: Selected statistically significant remedies for poverty, differing by year in school

Finally, table 4.23 shows that year in school was associated with more support for guaranteeing everyone a minimum income. Again, older students proved to be more liberal with regards to how they think poverty should be addressed.

Section IV: Self-Selection

One of my hypotheses was that students would self-select into disciplines that matched their own initial political beliefs (e.g., there would be more conservative students in economics, conventionally the most conservative discipline). At first glance, the similarities between economics and sociology students’ liberal-conservative self-ratings appeared to contradict my initial hypothesis about what kinds of students would take each course. In both courses, the majority of students’ beliefs were at the middle of the political spectrum. This appeared to suggest limited self-selection among students who chose to take Intro to Sociology and Intro to Economics. The political science students, on the other hand, were overwhelmingly liberal, supporting my hypothesis that liberal students would self-select into a more liberal discipline.

However, although economics and sociology students self-identified similarly, there was still the possibility of differences in their initial attitudes toward poverty. These would be
reflected in their responses to the substantive questions on the survey, but not necessarily in their liberal-conservative self-ratings or party IDs. I tested for these differences by aggregating all the initial survey responses and performing a regression over the courses the students were enrolled in. I was specifically interested in seeing if there were differences between sociology and economics, since there were fewer apparent political self-identification differences between the two courses. Political science served as a comparison group. My regression’s independent variables were thus two dummy variables, “Soc” and “Econ.” These were coded such that a value of 1 in the “Soc” column meant that respondent was a sociology student. Economics and political science students’ “Soc” value was 0. The “Econ” variable was coded the same way, with 1 meaning the person was an economics student and 0 meaning the student was not in economics. There was no overlap of students between courses. A response to one of the survey questions was the dependent variable for each regression. The regression thus tested the effect of being either a sociology or economics student on one’s initial responses to the survey. A p-value of 0.05 was considered statistically significant. A sample regression output is below.

Table 4.25: Sample regression output for responses to the question “For each of the following, please tell me if this is a major cause of poverty, a minor cause of poverty, or not a cause at all….Medical Bills.”

|_variable   | Regression coefficient | Standard error | t   | P>|t| | [95% conf. interval] |
|------------|------------------------|----------------|-----|-----|------------------------|
| Soc        | -0.23                  | 0.09           | 2.49| 0.013| [-0.422, -0.049]       |
| Econ       | -0.08                  | 0.08           | 0.95| 0.341| [-.256, .089]          |
| cons       | 1.33                   | 0.06           | 22.80| 0.000| [1.21, 1.45]           |

Table 4.6 shows the regression output of one of the Soc/Econ regressions. In this regression, the dependent variable was the average response to a question that asked students to say whether medical bills were a major cause of poverty, a minor cause of poverty, or not a cause at all. Responses to the question were coded monotonically on a scale of 3 to 1. A negative regression coefficient indicates that responses tended to be lower, or saw medical bills as a less
In this regression, Soc was statistically significant. This means that sociology students significantly rated medical bills as a less major cause of poverty than economics and political science students. Econ was not statistically significant—economics students’ responses were not significantly different from other students’ responses to this question. I performed similar regressions for all the initial survey responses, changing the dependent variable each time to a different response to a survey question. Most regressions did not produce statistically significant results. Summaries of the statistically significant independent and dependent variables, along with their regression coefficients and p-values are below.

Table 4.26: Summary of statistically significant survey responses, sociology

<table>
<thead>
<tr>
<th>Dependent Variable (survey question)</th>
<th>Independent Variable (course)</th>
<th>Regression Coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived importance of budget deficits</td>
<td>Sociology</td>
<td>.22</td>
<td>0.03</td>
</tr>
<tr>
<td>Perceived importance of loss of traditional values</td>
<td>Sociology</td>
<td>.30</td>
<td>0.02</td>
</tr>
<tr>
<td>Medical bills as a cause of poverty</td>
<td>Sociology</td>
<td>-.23</td>
<td>0.01</td>
</tr>
<tr>
<td>Decline in moral values as a cause of poverty</td>
<td>Sociology</td>
<td>.40</td>
<td>0.00</td>
</tr>
<tr>
<td>Expanding subsidized daycare as a remedy for poverty</td>
<td>Sociology</td>
<td>-.19</td>
<td>0.01</td>
</tr>
<tr>
<td>Making it harder to get divorced as a remedy for poverty</td>
<td>Sociology</td>
<td>.14</td>
<td>0.01</td>
</tr>
<tr>
<td>Expanding defense spending</td>
<td>Sociology</td>
<td>.27</td>
<td>0.01</td>
</tr>
<tr>
<td>Expanding food stamps</td>
<td>Sociology</td>
<td>-.23</td>
<td>0.05</td>
</tr>
<tr>
<td>Expanding environment spending</td>
<td>Sociology</td>
<td>-.28</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Table 4.7 shows the responses where sociology students significantly differed from students from the other courses. They tended to rank budget deficits and loss of traditional values as more important issues. Sociology students significantly saw medical bills as a less major cause of poverty, while naming decline in moral values as a major cause of poverty.

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4 Again, the same scale was used for responses to questions asking students to rank importance of issues, or their support/opposition for a specific policy (with negative coefficients indicating less perceived importance or less support).
more often. They also differed in their preferred remedies for poverty, tending to oppose subsidized daycare and support making it harder to get divorced. Finally, they tended to favor expanding defense spending, but opposed spending on food stamps and the environment.

Table 4.27: Summary of statistically significant survey responses, economics

<table>
<thead>
<tr>
<th>Dependent Variable (survey question)</th>
<th>Independent Variable (course)</th>
<th>Regression Coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drugs as a cause of poverty</td>
<td>Economics</td>
<td>.28</td>
<td>0.01</td>
</tr>
<tr>
<td>Spending more on medical care for poor people as a remedy for poverty</td>
<td>Economics</td>
<td>-.15</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Table 4.8 shows where economics students’ responses were statistically significant than the other students’. They tended to rank drugs as a major cause of poverty more often than sociology and political science students. Economics students also tended to oppose spending more on medical care for poor people as a remedy for poverty. Overall, economics had comparatively fewer statistically significant response differences than sociology.

Contrary to my initial hypothesis, the economics responses do not appear to reveal any sort of conservative preference. In fact, the sociology students appear to be more conservative than the economics students, completely countering my hypothesis. They especially were conservative with regards to moral values issues, seeing them as more important and preferring values-based causes and remedies to poverty. They tended to oppose structural causes of and structural remedies to poverty (medical bills, subsidized daycare, and food stamps, respectively). The regression results reveal a preference for individualistic causes of and remedies to poverty among sociology students. This firmly refutes my hypothesis that sociology students would initially be more liberal than economics or political science students.
Chapter 5: What did they learn? Analysis of course material

Section I: Sociology

You May Ask Yourself: An Introduction to Thinking like a Sociologist by Dalton Conley, the textbook used by the fall 2012 section of Intro to Sociology offers an in-depth, comprehensive account of poverty: theories about its causes, its effects, and possible remedies, as well as explanations of how it relates to a whole host of other social inequalities, from health disparities to educational ones. Poverty is mentioned 224 times in-text, including an entire chapter dedicated to understanding its existence. The chapter begins with a look at different theories of the causes of poverty. Conley critically examines arguments like the “culture of poverty” theory and the “underclass” theory, which are typically cited by conservatives to explain the existence of poverty over many generations. He also looks at more structural causes for poverty, like the effect of residential segregation on economic opportunity. Conley defines absolute and relative poverty, and compares poverty rates in the United States to other developed countries (the US has the highest poverty rate by far). However, the textbook does not include discussions of possible policy remedies to address poverty. Other chapters mention poverty as a contributor to educational disparities, local and global health disparities, domestic violence, welfare, and single parenthood. The solid in-depth examination of poverty presented in You May Ask Yourself appears to be consistent with my hypothesis about the way that poverty would be presented in sociology’s course material.

Course lectures examined poverty in even more depth. One full lecture was devoted to discussing class stratification in the U.S. and abroad, and two lectures were devoted to discussing poverty. The lesson about class stratification served as an introduction to poverty, and included a conceptual discussion of different types of equality (equality of opportunity, equality of condition, equality of outcome). This transitioned into a discussion of the reality of inequality in
the U.S., including geography that cause unequal conditions, e.g. food deserts, and income inequality in the U.S., comparing America’s Gini coefficient to other developed countries. The lecture also examined disparities in wealth accumulation by race. This transitioned into a discussion explicitly about poverty in the United States. The professor explained how the current official poverty threshold was developed in the 1960s, and told the class what it currently is for a family of four. She then presented some possible causes for poverty, including structural ones (too many low-wage jobs, insufficient safety net) and individual ones (personal failings).

Different components of social safety net programs in the U.S. were discussed, along with fact about low-wage jobs in the U.S. There was also discussion of what kinds of personal failings could contribute to poverty. The class discussion was thorough and engaging, examining many aspects of poverty in the United States. Part of this was due to the engaging teaching style of the professor, but it was also based in the course material itself. The lecture again supported my hypotheses about course material in sociology.

Intro to Sociology also had the highest level of critical engagement with course material of the three courses. Students were assessed in a variety of ways. There were two multiple choice/fill-in-the-blank/true-false exams, a midterm and a final. Students also had to write a research proposal about a sociological topic that interested them, though they did not have to actually conduct the research. Finally, they had to write a five-page book report on a book additional to the textbook, chosen from a provided list. These books discussed different types of domestic and international inequalities, including residential segregation, HIV/AIDS, and gender inequality. Moreover, lectures were very interactive, with a great deal of class participation. The professor would regularly ask students to think critically about the material she was presenting, and invite them to make comments about various issues. Despite the large size of the lecture hall,
there were lively class discussions about whether inequality was good or bad, the pros and cons of the current method of calculating the poverty threshold, how to operationalize the “personal failings” theory of poverty causation, and many more. The kind of material and critical engagement in sociology supported the hypotheses I had about how material would be presented in the course.

Section II: Economics
Northwestern’s fall 2012 Intro to Macroeconomics course text was the sixth edition of *Principles of Macroeconomics*, by Harvard economics professor and former adviser to President George W. Bush N. Gregory Mankiw. In 545 pages of text, the word “poverty” was mentioned 18 times, with only 6 of these mentions relating to poverty in the United States and what can be done about it. The majority (two-thirds) of these mentions came in Chapter 6, titled “Supply, Demand, and Government Policies” (Mankiw 2012, 113). The mentions of poverty in this chapter come when Mankiw discusses the effects of minimum wage laws on poverty and unemployment. It is clear that he puts little credence in arguments that raising the minimum wage can help alleviate poverty, emphasizing that most minimum-wage earners “are teenagers from middle-class homes working at part-time jobs for extra spending money” (Mankiw 2012, 120). Nonetheless, he does at least mention the lack of consensus among economists as to what the actual effect of raising the minimum wage may be. Mankiw frames minimum wage policy as a tradeoff between equality and efficiency, contending that “minimum-wage laws try to help people escape poverty. Yet price controls often hurt those they are trying to help…Minimum-wage laws may raise the incomes of some workers, but they also cause other workers to be unemployed” (Mankiw 2012, 122). The other two relevant mentions of poverty come in Chapter 15, about unemployment. This chapter focuses on why a certain level of unemployment is inevitable in an economy, though it does not say what that amount should be. Poverty is
mentioned in the context of government-sponsored job-training programs. Mankiw acknowledges that “public training programs...aim to ease the transition of workers from declining to growing industries and to help disadvantaged groups escape poverty,” and that “advocates of these programs believe that they make the economy operate more efficiently by keeping the labor force more fully employed and that they reduce the inequities inherent in a constantly changing market economy” (Mankiw 2012, 320). His next paragraph detailing the criticisms of public job training programs is almost twice as long as the one preceding it, arguing “that the government is no better—and most likely worse—at disseminating the right information to the right workers and deciding what kinds of worker training would be most valuable” (Mankiw 2012, 321).

Of these two chapters presenting information about poverty in the United States, the class readings only included one—Chapter 15, about unemployment. The lectures about unemployment reinforced Mankiw’s arguments, and framed unemployment in terms of supply, demand, and business cycles. There was no mention of structural inequalities in the economy that may lead to unemployment; instead, causes were presented in terms of conflicting Keynesian and neoclassical theories about how supply and demand curves interact. In addition, since students were not required to read the chapter discussing the relationship between minimum wage and poverty, their only information about minimum wage policy came in lectures and practice problems for exams. Practice problems for the second midterm and final exam addressed minimum wage, and the professor’s solutions to both problems unequivocally stated that “unemployment increases as the minimum wage rises.” These solutions plotted the rise in unemployment on a graph without numerically labeled axes, so it was unclear exactly how much unemployment would rise. There was no discussion of the nuances of minimum wage
policy, and minimum wage problems did not appear on the actual midterm or final exam. Lectures made no mentions at all of poverty or inequality.

Course assessments included very limited critical engagement with the course material. Students were assessed using two midterms and one final exam. Each exam contained a section of short answer questions, which required very limited critical thinking to identify and explain a few concepts. The majority of points focused on mathematical problems, where students solved algebraic equations and drew a variety of graphs. These required little critical thinking about the context or human dimension of the economy, instead focusing on numerical equations with little explanation of how they apply to people’s real-life experiences. Students were also assigned optional homework problems from the textbook, some of which required critical thinking to explain important concepts. However, since these were optional, the level of critical thinking exhibited by each student depended solely on his or her interest in the course material. This supports my original hypothesis that economics would involve the least amount of critical engagement with course material, as it is more math-focused. In addition, the kinds of material presented in class about poverty, minimum wage, and inequality are in line with my hypotheses about the kinds of material that would be presented in class.

Section III: Political Science

The textbook used by the winter 2013 section of Intro to American Government and Politics was *American Government: Power and Purpose* by Theodore Lowi, Benjamin Ginsberg, Kenneth Shepsle, and Stephen Ansolabehere. In nearly six hundred pages of text, poverty is mentioned only 7 times. There is no look at the context, causes, or experiences of poverty; instead, poverty tends to be mentioned as an example of an issue relating to the concepts of the text. Poverty programs are mentioned as one of the “most notable instances … of regulated federalism,” alongside “the areas of civil rights… and environmental protection” (Lowi et al.,
Poverty is also mentioned as an example of a “valence issue,” one where “all people want the same outcome” of less poverty (Lowi et al., 2012, pg. 447). Another mention comes in the chapter about public opinion, as an example of a demographic characteristic that describes some Americans (Lowi et al., 2012, pg. 370). Acknowledging America’s place as one of the “most diverse societies in the world, with freedom to practice every major religion, with all manner of political and social organizations, and with great concentrations of wealth and poverty,” Lowi and his coauthors extol the virtues of our democracy, praising the American people’s “strong common commitment to democracy itself” (Lowi et al., 2012, 406). Inequality in the American political system is also largely ignored. Inequality is only mentioned 9 times, and only 3 of those mentions are not in footnotes. One of those three mentions appears in an infographic. From this analysis, it appears that at least in this leading intro-level political science text, poverty and inequality in the American political system tend to be overlooked. This does not support my hypothesis that political science would have more discussion of poverty than economics—in fact, the textbook devoted much less space to the subject than economics.

Students in the course were assigned all chapters of the textbook that included these brief mentions of poverty. The issue of inequality was somewhat more elaborated on in class lectures, especially during the lecture about interest groups and American politics. A good portion of the lecture was spent discussing criticisms of the amount of influence interest groups have on American politics. The professor explained that interest groups tend to represent the rich, as interest group participation increases by income. He also mentioned that these interest groups tend to “drown out the voices of people with fewer resources,” citing campaign finance laws that allow rich individuals to give large sums of money to candidates. This course material was a more in-depth discussion of poverty than in economics, though it was nowhere near the level of
attention paid to poverty in sociology. Nonetheless, this in-between treatment was broadly consistent with my original hypothesis about political science’s treatment of poverty.

The class assignments for this course involved very limited critical engagement with the course material. There were two quizzes, each with multiple choice, fill-in-the-blank, and true/false questions. These required little more than rote memorization and regurgitation of facts from students. The other major part of students’ assessments came from a mid-term and final exam, which included several identification or short-answer questions, and a longer extended essay portion. These exams required students to be able to critically engage with the course material in the exam period, but were less intensive or involved than writing a paper. The final component of students’ grades came from their participation in discussion sections, which were framed as debates on important concepts in the course. This exercise involved the most critical engagement with the course material, as students were assigned to take a side on an issue and defend it. However, none of the topics debated in the weekly discussion sections had to do with poverty or inequality. The amount of critical engagement in political science was somewhat less than I had anticipated. I had expected some sort of paper or essay to be assigned outside of class, but this was not the case. It appears that although there was some amount of critical engagement with the course material, none of that really addressed the topics of poverty or inequality, which may mean that students’ knowledge and opinions will show limited changes.

**Section IV: Additional Textbooks**

In order to gain a broader understanding of how each discipline addressed poverty, I briefly examined additional intro-level textbooks from sociology, economics, and political science. The sociology textbook I chose to analyze was *Sociology* by Anthony Giddens. For economics, I chose to look at *Essentials of Economics* by Paul Krugman, Robin Wells, and Kathryn Graddy. The political science textbook I chose to examine was *The Challenge of*
Democracy: American Government in a Global World by Northwestern professor emeritus Kenneth Janda, Jeffrey M. Berry, and Jerry Goldman. All three are leading textbooks, and have commonly been used in prior sections of the intro-level social science courses I observed.

These textbooks exhibited similar patterns to the books from fall 2012 and winter 2013. Sociology contained over 100 mentions of poverty, and again included an entire chapter devoted to understanding “poverty, exclusion, and social welfare” (Giddens 2006, 339). There was a chapter on class stratification that discussed poverty as well. The book discussed how to define and measure poverty, and included a nuanced discussion of both structural and individualistic causes of poverty. It also included an analysis of government welfare programs as a potential solution to poverty. The discussion of poverty was overall fairly similar to that of You May Ask Yourself.

Krugman et al.’s Essentials of Economics contained even fewer mentions of poverty than the Mankiw book. Poverty was mentioned 10 times in over 500 pages of text, and only 6 of those refer to poverty in the United States. However, these mentions presented a more balanced view of poverty than in Mankiw’s book. Minimum wage laws were depicted as a response to a supply-demand equilibrium that produced “wage rates that yield an income below the poverty level” (Krugman et al. 2011, 104). Poverty was also mentioned as a consequence of a recession (Krugman et al. 311). Krugman et al. included poverty in their discussion of possible “marginal social benefit[s] of a good or activity,” which occurred in the chapter about externalities and public goods (Krugman et al. 2011, 278). This small section used early childhood education programs as an example of a socially beneficial policy. The authors presented the results of several studies that have found that high-quality preschool leads to students who are “more likely to end up with a job and to earn a high salary later in life,” breaking the “cycle of poverty,” and
can even increase GDP as a whole (Krugman et al. 2011, 277-78). Though this section is brief, it
does portray a more human aspect of economics that is absent in Mankiw.

Janda et al.’s textbook includes much more about poverty than the Lowi et al. book. They
mention poverty over 55 times in the text. The first mention comes in their discussion of the
purposes of government. One potential purpose is “promoting equality,” including alleviating
poverty, and they acknowledge that there is debate about exactly how much of a role government
should play in alleviating economic inequality (Janda et al. 2008, 10). They also mention that
blacks and Latinos have faced poverty more poverty than whites, and that the Democratic party
platform contained more mentions of poverty than the Republican platform in 2008 (Janda et al.
2008, 510, 505, 251). The most substantive discussion comes in their chapter on domestic policy,
where “Poverty in America” gets its own subsection under the section about “public assistance”
(Janda et al. 2008, 597) There are 5 pages devoted to explaining how poverty is measured, how
poverty rates have changed over time, and how welfare policy has evolved to address the issue.
This section explains the how the official poverty threshold is calculated, and presents some
prominent critiques to that method (Janda et al. 2008, 598). They also describe how welfare laws
have changed over the past five decades and how those changes have affected welfare recipients
(Janda et al. 2008, 601). This is overall a much more substantive discussion of poverty than in
Lowi et al. The Janda et al. textbook appears to fall in line with my original hypothesis that
political science texts would have a discussion of poverty that was in between sociology and
economics. While general patterns from my hypotheses held true, the content of these textbooks
suggests that a course’s discussion of poverty may depend less on the discipline and more on the
professor and how he or she chooses to present it, most prominently in political science and to a
lesser extent in economics as well.
At the end of each course, students were sent a follow-up survey to determine if and how their knowledge and attitudes toward poverty had changed. Of the economics students who were sent the survey, 51 responded, for a response rate of 22%. In political science, 35 students, or 29%, responded to the follow-up survey. The course with the worst response rate to the follow-up survey was the sociology course. Despite repeated email reminders to complete the survey, only 14 people, or 7%, responded.\textsuperscript{5} This small sample size unfortunately made it impossible to conduct statistical analysis of the sociology data. However, qualitative analysis still yielded fruitful and interesting results. In all three cases, the samples were very similar demographically (even with the small N in sociology), suggesting that both the before and after samples were in fact representative of the general class population.

There were no large-scale shifts in opinions after taking the courses—however, there were some small but important changes. There were little to no observed changes in attitudes by year or by liberal-conservative self-rating. This suggests that there is little relationship between students’ age or political leanings and how they are affected by their courses, discrediting my original hypotheses. The following sections examine the largest changes in belief of each course as a whole, as these provided the largest samples for analysis and the most interesting results. Statistical significance was determined using a simple t-test for difference of means between the before and after samples for each class. Only economics and political science’s statistical significance were analyzed as those had before and after samples large enough for a statistical test to be valid. The value of a mean represents the average of all responses to a particular question. Because responses were coded monotonically (e.g. scale of 1-3, where 1 indicates the

\textsuperscript{5} I sent email reminders to students every few days and still got little response. I stopped the persistent emails only after two students replied angrily stating, “I get your emails every day. I don’t want to take your survey so stop emailing me.”
least amount of support for a policy and 3 indicates the most support), statistically significant changes of mean responses meant that there were significant shifts in support/opposition to policies presented in the questions. P-values of 0.05 or less were considered significant.

**Section I: Importance**

*Table 6.1: Changes in perceived importance of child poverty by class*

<table>
<thead>
<tr>
<th>Importance of Child Poverty</th>
<th>Soc Before</th>
<th>Soc After</th>
<th>Econ Before</th>
<th>Econ After</th>
<th>PS Before</th>
<th>PS After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Important</td>
<td>79%</td>
<td>64%</td>
<td>61%</td>
<td>65%</td>
<td>71%</td>
<td>74%</td>
</tr>
<tr>
<td>Somewhat Important</td>
<td>17%</td>
<td>29%</td>
<td>36%</td>
<td>31%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>Not important</td>
<td>3%</td>
<td>7%</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Table 6.2: Changes in perceived importance of adult poverty by class*

<table>
<thead>
<tr>
<th>Importance of Adult Poverty</th>
<th>Soc Before</th>
<th>Soc After</th>
<th>Econ Before</th>
<th>Econ After</th>
<th>PS Before</th>
<th>PS After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Important</td>
<td>57%</td>
<td>57%</td>
<td>53%</td>
<td>54%</td>
<td>68%</td>
<td>60%</td>
</tr>
<tr>
<td>Somewhat Important</td>
<td>41%</td>
<td>43%</td>
<td>44%</td>
<td>42%</td>
<td>29%</td>
<td>37%</td>
</tr>
<tr>
<td>Not important</td>
<td>2%</td>
<td>0%</td>
<td>3%</td>
<td>4%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

These tables show changes in how important students from each course perceived child and adult poverty to be before and after taking the course. In Table 6.1, we see that the proportion of people ranking child poverty as very important remained relatively similar before and after the class in both economics and political science. This makes sense, as neither class really mentioned the issue so it is unlikely student opinions changed much. However, in sociology the percentage of people ranking child poverty as very important dropped by 15 points. Though this course was the one that focused the most on poverty, perhaps the focus on other social inequalities in addition to poverty meant that students found child poverty to be less
of an important issue. This change could also just be due to chance. In table 6.2, we see that the perceived importance of adult poverty remained almost identical in all three classes, though political science saw a slight drop in the perceived importance of the issue. This appears to suggest that mentioning adult poverty in sociology had little effect on how important students thought the issue was, as their lack of changes resembles the courses that did not discuss poverty at all.

**Section II: Nature**

Table 6.3: Changes in poverty threshold estimation by class

<table>
<thead>
<tr>
<th>Poverty Line (average)</th>
<th>Soc Before</th>
<th>Soc After</th>
<th>Econ Before</th>
<th>Econ After</th>
<th>PS Before</th>
<th>PS After</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$31,332</td>
<td>$28,928</td>
<td>$30,611</td>
<td>$33,278</td>
<td>$33,371</td>
<td>$30,228</td>
</tr>
<tr>
<td>Min</td>
<td>$5000</td>
<td>$20,000</td>
<td>$1000</td>
<td>$12,000</td>
<td>$500</td>
<td>$10,000</td>
</tr>
<tr>
<td>Max</td>
<td>$80,000</td>
<td>$60,000</td>
<td>$75,000</td>
<td>$100,000</td>
<td>$80,000</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

This table shows how students from each course estimated the poverty line for a family of four before and after their respective classes. All students overestimated the poverty line both before and after the course (the actual official poverty line is $23,550). The average estimation dropped after both the sociology and political science courses, while after taking the economics course student estimates actually increased. Sociology students’ estimates after taking the course were closest to the actual poverty line, which suggests that the discussion of poverty may have had at least a minimal effect on students’ knowledge of what it means to be poor.

**Section III: Causes**

Table 6.4: Shortage of jobs as a cause of poverty, economics

|                  | Before | After | Pr(|T| < |t|) |
|------------------|--------|-------|---------|
| Major cause      | 64%    | 48%   | 0.0268  |
| Minor cause      | 33%    | 44%   |         |
| Not a cause      | 3%     | 8%    |         |
### Table 6.5: Poor quality of public schools as a cause of poverty, economics

|             | Before | After | Pr(|T| > |t|) |
|-------------|--------|-------|---------|
| Major cause | 54%    | 67%   | 0.0401  |
| Minor cause | 42%    | 33%   |         |
| Not a cause | 4%     | 0%    |         |

### Table 6.6: Drug abuse as a cause of poverty, sociology

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major cause</td>
<td>41%</td>
<td>57%</td>
</tr>
<tr>
<td>Minor cause</td>
<td>53%</td>
<td>35%</td>
</tr>
<tr>
<td>Not a cause</td>
<td>5%</td>
<td>7%</td>
</tr>
</tbody>
</table>

### Table 6.7: Medical bills as a cause of poverty, sociology

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major cause</td>
<td>47%</td>
<td>79%</td>
</tr>
<tr>
<td>Minor cause</td>
<td>50%</td>
<td>14%</td>
</tr>
<tr>
<td>Not a cause</td>
<td>3%</td>
<td>7%</td>
</tr>
</tbody>
</table>

### Table 6.8: Too many immigrants as a cause of poverty, political science

|             | Before | After | Pr(|T| < |t|) |
|-------------|--------|-------|---------|
| Major cause | 71%    | 57%   | 0.0779  |
| Minor cause | 26%    | 37%   |         |
| Not a cause | 3%     | 6%    |         |

### Table 6.9: Shortage of jobs as a cause of poverty, political science

|             | Before | After | Pr(|T| < |t|) |
|-------------|--------|-------|---------|
| Major cause | 2%     | 2%    | 0.0635  |
| Minor cause | 48%    | 29%   |         |
| Not a cause | 50%    | 69%   |         |
The tables in this section show some changes in what students thought were the most important causes of poverty in each class. The economics class saw the largest shifts, with two statistically significant changes. After taking the course, fewer named shortage of jobs as a major cause of poverty (Table 6.4), while more people thought poor quality of public schools was to blame (Table 6.5). Shortage of jobs was the named as a major cause of poverty most often in the initial survey, so this decrease in support is particularly notable. Interestingly, they decreased support for one structural cause (shortage of jobs) while increasing their preference for a different structural cause of poverty (poor quality of public schools). It seems likely that their decreased support for shortage of jobs may come from the course material. In economics, economies are presented as having a natural rate of unemployment, so it is a given that any number of people are unemployed at a given time. This suggests that poor people’s inability to find jobs may not be the result of not enough jobs, but rather a natural phenomenon. The issue of schools, on the other hand, was not discussed much in the economics class, so the changes are not likely due to course material. They may be due to the increased prominence of education in the 2012 presidential election, or the many high-profile stories about the quality Chicago Public Schools that were discussed in the fall of 2012.

Sociology students also saw some large changes in what they saw as the most important causes of poverty. The proportion of students who said that drugs and medical bills were major causes of poverty greatly increased, while those who saw too many immigrants as a problem essentially disappeared. This is relatively consistent with the themes of the course. The high cost of medical care and drugs were both mentioned during the class discussion of poverty, while the immigrant experience was discussed at a different point in the class. Moreover, in the initial survey, sociology students were significantly less likely than economics students to name...
medical bills as a cause of poverty (see p. 32). After the course, the number who saw this as a major cause increased over 30%. In this instance, it does strongly seem that the issues mentioned in class did have an impact on student opinions.

Political science saw minimal changes in what causes they thought were most important. There were no statistically significant changes—the two shown in tables 6.9 and 6.10 are the ones with the most change. Neither issue was discussed in class, so these changes are likely due to some outside influence, or due to chance.

Section IV: Remedies

Table 6.11: Should food stamps be expanded?, economics

|         | Before | After | Pr(|T| < |t|) |
|---------|--------|-------|-----------|
| Expanded| 18%    | 13%   | **0.0492**|
| Kept about the same | 65% | 56%    |
| Cut Back | 17%    | 31%   |

Table 6.12: Support for increasing tax credits for low-income workers, economics

|         | Before | After | Pr(|T| < |t|) |
|---------|--------|-------|-----------|
| Support | 72%    | 54%   | **0.0175**|
| Oppose  | 28%    | 46%   |

Table 6.13: Support for increasing minimum wage, economics

|         | Before | After | Pr(|T| < |t|) |
|---------|--------|-------|-----------|
| Support | 56%    | 44%   | 0.1082    |
| Oppose  | 44%    | 56%   |

Table 6.14: Support for expanding subsidized daycare, economics

|         | Before | After | Pr(|T| < |t|) |
|---------|--------|-------|-----------|
| Support | 82%    | 67%   | **0.0306**|
| Oppose  | 18%    | 33%   |

Table 6.15: Support for increasing minimum wage, sociology

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td>62%</td>
<td>50%</td>
</tr>
<tr>
<td>Oppose</td>
<td>38%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Table 6.16: Support for expanding subsidized daycare, sociology

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td>67%</td>
<td>86%</td>
</tr>
<tr>
<td>Oppose</td>
<td>31%</td>
<td>14%</td>
</tr>
</tbody>
</table>
Table 6.17: Support for spending more for housing for poor people, sociology

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td>60%</td>
<td>71%</td>
</tr>
<tr>
<td>Oppose</td>
<td>40%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Table 6.18: Support for Requiring public schools to teach about moral values, political science

|         | Before | After | Pr(|T| < |t|) |
|---------|--------|-------|--------|
| Support | 39%    | 23%   | 0.0480 |
| Oppose  | 61%    | 77%   |        |

Table 6.19: Support for increasing minimum wage, political science

|         | Before | After | Pr(|T| < |t|) |
|---------|--------|-------|--------|
| Support | 80%    | 74%   | 0.2453 |
| Oppose  | 20%    | 26%   |        |

This final set of tables shows the changes in which remedies students preferred to address poverty before and after taking the courses. In economics, students significantly decreased their support for several structural remedies for poverty, such as food stamps (table 6.11), tax credits for low-income workers (Table 6.12), and expanding subsidized daycare (Table 6.14). In accordance with what was presented in class, they also decreased their support for increasing the minimum wage (Table 6.13), though this was not statistically significant. Though support for most policies stayed relatively the same, this significant decrease in support for policies that require government intervention appear to be in line with the general attitudes presented in class—that the free market alone works better with minimal government intervention.

Sociology students also saw some major changes. They increased their support for subsidized daycare and housing for poor people (Tables 6.16 and 6.17). These increases reflect the structural attitude toward poverty presented in the class. Interestingly, sociology students decreased their support for raising the minimum wage. Though this may at first seem to go against the structural approach of sociology, it does in fact still reflect what was mentioned in class. Class discussion of minimum wage highlighted that many minimum wage workers are teenagers getting their first jobs, and suggested that perhaps a more effective way to address
poverty would be to expand programs that addressed more comprehensive factors. Expanding childcare and housing would fall into this category, so it thus makes sense that sociology students preferred these over raising the minimum wage. The increased support for expanding subsidized daycare is especially notable because sociology students were initially statistically significantly less likely than economics and political science students to support this policy (see p. 32). This nearly-20% increase in support, with the accompanying increase in support for public housing suggests that the ideas about poverty presented in the sociology class did indeed have an influence on students’ views.

Finally, support for only one remedy changed after the political science class. Students were significantly less supportive of requiring schools to teach about moral values (Table 6.18). This was not an issue mentioned in the class, and it is unclear why this is the only issue whose support changed. Table 6.19 shows that student support for raising the minimum wage stayed relatively the same both before and after the course. This provides a clear contrast to the other two classes, which exhibited changes. It indicates that mentioning the specific policy of minimum wage in the economics and sociology classes did seem to have an effect on students, while when it was not mentioned, as in the political science class, student opinions remained relatively constant.
Chapter 7: Conclusion

Summary of results

Overall, the hypotheses about disciplines mostly held true. Sociology, economics, and political science all had very different approaches to addressing poverty. Sociology had the most discussion by far. Both political science and economics largely ignored the subject, though political science lectures did address inequality in a way that economics did not. Sociology had the most critical engagement with course material as well, with much less in political science and economics. Unfortunately, there was some difficulty in gauging the results due to the very small size of the sociology “After” sample. Nonetheless, there were some results of note. There were no large-scale general shifts, suggesting that one course alone may not have that much of an effect on students’ political opinions or attitudes. Breaking down before-and-after responses by income, liberal-conservative self-rating, or year showed very few changes, refuting my initial hypotheses about the effects these characteristics would have on how students were affected by courses.

Several specific policies did exhibit significant changes. In economics, support declined for increasing the minimum wage, and for expanding food stamps tax credits for the poor, and subsidized daycare. In contrast, sociology students tended to increase their support for such policies after the course (except for raising the minimum wage, which was explained by the fact that it was presented as an imperfect remedy in class). Political science, which neither espoused a specific economic view nor made mention of specific policy saw hardly any changes at all. This suggests that mentioning certain policies in classes may indeed have an effect on what students think about those policies and policies similar to them. The different way government intervention was portrayed in sociology and economics was also reflected in the way students’ attitudes toward government policy changed after taking each course.
Recommendations for future studies

Several methodological changes would make this study more effective in the future. The largest would be some way to get more responses to the before and after surveys—perhaps requiring mandatory responses, with collaboration from the professor, would make collecting responses more effective. This would make it easier to test for statistical significance, and give large enough samples to statistically test demographic breakdowns. Another interesting component to add would be an experiment in a laboratory setting, to see if reading different academic texts has an effect on what kind of policy preferences students choose. Finally, futures studies would benefit from the ability to compare specific students before and after the course. Students’ identifying information was not collected in this study, but if it could be made possible, it would be an interesting and beneficial thing to include in the future.
Appendix 1: Poverty Survey Questions

1. Here is a list of some possible problems facing the United States. For each one - even if you have already mentioned it - please say whether you believe it is very important, somewhat important, or not very important at all. (IMPORTANCE)

- International terrorism
  - Very important
  - Somewhat important
  - Not very important at all
- Unemployment
  - Very important
  - Somewhat important
  - Not very important at all
- Climate Change
  - Very important
  - Somewhat important
  - Not very important at all
- Child Poverty
  - Very important
  - Somewhat important
  - Not very important at all
- Inflation
  - Very important
  - Somewhat important
  - Not very important at all
- Education
  - Very important
  - Somewhat important
  - Not very important at all
- Budget Deficits
  - Very important
  - Somewhat important
  - Not very important at all
- Health Care
  - Very important
  - Somewhat important
  - Not very important at all
2. Please answer the following question as best you can. If you don't know the answer to the question, just say so and move on to the next question....Is the percentage of Americans in poverty as reported by the government currently closer to 1%, 5%, 15%, or 30%? (NATURE)

- 1%
- 5%
- 15%
- 30%
- Don’t know

3. According to the official government guidelines, about how much income do you think a family of four needs to make in order to be just above the poverty line? Please state a dollar amount. (NATURE)

4. From what you know, about what portion of poor people in this country do you think are African American? Please give a percentage figure between zero and one hundred. (NATURE)

5. For each of the following, please tell me if this is a major cause of poverty, a minor cause of poverty, or not a cause at all. (CAUSES)

- Drug abuse
  - Major cause
  - Minor cause
  - Not a cause at all

- Medical bills
  - Major cause
  - Minor cause
  - Not a cause at all
Too many jobs being part time or low wage
   ○ Major cause
   ○ Minor cause
   ○ Not a cause at all

Too many single-parent families
   ○ Major cause
   ○ Minor cause
   ○ Not a cause at all

A shortage of jobs
   ○ Major cause
   ○ Minor cause
   ○ Not a cause at all

The welfare system
   ○ Major cause
   ○ Minor cause
   ○ Not a cause at all

Too many immigrants
   ○ Major cause
   ○ Minor cause
   ○ Not a cause at all

Poor people lacking motivation
   ○ Major cause
   ○ Minor cause
   ○ Not a cause at all

Decline in moral values
   ○ Major cause
   ○ Minor cause
   ○ Not a cause at all

Poor quality of public schools
   ○ Major cause
   ○ Minor cause
   ○ Not a cause at all

6. In your opinion, which is the bigger cause of poverty today— that people are not doing enough to help themselves out of poverty, or that circumstances beyond their control cause them to be poor? (CAUSES)
   • People not doing enough
   • Circumstances beyond their control
6. People should be allowed to make as much money as they can, even if it means some make millions while others live in poverty. (CAUSES)

- Strongly agree
- somewhat agree
- somewhat disagree
- strongly disagree

8. Now, what about your views? Would you support or oppose an increased effort by the federal government to address poverty in America? (REMEDIES)

- Support
- Oppose

9. Below is a list of present federal government programs. For each, please say whether you feel it should be expanded, cut back, or kept about the same. (IMPORTANCE)

<table>
<thead>
<tr>
<th>Program</th>
<th>Expanded</th>
<th>Kept about the same</th>
<th>Cut back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aid to education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense spending</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic aid to other nations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health care</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Homeland security
  - Expanded
  - Kept about the same
  - Cut back
- Improving public infrastructure, such as highways, bridges, and airports
  - Expanded
  - Kept about the same
  - Cut back
- Food stamps
  - Expanded
  - Kept about the same
  - Cut back
- Scientific research
  - Expanded
  - Kept about the same
  - Cut back
- Farm subsidies
  - Expanded
  - Kept about the same
  - Cut back
- Environmental protection
  - Expanded
  - Kept about the same
  - Cut back

10. Do you think the federal government is spending—too much, about the right amount, or too little—money to address the issue of poverty in this country? (IMPORTANCE)

- Too much
- About the right amount
- Too little
- No opinion

11. Here is a list of some things the government could do to directly help the poor in America. Please tell me if you support or oppose each. (REMEDIES)

- Increasing the minimum wage
  - Support
  - Oppose
● Increasing tax credits for low-income workers  
  ○ Support  
  ○ Oppose  
● Increasing cash assistance for families  
  ○ Support  
  ○ Oppose  
● Expanding subsidized daycare  
  ○ Support  
  ○ Oppose  
● Spending more for medical care for poor people  
  ○ Support  
  ○ Oppose  
● Spending more for housing for poor people  
  ○ Support  
  ○ Oppose  
● Making food stamps more available to poor people  
  ○ Support  
  ○ Oppose  
● Guaranteeing everyone a minimum income  
  ○ Support  
  ○ Oppose

12. Here is a list of things the government could do that some people say would reduce poverty in America. Do you support or oppose the government doing each? (REMEDIES)

● Requiring public schools to teach about moral values  
  ○ Support  
  ○ Oppose  
● Expanding public employment programs  
  ○ Support  
  ○ Oppose  
● Expanding job-training programs  
  ○ Support  
  ○ Oppose  
● Improving public schools in low-income areas  
  ○ Support  
  ○ Oppose  
● Making it harder to get divorced  
  ○ Support  
  ○ Oppose  
● Putting more police in low-income areas
13. Would you be willing to pay more in taxes to pay for more of such government spending to help the poor? (REMEDIES)

- Willing
- Not Willing
- No opinion

14. What is your year in school?

- Freshman
- Sophomore
- Junior
- Senior

15. What is your gender?

- Female
- Male

16. How would you rate your political beliefs? (Very Liberal, Liberal, Moderate, Conservative, Very Conservative)

- Very liberal
- Liberal
- Moderate
- Conservative
- Very Conservative

16. Which political party do you identify with? (Democrat, Republican, Other—please list)

- Democrat
- Republican
- Other
- None

18. What is your best guess of your parents’ total annual income?

- Less than $50,000
- $50,000-$100,000
Follow-up Questions (distributed only at the end of the quarter)

1. Please estimate what percentage of class you attended.
2. How many hours per week did you spend on this class outside of lecture/discussion? Please provide your best estimate.
3. What other classes did you take this quarter?
4. How would you describe your professor? Please select all that apply.
   - Smart
   - Engaging
   - Boring
   - Uninformed
   - Interesting
   - None of the Above
   - Other
5. What do you think of your professor’s political beliefs? Select one.
   - Conservative
   - Moderate
   - Liberal
   - Other
6. Did you enjoy this class?
   - Yes
   - No
7. After taking this course, are you interested in taking another course in the subject?
   - Yes
   - No
8. Did you take part I of the survey earlier in the quarter?
   - Yes
   - No
Bibliography


Woessner, Matthew, and April Kelly-Woessner. "I Think My Professor is a Democrat: Considering Whether Students Recognize and React to Faculty Politics." *PS: Political Science & Politics*, 2009: 343-352.