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# THE ELEPHANT (OR DONKEY) IN THE ROOM:

# POLITICAL IDEOLOGY AND NEWS COMPREHENSION

by

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THE ELEPHANT (OR DONKEY) IN THE ROOM:

POLITICAL IDEOLOGY AND NEWS COMPREHENSION

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This paper looks at the influence of ideological schemas on comprehension of news articles. Schema theory pervades psychological explanations for conceptualizing and comprehending the world. While schemas, or mental organizational structures, are essential for comprehending information, they can also be misapplied, leading to a variety of errors in understanding, with particular application in comprehension of political concepts and the news. This paper looks to at how level of congruence between the political ideology of the individual and the tone of a news article affect comprehension levels. Undergraduate students at the University of Nebraska-Lincoln took a reading comprehension task for two news articles from ideologically disparate sources. Results were compared with individual political tendencies based on established ideological measures. Findings showed a small negative correlation between ideology and comprehension, suggesting that strong ideological rhetoric in a news article can interfere with understanding of core information. Implications for the classroom show the need for early instruction in the impact of the perspectives of the author and reader on understanding in order to mitigate negative effects.

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# Chapter 1

## Introduction and Review of Literature

In the last several decades, theorists have downplayed the divide between various political parties in the United States and questioned the relevance of discussing political ideology as a serious concern for researchers. Currently, however, the increasingly polarized political climate and new theoretical measures have increased interest in the effects of ideology and have led Jost (2006) to declare "the end of the end of ideology." In a world of instant connections between people all over the world and multiple news broadcasters competing for attention, 24 hours a day, choices each individual makes on how to stay informed can have dramatic differences in their perception and awareness of events. In this paper, I look at individuals as consumers of the news. By better understanding some of the factors involved in comprehending the myriad sources of media we all experience daily, I hope to help both producers and consumers of news content become more aware and effective at understanding their interactions. A key stumbling block in the interactive reading process is the interplay of ideologies. Understanding the effects of each individual's political perspective on the comprehension process is vital to both the effective creation of news texts and the competent absorption of those materials.

### Schema theory

Schema theory provides a powerful explanatory tool in understanding the mental processes that determine comprehension in reading, as well as understanding any new information. Comprehension occurs when reader has some understanding of the objects and their relationships in a text. This understanding occurs as an interaction between two

sides. The reader decodes the words on the page and relates this information to knowledge already existing in the reader's experience. Schema theory gives a framework for understanding this interaction between bottom-up and top-down processes in reading. Schemas are mental structures that compile information about a concept (e.g. a dog, an airport or marine biology). They are evoked when prompted by text on a page but then help to create understanding by bringing to mind applicable knowledge already possessed by the reader.

The influence of schemas in comprehension has been long established in the literature. Bransford and Johnson (1972) demonstrated how merely seeing an illustration or being prompted with a short phrase giving context was enough to activate schemas and could greatly increase comprehension of a passage. Steffensen, Joag-Dev, and Anderson (1979) showed how, beyond direct prompting by a researcher, a reader's background can lead to large differences in comprehension when passages speak about events that are culturally familiar.

Beyond initial understanding, schemas are vital to how the brain functions in retrieving read information, with errors in recall following predictable forms based on existing schemas (Bransford, 1984). At both the time of encoding and retrieval different combinations of schemas may activate, giving potential for different understanding based on the specific context of the verbal interaction. Additionally, it is important to remember that schemas are not static units (Richgels, 1982); every activation can lead to an elaboration on a schematic model, giving the structure more subtlety and explanatory power.

While schema theory has become nearly canonical in cognitive psychology, some new developments continue to refine schema-related concepts. A major criticism of early models of schemas is in the relative inflexibility of the schema as described. These models suggest that seeing words immediately evokes the proper context and brings to mind the specific best schema of the reader. Newer research suggests, however, that there is a more flexible, far-reaching process occurring in the reader's mind where all possible concepts for a word are brought forth regardless of context. This means that seeing the word *key* would simultaneously bring to mind door openers, geographical bodies, something being vital, and other associated concepts (Kintsch, 1988). From this pattern of spreading activation in the mind the most relevant pathways are sustained and irrelevant information dies out. This model seems to more accurately describe the processes that actually occur in the brain, but using either this construction-integration model or older schema theory, a meaningful interaction between the words on the page and the reader is the most important process.

**Effects of schemas in social interaction and news**

Beyond text comprehension as mentioned above, schemas pervade mental interactions of any sort. Schemas can be applied to social perception, as in a survey of different Christian groups' images of each other in a study by Biela, Lingoes, Lin, & McKeachie (1989). Outgroup members were seen as more homogenous when in a competitive setting, and information that was consistent with existing biases was more effectively processed. Individuals were hesitant to make generalizations about groups where they shared membership because they had more detailed schemas which would be violated but had no trouble doing the same for other groups.

These differences in standards for schema utilization are relevant to this discussion because much of political discourse today focuses on stressing in-group solidarity and demonizing opponents. Schemas function to ‘fill in the blanks’ in memory retrieval, and an oversimplified schema for an opposing political party can lead to more generalizations and less understanding. This oversimplification can lead to a tendency to distort facts that will be tested in this study.

Findahl and Höijer (1985) studied comprehension of television news reports. Findings fit well with existing schema theories. Viewers retained the most information on topics relevant to their daily lives or that occurred in locations similar to theirs. Also, when not sure of answers, partial guesses followed logical processes that suggested correct schema activation but without retention of a particular fact.

In this example again, schemas are shown to function as heuristics for eliciting information about past experience. However, Findahl and Höijer showed how a process as straightforward as retelling information from a newscast viewed a few minutes before can easily become biased and corrupted by prior experiences. Acknowledging the fundamental impacts of established schemas on information retention and recall is essential. As important is acknowledging the two-way street of schema formation and use, and seeing the potential biases that can be developed when taking in new information.

**Media effects in schema formation**

Schemas are vital for determining what an audience takes from a text, be it in written form or in other aural or visual formats such as radio or television. This paper focuses how a person’s political schemas impact comprehension of political texts, but some acknowledgement of effects of these texts on schema formation are also relevant to

the process. While no one can overtly affect what people think, many tools exist to direct thinking. Media can shape attitudes by giving incomplete or biased presentations of information so that the audience processes certain data more completely. As Entman (1989) has stated, “It may be more realistic to think of the media as contributing to-but not controlling-the structure of publicly-available information that shapes the way people can and do think politically” (p. 366). Schemas form based on the exposure of context-specific information applied to more general mental concepts, but these schemas will become necessarily biased over time if only given certain perspectives.

Much research has shown how framing of questions can dramatically alter responses to an issue. This is particularly salient in a political sphere. Framing functions to prime the readers or interviewees in certain ways which can activate particular schemas useful to the questioner’s ends. Examples demonstrating how framing can generate completely different responses include studies of affirmative action situations (Shen, 2004) and whether an act of violence is seen as patriotic or as terrorism (Dunn, Moore, & Nosek, 2005). At the same time, however, Shen (2004) has pointed out that people are not infinitely susceptible to suggestion because this process is mitigated by existing schemas.

**Understanding political ideology**

Historically, political ideology is usually organized dichotomously between two extremes. These extremes, labeled liberal and conservative, left- and right-wing, or a variety of other terms, oversimplify the range of political beliefs and give an insufficient description of actual human behaviors and preferences. While the most specific salient political issues can vary spatially and temporally (e.g. voting rights for women are not in

the public eye as they were 100 years ago), researchers have found key underlying frameworks to use in identifying general political tendencies in individuals. Researchers have put forth several theories for classifying and predicting political predispositions (for a review, see Jost, Glaser, Kruglanski, & Sulloway, 2003). At the same time, two major constructs have generally been shown to explain related but distinct aspects of political ideology, right-wing authoritarianism (RWA) and social dominance orientation (SDO).

Right-wing authoritarianism represents the spectrum of sociopolitical attitudes based around individual autonomy versus societal control. RWA was first put forth by Altemeyer (1988) as a more reliable improvement on previous models. It includes three factors: authoritarian submission, which is the respect for existing structures, authoritarian aggression, which is the desire for societal controls, and conventionalism, which is a respect for traditional values in society (Duckitt & Sibely, 2010). In addition to being more theoretically and statistically robust than previous measures of authoritarianism, RWA has been shown to predict many components of conservatism including party affiliation, pro-capitalist attitudes, and racial prejudice (Jost et al., 2003).

Social dominance orientation looks at preferences in societal organization in being more egalitarian or more hierarchical (Duckitt & Sibely, 2010). High incidence of SDO reflects a desire to maintain existing hierarchies, generally more beneficial to the wealthy, men, and White people (Pratto, Sidanius, Stallworth, and Malle, 1994). SDO consists of two factors: opposition to equality and the desire for group-based dominance (Jost et al., 2003).

It should be noted that while both scales may predict for the same attitudes in an individual, reasoning for each attitude generally comes from different bases. The two

scales do not correlate highly, only around .20 (Jost et al., 2003), but because they both are predictive of conservatism in general, both contribute to many of the same issues, such as racial prejudice and views about women's rights. At the same time, each is necessary to get a more full understanding of political ideology. For example, Altemeyer (1998) explained that racial prejudice in people with high RWA and low SDO can be explained by coming from a tightly knit, ethnocentric background where increased rights and opportunities for other groups would represent dissolution of the status quo. In contrast, someone with low RWA and high SDO might perceive that this version of the status quo does not exist and that racial prejudice merely reflects wanting more relative power in a highly competitive world.

**Quantifying political ideology**

Political party self-identification is an effective tool in some situations, such as predicting voting, but can be too simplistic in other circumstances, such as in predicting positions on specific issues. Jost (2006) showed that in the last 32 years, about 80 percent of respondents in various surveys who described themselves as liberal or strongly liberal, or conservative or strongly conservative voted for their party's candidate for president. At the same time, two individuals who self-identify as conservatives, one rating highly on a right-wing authoritarianism scale but low on a social dominance orientation scale and the other rating oppositely, could likely have a different position on many specific issues not predicted by party identification.

For testing right-wing authoritarianism, I will use the RWA scale developed by Bob Altemeyer (2006). Altemeyer first developed a version of the scale in 1988, though

it has gone through multiple revisions to reach its current form. It uses 22 items answered on a seven-point Likert scale from strong disagreement to strong agreement.

Pratto, et al. (1994) developed a commonly used scale for testing social dominance orientation. The current version, SDO-6 uses 14 items. Like the Altemeyer scale, this one employs a seven-point Likert scale from strong disagreement to strong agreement.

**Selection of articles**

I looked to news organizations typically touted by pundits on each side of the mainstream political spectrum as having archetypal opposite positions. The iconic conservative news organization mentioned is Fox News Network, with a Pew Research study (2009) finding that 47 percent of the American public see it as "mostly conservative" in its reporting. On the other side of the spectrum of reporting partiality the most common news organization presented as having a liberal bias is often the New York Times. One national public opinion poll in 2007 found that in answer "When the New York Times reports the news, they show a bias that favors..." 40 percent of respondents saw a liberal bias, the largest single group (*Rasmussen Reports*, 2007).

While public perception of bias does not equate with actual bias, this study looks for connections in reading comprehension differences based on political spectrum or party. Another survey finds connections between source of television news and likelihood of voting for a political party. In it, 78 percent of likely voters surveyed who regularly watch Fox News Network said they supported Republican candidates (Thee-Brenan, 2010).

Using Fox News and the New York Times as sources, I found articles pertaining to issues correlated to either RWA or SDO. Not all articles from either source are written with an equivalent ideological voice. Because of this, after selecting and editing for length potential news stories, I sent them to an expert to independently rate them according adherence to the two constructs. The expert used for this step is a doctoral political science student. Articles were sent and rated until I settled on a New York Times article rated lowly from a RWA perspective and a Fox News article rated highly from a SDO perspective.

**Comprehension item creation**

For comprehension items I followed the general conceptual framework put forth by Findahl and Höijer (1985). They suggest creating short response items instead of multiple choice ones. These should yield richer data because the format allows clearer identification of the thought processes leading to different answers. For example, asking about consequences of adjusting automobile fuel standards may lead to conservative partial answers about increased car prices or liberal partial answers about decreased fuel costs.

For this study, the goal was to see connections between an individual's political ideology and schemas, and both what he or she remembers and misremembers when reading. I argue that having schemas congruent with the tone normally presented by a news organization will lead to increased comprehension and that when lapses in comprehension occur, different ideological backgrounds will lead to different distortions of the facts. To illustrate this concept consider an example of wrongdoing by an employee of the government who is a Democrat. When questioned about this wrongdoing,

particularly if an individual is not aware of the specifics of the case, I contend that a conservative will tend to generate a worse description than the facts of what occurred and a liberal will tend to generate a more positive picture of the event.

**Summing up**

The main purpose of this study was to find out if agreement between political ideology of the reader and author of a news article predict reading comprehension. This is of theoretical interest in determining if minor differences in tone and description of various individuals, groups, and concepts are enough to activate different schemas and influence comprehension. Anderson (1984) and Bransford (1984) showed many ways in which schemas shape comprehension, but this new study may delineate a further extension for the functioning of schemas not fully developed in the past. This study may suggest a compounding difficulty in presenting information that challenges the reader's preconceptions because the information's source may be more difficult to comprehend, which could have practical application in many areas. Specific to this paper, people working in political discourse or reporting could better inform their writing to more effectively reach either a more general or specific audience.

Researchers (Bransford and Johnson, 1972; Steffensen, 1979; Findahl and Höijer, 1985; Shen, 2004; Dunn et al., 2005) have demonstrated many instances where schemas demonstrate significant influence on how easily a reader comprehends a text, which content is retained, and how that information can be remembered or misremembered. Research in this area generally has examined single-step connections between information and the reader, e.g., more comprehension of a news story based in the reader's home town. In this paper, I add the hypothesis that less-direct schemas can also

occur in meaningful ways. I argue that smaller stylistic elements such as tone and phrasing also function to bring a noticeable positive difference in comprehension along ideological lines.

Alternately, this hypothesis may lack strength given the large number of factors at play in reading comprehension. With so many different types of schemas being utilized when reading a text, the particular distinction being tested in this paper may be either too precise or completely artificially constructed. This study presupposes enough agreement between the author of an article and some of its readers that it will contribute a meaningful amount to how much information the reader retains. This assumption could give too much credence to political ideology in relation to other active schemas.

The underlying construct that I am looking for in this study is political ideology congruence between a reader and the stance of an author. This construct will be measured in terms of reading comprehension success on a test that is tied to political ideological correspondence to the text's source's perceived ideology. The existence of this schema would be supported by higher reading comprehension scores for participants when reading an article from a source more in line with their political ideologies. Political ideology is operationally defined in this study as a bidimensional construct using scales based on levels of right-wing authoritarianism and social dominance orientation included in a survey given in the study. Participants were ranked relative to each other based on their responses.

The experiment also asked for participants to rate their interest, enjoyment and adjudged value of the news articles. For the purpose of this study, these measures will serve as a way to judge the participants' relative levels of attention employed in the

experiment. Cherry (1953) showed the impact of attending to a single source and the limitation of the human mind in dealing with distracters. Low levels on any of these indices may reflect a lack of attention to the articles caused by boredom, apathy or other distractions, and may lower reading comprehension. Drops in performance can occur by not attending enough during encoding or by not reading comprehension questions closely and answering imprecisely.

Given the constructs in regard to reading comprehension, political ideological identification, and levels of interest, enjoyment, and value, I had three basic hypotheses. First, I hypothesized that the various ideological measurement scores will all correlate significantly. This serves as a basic first step from which later analysis becomes possible. My second and central hypothesis, as mentioned above, was that congruence between the ideological background of the articles and the readers will correlate positively in terms of reading comprehension scores. This means that more conservative participants will score higher on the Health Care quiz and lower on the Fuel Standards quiz, and that more liberal participants will do the opposite. Finally, I hypothesized that interest, enjoyment, and value all correlate with higher reading comprehension scores. Of those measurements, enjoyment and value would seem to reflect more ideological interest, so they should have a higher connection to success.

# Chapter 2

# Methods

## Participants

Participants in the study consisted of undergraduate students enrolled at the University of Nebraska-Lincoln. Participants were recruited from four undergraduate-level educational psychology classes. Potential participants gave their names, email addresses, and possible meeting times on a sign up sheet. I then distributed participants between reserved room times and sent emails informing participants of their assigned participation times. All participants took part in the same experiment. Participation in the project qualified participants for exemption from a required assignment in their respective classes.

## Materials

Materials for the experiment consisted of a consent form (Appendix A), two news articles (Appendices B & C, see Tables 1 & 2), two quizzes (Appendices D & E), and a survey (Appendix F). The articles were abridged versions of news articles taken from the New York Times and Fox News. In the quiz, the first item asked for a brief summary of the article. The next six looked for specific answers concerning details presented in each article. The eighth item in each quiz asked an opinion question which looks for a response based on information presented in the articles. Items 9-11 asked for rating the articles generally in terms of enjoyment, interest, and value respectively. The survey consisted of the items from both the Right-Wing Authoritarianism and Social Dominance Orientation scales combined, as well as items for participants to place themselves on an

Table 1

*Fuel Standards News Article (Adapted from the New York Times)*

---

**Obama to Mandate Rules to Raise Fuel Standards**

WASHINGTON — President Obama has decided to use his executive power to order tougher fuel efficiency standards for cars and trucks, accelerating the fight against climate change without waiting for Congress, administration officials said Thursday.

Mr. Obama plans to announce on Friday that he is ordering the creation of a new national policy that will result in less greenhouse-gas pollution from medium- and heavy-duty trucks for the first time and will further reduce exhaust from cars and light-duty trucks beyond the requirements he has already put in place.

Under rules that were eventually formalized last month, new cars have to meet a combined city and highway fuel economy average of 35.5 miles per gallon by 2016. The administration said the new rules would cut emissions of carbon dioxide and other heat-trapping gases by about 30 percent from 2012 to 2016.

The initiative comes as the spill in the Gulf of Mexico has underscored the problem with dependence on oil, and officials said the president would cite the problem when he discusses his plan. The order allows Mr. Obama to advance his goals even as Senate Democrats have difficulty trying to pass a comprehensive energy bill that he supports.

Medium and heavy trucks represent only 4 percent of all vehicles on American highways but they consume more than 20 percent of on-road transportation fuels, according to the Union of Concerned Scientists, an environmental advocacy organization. Improving the average fuel economy of these trucks by 3.7 miles per gallon would reduce American annual oil consumption by 11 billion gallons in 2030, the group said.

Building cleaner cars costs money but may ultimately save consumers more through lower gasoline bills. The policy already enacted will add about $1,000 to the cost of an average new car by 2016, but save about $3,000 in fuel over the life of the vehicle, according to government officials.

Manufacturers want a single, national standard set over the long term because it is easier to meet than the patchwork quilt of regulations imposed in the past.

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Table 2

*Health Care News Article (Adapted from Fox News)*

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**Holy war over health care law? Obama angers Catholic leaders**

Catholics are fired up over new rules implementing Obama's health care reform law forcing Catholic universities, hospitals, and charities to provide insurance for their employees covering contraception -- even though that violates church teachings.

"When you push people of faith and you tell them the government is going to knock down the wall of separation of church and state and overreach like the Obama administration, you've got a war on your hands," said Bill Donohue, president of the Catholic League.

"Never before has the government forced individuals and organizations to go out into the marketplace and buy a product that violates their conscience," said New York Cardinal-designate Timothy Dolan. "This shouldn't happen in a land where free exercise of religion ranks first in the Bill of Rights."

Pressed on the matter at his daily briefing Tuesday, White House Press Secretary Jay Carney repeated several times the administration believes it struck an "appropriate balance" in crafting the policy.

Even some Catholic Democrats are not buying that claim, however, with liberal columnist E.J. Dionne ripping the policy in a Washington Post column. Dionne charged Monday that the president "utterly botched" the issue and "threw his progressive Catholic allies under the bus."

Catholic leaders have also noted that Catholic hospitals can only invoke the "conscience clause" -- and get an exemption on the new rules -- if they turn away patients of other faiths, something that is also anathema to the church.

"That means we can't say what we've been saying for 200 years, 'Are you hungry?'" retired Cardinal Theodore McCarrick said in an interview Tuesday. "We have to say, 'Are you Catholic?' We don't do that."

Catholic voters played a pivotal role in Obama election in 2008 and could be important again in November. Catholics made up 27 percent of the electorate three years ago, which translates into an estimated 35 million voters.

Obama won 54 percent of the Catholic vote in 2008, a nine-point edge over Arizona Republican Sen. John McCain, but White House officials are downplaying any current political fallout.

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ideological scale ranging from strongly liberal to strongly conservative and a political party scale ranging from strong democrat to strong conservative.

**Procedure**

Participants received a packet containing, in order, one of the articles (with article order reversed for half of the participants, randomly assigned), and the corresponding quiz, followed by the remaining article, the corresponding quiz, and the political ideology survey. Participants were instructed to read and answer the items on each page in turn. Each participant was instructed to go through the packet at his or her own pace but not be return to previous pages after moving forward. After going through the packet as his or her own pace, each participant handed in the materials and signed in on a sheet in order to receive credit for participation.

**Measures**

Quiz responses for items 1-7 were scored on an 0-4 scale according to the following rubric (see Table 3), which was developed based on guidelines for rubric creation written for the Field-tested Learning Assessment Guide, an assessment group based at the University of Wisconsin-Madison (Ebert-May, 2001). The rubric was designed to rate readers' knowledge of each item with a preference for information found directly in the article.

Item 8 was analyzed qualitatively for common congruence of political ideology and positive or negative reactions to the articles. Items 9-11 were rated on a seven-point Likert scale.

Table 3

*Scoring Rubric for Rating Readers' Knowledge of Quiz Items*

| Score | Criteria |
|---|---|
| 0 | No response or does not apply information from the article |
| 1 | Misapplies information from the article |
| 2 | Demonstrates only partial connection between relevant information and the question and/or relies heavily on information not found in the article |
| 3 | Gives an adequate response but may leave out some relevant information or rely on information not found in the article |
| 4 | Gives a detailed and complete response based on information presented in the article |

Survey items generated four results. RWA items scored on a seven-point Likert scale generated a score ranging from 22 (most liberal) to 156 (most conservative). SDO items produced a similar range of scores (from 16 to 112) and the self-report scales for ideology and party identification generated scores from 1 to 7. Participants' scores in these areas were compared with scores on quiz items in testing for possible connections between the two.

**Data Analysis**

For analysis in this study, I first looked at correlations between the various measures. This consisted of three main sections. First, I examined correlations between the various ideological measures. This served to see if this study confirms existing correlations seen in previous studies relating the SDO and RWA scales to each other and to self-report measures. Second, I looked at relationships between reading comprehension scores and the ideological measures. This made up the core of the experiment and focused on the effects ideology might have on reading. Finally, I looked at relationships between comprehension scores and measures of interest, enjoyment and value. This

analysis served as another mini-experiment in the study to see if these measures relate logically to the larger theoretical framework.

Correlation was used instead of regression because of the nature of the measures used. Regression functions best when all independent variables have some level of predictable effect on the dependent variable. In this case, there is a theoretical framework for predicting effects of ideology on reading comprehension, but there have been no previous studies looking at the particular relationships studied in this paper. Correlations function well to see which connections are relevant for discussion.

In looking at relationships between the various ideological identification measures, regression could be used; such an analysis could show how much of, for example, party self-identification, is attributable to the two survey measures. However, the main focus for analysis in the data is on relationships between quiz scores and the other measurement tools. Looking at correlations between the ideological identification measures thus was judged sufficient for confirming their utility as established in earlier studies.

# Chapter 3

# Results

## Preliminary Analyses

Before analyzing the data in regard to my hypotheses, I ran analyses to help confirm the strength of the data. I did a brief analysis of rater consistency in order to see if the results would be replicable in other contexts. I also looked at the reliability of the various quiz items in order to see if success on any of the items predicted success in general, or if some items were problematic due to poor question design or other unanticipated factors.

To test the adequacy of the scoring rubric for the quiz items, I compared a subset of my scores with the scores of another rater. I trained a fellow student with the rubric I created, going over the scores in general terms and giving some examples of applications specific to the items in the quizzes. The student then scored ten participants' quizzes which I had previously also scored. Looking at measures of correspondence between raters, I found Cronbach's alpha to see a simple correlation, as well as an intraclass correlation to see if the quizzes' absolute scores related as well as relative scores. For the ICC, I used a two-way mixed-effects model because I looked at the reliability between two raters not taken from a larger population that rated all of the applicable data. For the data from the two raters, $\alpha$=.937 and the average measures between the two raters in the intraclass correlation was .935, indicating a high level of agreement in judgments made independently based on the scoring rubric.

I then ran a reliability analysis for the graded quiz items to see if any of the items did not fit well with the others as predictive measures. The items from the individual

quizzes had Cronbach's alpha values of .598 for the Fuel Standards questions and .676 for the Health Care questions. Both combined has an alpha value of .782. Looking at item-total correlations and alpha-if-deleted values, only one item, Health Care question 7, had a noticeably lower correlation value than the others. At the same time, removing the item would only increase the alpha value for the scale by .002 so I chose not to remove it from my analysis. Overall, this suggests that the items were at least moderately well constructed, and that a larger item set, if made similarly, almost certainly would increase the power of the instrument to judge reading comprehension levels.

As discussed above, I looked at a series of correlations in order to see which, if any of the results aligned in hypothesized manners. Analysis focused on three main areas, ideological identification measures, quiz scores and ideology, and quiz score relationship to interest, enjoyment, and value.

Item 8 on each of the quizzes asked an opinion question about the content in hopes of seeing trends relating ideology to response. A combination of brevity of responses (numerous answers consisting of only "Yes" or "No") and wildly varied response foci made finding meaningful results for this question difficult. Consequently, it will be excluded from further discussion.

**Ideological Identification Measurements**

I analyzed the relationships between the various ideological identification measurements used in the experiment. Previous studies (Jost et al., 2003) already showed significant correlations between all of the ideological measures used in this study. With clearly established measures, I looked for confirmation that my data reflected similar relationships so that I would have a stable metric on which to base later analysis. As

predicted, all of the ideological measures correlated significantly at varying levels as can be seen in Table 4.

Table 4

*Ideological Identification Correlations*

| | Ideology | Party | SDO Total | RWA Total | Survey Total |
|---|---|---|---|---|---|
| Ideology | - | | | | |
| Party | .835** | - | | | |
| SDO Total | .435** | .372** | - | | |
| RWA Total | .740** | .641** | .463** | - | |
| Survey Total | .737** | .628** | .739** | .939** | - |

**. Correlation is significant at the 0.01 level (2-tailed).

**Quiz Score and Survey Correlations**

I next looked at possible correlations between reading comprehension quiz scores and ideological scores based on the RWA and SDO surveys. I hypothesized that the Fuel Standards scores would correlate negatively with the survey scores because of the article's liberal ideological voice, and that the Health Care scores would correlate positively with the survey scores because of the article's conservative voice. This hypothesis was not reflected in the data, in which the only significant correlations (see Table 5) with either of the quiz scores were negative correlations between Health Care scores and the survey totals.

Table 5

*Quiz Score and Survey Correlations*

| | FS Score | HC Score | SDO Total | RWA Total | Survey Total |
|---|---|---|---|---|---|
| Fuel Standards Total Score | - | | | | |
| Health Care Total Score | .650** | - | | | |
| SDO Score | -.137 | -.215* | - | | |
| RWA Score | -.046 | -.191 | .463** | - | |
| Survey Total | -.099 | -.248* | .739** | .939** | - |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

**Interest, Enjoyment, and Value**

Finally, I looked at participants' reactions to the articles and how these reactions related to comprehension scores. On a basic theoretical level, the measures were all seen to serve as approximations of attention, and increased attention would predict increased comprehension. For the Fuel Standards scores, quiz results showed significant positive correlations (see Table 6) with enjoyment and interest. With the Health Care scores (see Table 7), quiz results correlated significantly positive with interest.

Table 6

*Fuel Standards: Comprehension Score and Participant Reaction Correlations*

| | FS Score | Enjoyment | Interest | Value |
|---|---|---|---|---|
| Fuel Standards Total Score | - | | | |
| Enjoyment | .331** | - | | |
| Interest | .329** | .863** | - | |
| Value | .055 | .577** | .539** | - |

**. Correlation is significant at the 0.01 level (2-tailed).

Table 7

*Health Care: Comprehension Score and Participant Reaction Correlations*

| | HC Score | Enjoyment | Interest | Value |
|---|---|---|---|---|
| Health Care Total Score | - | | | |
| Enjoyment | .035 | - | | |
| Interest | .296** | .513** | - | |
| Value | -.057 | .440** | .355** | - |

**. Correlation is significant at the 0.01 level (2-tailed).

In summary, results showed a functional quantification system for political ideology and for scoring comprehension quizzes, but also results also showed comprehension relationships contrary to earlier hypotheses. The reading comprehension questions showed regular internal consistency to no major outliers. Each of the ideological measures correlated well in ways similar to previous studies. At the same time, while ideological correspondence was predicted to increase reading comprehension, the only significant correlation in that area showed a negative relationship between conservative ideology and success on the conservative news article. Additionally, while enjoyment, interest, and value were all hypothesized to be predictors of increased reading comprehension, only some of these correlations occurred, and in different levels for the two articles. Possible explanations of these results require further clarification.

# Chapter 4

## Discussion

In this chapter I will evaluate in what ways the results reflected my initial hypotheses and what further implications these results suggest. Briefly, my hypotheses focused on connections between ideological identification measurements, ideology and reading comprehension, and interest, enjoyment, and value and reading comprehension. After addressing each hypothesis individually, I will bring together these sections with a more general analysis and conclude with possible applications for the classroom and areas for further study.

### Ideological Identification Measurements

Before considering results of the comprehension component of the study, I will first discuss the relationships between the ideological measures and their various connections. As predicted, all of the measurements correlated with each other at significant levels, but I will look at some of the relative differences in more detail.

Social dominance orientation and right-wing authoritarianism scales correlated moderately well ($r$ = .435). Previous studies have also found the measures to correlate, but to a lesser extent (e.g., $r$ = .200 in Jost et al., 2003). This holds consistent with theory and previous findings that the two scales touch on separate but overlapping aspects of conservative ideology.

Party self-identification correlated at a lower level than ideology self-identification in large part because of differences in language for the different types of identification. The two self-identification measures correlated well together (.835), with most participants answering similarly or identically on the two scales when responses

were converted to numerical values. A significant exception to this relationship, however, came from individuals selecting “Independent” when not identifying with either of the major parties. This gave the middle value (4 on a scale of 1 to 7) for the individual’s party, regardless of beliefs and subsequently impacted correlations.

While social dominance orientation does not correlate as highly with participants’ self-identification as right-wing authoritarianism, I feel that a combined total gives a more complete picture in identifying conservatism. When combined, the scales correlated nearly equally compared to only the RWA scale. In real-world applications of the concepts reflected by the two scales, both arguably combine to give a more complete understanding of specific issues, and additionally, high levels on either scale suggest the presence of conservative beliefs (Altemeyer, 2006; Pratto et al., 1994). Every issue cannot be neatly explained in terms of only preferences of higher levels of social dominance or authoritarianism. Some are served best by looking at one or the other model or by both together. Consequently, I will make mention of statistics related to each measure separately, but I will focus more on the combined scores in later discussion.

**Quiz Score and Survey Correlations**

Quiz scores on the Health Care article correlated significantly with the SDO scale ($r$=-.215) and the combined SDO and RWA scale ($r$=-.248). While this result was contrary to my hypothesis in this area, in looking at the types of results given by participants I find that the theory was better applied by the data than by the researcher.

My hypotheses focused on ideological schemas as providing readers a tool for remembering the facts of a given article. However, the present results suggest that, while these schemas may contribute to comprehension in a sense, this understanding may be

corrupted. Conservative participants earned lower scores (see Table 5) because of an increased tendency to focus on reactions to the facts of the article rather than the facts themselves. One example of this occurred in response to items 2 and 3 in the Health Care questions. These items asked about the new rules the article mentioned as angering some Catholics, referring to requirements under new health care law that employers provide health care insurance that covers contraception. In spite of the wording “new rules” many participants instead mentioned the First Amendment or the separation of church and state as the offending comments, often quoting spokespeople from conservative sources referenced in the article. In remembering what they had read, these participants tended to focus on the rhetoric related to the issue and less on the careful reading of the applicable information that the question required.

The Fuel Standards article quiz scores did not correlate significantly with the survey measures, but this lack of support most likely ties into a larger understanding of the effects of ideology on news comprehension. While the Fuel Standards article was written from a more liberal perspective, in my judgment its presentation and language were not crafted in a way that would trigger political schemas as strongly. The article gave more space and emphasis to the benefits from changing policy on car fuel efficiencies, but the arguments came more based on statements of projected benefits and less on opinion-based, individual reactions to events. When information is not accompanied by strong rhetoric, ideological schemas are likely to activate less and potential effects are mitigated (Duckitt, & Sibley, 2010; Dunn et al., 2005).

As another implication of the quiz score findings, the results may support the reasoning that a combined SDO and RWA scale better represents a measure of

conservatism than either score individually. Both SDO and RWA were negatively correlated with quiz scores, but the combination of the two correlated more highly than either individually. This suggests that registering higher on both scales taps a deeper connection to the effects attributable to conservative ideology. As Jost et al. stated, "[o]ne can therefore infer that the most inexorable right-wingers are those who are motivated simultaneously by fear [RWA] and aggression [SDO]" (2003, p. 350).

**Interest, Enjoyment, and Value**

In this study, interest served as the most directly related of the three measures in judging a general level of attention. Hidi (2001) described the interaction of interest and attention noting that interest increases attention during some phases of reading, but overall attention increases are mitigated by other factors, such as how well interesting segments fit with other parts of a passage. Interest correlated with comprehension scores for both articles, regardless of ideology, while neither of the other two measures did the same. Fitting with the findings of Hidi that interest is not a direct proxy for attention, interest only correlated somewhat with comprehension ($r$=.329 for Fuel Standards and $r$=.296 for Health Care).The strength of interest as a level of attention assessment is that it is the most value-free of the three measures. In general, participants rating themselves as highly interested merely said that they were paying attention to at least some part of the article, not that they were for or against any of the positions presented.

In contrast, as reflected in the results, enjoyment seemed to reflect more of an intersection between general interest and ideology. A reading passage may be compelling, but if it draws conclusions perceived as conflicting with the reader's beliefs, he or she will find the content less enjoyable. As discussed above, for ideologically conservative

participants, reading an article from a strongly-partisan conservative viewpoint interfered with comprehension of some details. Individuals presumably focused on ideologically-charged statements over facts presented in the article. In comparing Health Care quiz results with enjoyment, similar results occurred. Enjoyment did not seem to mean simply an increase in attention, but instead also reflected existing ideological schemas and the corresponding comprehension issues.

An examination of the Fuel Standards article (see Table 1) similarly reinforces the concept of enjoyment as a combination of interest and ideology. In the case of the Fuel Standards questions, having strongly liberal beliefs did not cause interference in comprehension. I have argued above that this is because of the less volatile language used in that article. The Fuel Standards passage contained little impassioned rhetoric so readers with similar positions did not have to contend with the distractions present in the text as compared to conservative readers of the Health Care article. Consequently, when the ideological component of enjoyment loses influence on comprehension, enjoyment should function similarly to interest. This is the case in the data; enjoyment and interest for the Fuel Standards data both correlate significantly ($r$=.331 and $r$=.329 respectively), and correlate highly with each other ($r$=.863). This compares to the Health Care data where quiz scores correlate to interest significantly ($r$=.296), but not to enjoyment ($r$=.035), and interest and enjoyment do not correlate as highly as for the Fuel Standards items ($r$=.513).

Value did not correlate well with either of the quiz scores (see Tables 6 & 7) possibly because it may best serve as a gauge of interest in the subject of the article, but not the article itself. For example, for the Fuel Standards questions, an individual might

have been interested in the topic, but have drawn different conclusions than the main thrust of the article, based on existing ideological schemas. This could affect that individual's comprehension in one way while a person with a different ideology but similar interest in the topic would be affected in a different way. In essence, participants of either ideology could be quite interested in a particular issue, but conflicting effects of their existing schemas would cancel out any overall correlations.

**Conclusions**

Based on the findings of this study, in most cases having a well-informed and strongly ideological populace is at cross-purposes. If one's goal in reading or watching the news is entertainment or confirmation of existing beliefs, the current state of cable news networks and similar news sources will function well. However, if one's goal from news consumption is to become more well-informed about the events described, a different approach is necessary. The simplest solution would be to seek out news from neutral sources. At best this is an imperfect process, and at worst the reader's naïveté will compound negative effects by more strongly believing the neutrality of a biased source. All news writing includes some sort of bias, if not explicitly in presenting facts in a misleading way, then more subtly in giving more emphasis to certain sides of the story. Because a truly neutral presentation of facts is impossible, or at least very difficult, the impetus for being properly informed placed upon the reader, not the source.

A baseline goal for all reading is comprehension, but in much reading, an awareness of context is equally vital. As an extreme example, this necessity could be seen in a reading of Adolph Hitler's *Mein Kampf (*1943). Perfect comprehension with zero context could lead to internalization of potentially problematic ideas. Luckily, most

readers of *Mein Kampf* bring their own schemas to the process in a way that mitigates the effects of the book's ideology on the reader. However, if a person already possesses strong views in line with the book before its reading, the piece's unfounded assertions could be taken as fact and further reinforce the reader's misconceptions.

Unfortunately, people from all walks of life, not merely extremist ideologues, possess potentially problematic ideological schemas that impact their understandings of the world. This paper demonstrated some similar effects in a more moderate population reading less politically inflammatory passages. Because the results of this study suggest meaningful implications from seemingly innocuous, daily situations, more emphasis must be placed on individuals more actively questioning the data they receive while consuming media. If this paper adds meaningful information to understanding of political ideological schemas, it should be, first, that political ideology is a relevant metric for understanding differences in individual understandings of the world, and second, that the intersection of strong political ideology in the reader and the writer is a distortion of fact, as shown by the negative correlation between reading comprehension of more conservative readers and a strongly ideologically conservative article. This is caused by an increased focus on commentary of events instead of events themselves.

**Classroom Implications**

Schemas have been an established concept in psychology at least as far back as Bartlett (1932), but their relative importance has not kept pace with their dissemination into other fields. Even in educational psychology, the American emphasis on behaviorism pushed aside schemas until their reemergence during the cognitive revolution in the late 1950s. While much of schema theory is now considered 'settled' in psychological circles,

even when individuals in others fields employ schemas, they often lack the terminology and deeper understanding of the processes at work.

Findings of this experiment further emphasize the need for media consumers to take in information with an awareness of perspectives, both of the sources and the readers themselves. Concerted efforts should be made to introduce and emphasize schemas as an important tool for understanding the world, at least as early as in high schools, if not before. Three subject areas lend themselves to early schema instruction, specifically psychology, English, and history, though these teachings should be taught in a way that may be generalized to all areas.

Psychology embodies the most obvious starting point for schema instruction, but efforts in this setting much receive more emphasis. The high school that I attended had an excellent psychology teacher, yet even in that course schemas did not receive much attention. Schemas in most part were seen as an offshoot of Piaget's developmental stages. In relegating their role to the work of a researcher dead before the students were born, current applications of the theory seemed less important. Building a foundation in Piaget and showing current applications would make the lessons more applicable to students' lives. An emphasis on schema awareness would have the many implications mentioned above, and additionally may help to sort the disjointed theories presented in introductory psychological courses into more useable forms.

While psychology is the ideal setting for teaching schema theory, psychology courses have limited reach, with such courses unavailable in most high schools and available only as electives when they are offered. In contrast, English courses reach all students and have the added benefit of already heavily focusing on schema-related

concepts. In poetry analysis, for instance, and in much classroom reading in general, students are asked about what particular words or phrases evoke in their minds. In this action, the teachers are tapping directly into the students' schemas. A short teaching segment that names and explains what is going on in the class would give a useful primer on the concept. Later, regular mention of schemas at similar times throughout instruction could give a sense of larger application of the concepts.

History classes similarly offer the potential for schema theory instruction in line with the findings in this study. A perfect time for schema-based instruction occurs when looking at primary and secondary documents. Primary documents come directly from a discussed time period, e.g., a photo from a battle site or a child's journal about events in his or her life). Secondary documents interpret primary sources, e.g., a book written about a historical event. Already, lessons in the differences between these sources include strengths and weakness of information from each type of source and how to compensate in interpreting events. Specifically, teachers must show how a historian's presentation of events has an inherent bias, and that this bias both comes from the writer's schemas and is processed by the reader's different schemas. Awareness of schemas must then be paired with tools for mitigating these schemas effects. Again, the instructor must make the additional step of trying to demonstrate further applications of the concepts in the real world. This could encourage thinking about sources and perspectives in historical and current news sources, and could help to foster development of savvy information consumers.

**Further Research**

Much more could be done in this area to further clarify and expand upon the effects of political ideological schemas. Some connections were found suggesting that statements congruent with one's ideology can distract from central information in a news article, but more research is necessary to support these findings. More could be done to further hone the reading comprehension measurement mechanisms to strengthen the test items. Also, beyond crafting a tighter instrument, the replication of the study with larger populations and in different settings could add to the applicability of the findings.

This paper focused on a replication of a reading comprehension task. The findings from the two articles differed, but these differences were explained based on a combination of the content of each article and participants' quiz responses. This reasoning was based on the information available, but further study could support or challenge that reasoning. Increased emphasis on matching levels of rhetoric, either through a more thorough search of news sources or even composing articles specifically for a study, would help to test whether or not analysis in this study was well-founded.

The interplay among enjoyment, interest, and reading comprehension could also use further research. Discrepancies in the correlationships between enjoyment and interest to reading comprehension in this study suggested differing levels of ideological charge to the two articles. Further replications of this experiment may show consistent relationships between this variable and the bias of a news article. Specifically, the goal would be to see if interest remains a strong correlate with reading comprehension while enjoyment varies, correlating strongly with reading comprehension for ideologically neutral articles, but correlating less for more ideologically extreme articles.

References

Altemeyer, B. (1988). *Enemies of freedom: understanding right-wing authoritarianism*. San Francisco: Jossey-Bass Publishers.

Altemeyer, B. (2006). *The authoritarians*. Winnipeg: B. Altemeyer.

Anderson, R. C. (1984). Role of the reader's schema in comprehension, learning, and memory. *Learning to read in American schools: Basal readers and content texts* (pp. 243-258). Hilsdale, NJ: Lawrence Erlbaum Associates, Inc..

Bartlett, F. C. (1932). *Remembering; a study in experimental and social psychology,*. New York: Macmillan Co..

Biela, A., Lingoes, J. C., Lin, Y., & McKeachie, W. J. (1989). Cognitive schemas in social perception. *Multivariate Behavioral Research*, *24*(2), 195-208.

Bransford, J. D., & Johnson, M. K. (1972). Contextual prerequisites for understanding: some investigations of comprehension and recall. *Journal of Verbal Learning and Verbal Behavior*, *11*(6), 717-726.

Bransford, J. D. (1984). Schema activation and schema acquisition: comments on Richard C. Anderson's remarks. *Learning to read in American schools: Basal readers and content texts* (pp. 259-272). Hilsdale, NJ: Lawrence Erlbaum Associates, Inc..

Cherry, E. C. (1953). Some experiments on the recognition of speech, with one and with two ears. *The Journal of the Acoustical Society of America*, *25*(5), 975-979.

Duckitt, J., & Sibley, C. G. (2010). Personality, ideology, prejudice, and politics: a dual-process motivational model. *Journal of Personality*, *78*(6), 1861-1893.

Dunn, E. W., Moore, M., & Nosek, B. A. (2005). The war of the words: how linguistic

differences in reporting shape perceptions of terrorism. *Analyses of Social Issues and Public Policy*, *5*(1), 67-86.

Ebert-May, D. (2001). Classroom assessment techniques scoring rubrics. *Field-tested Learning Assessment Guide (FLAG)*. Retrieved May 24, 2012, from http://www.flaguide.org/cat/rubrics/rubrics1.php

Entman, R. M. (1989). How the media affect what people think: an information processing approach. *Journal of Politics*, *51*(2), 347-370.

Findahl, O., & Höijer, B. (1985). Some characteristics of news memory and comprehension. *Journal of Broadcasting & Electronic Media*, *29*(4), 379-396.

Hidi, S. (2001). Interest, reading, and learning: theoretical and practical considerations. Educational Psychology Review, 13(3), 191-209.

Hitler, A., & Manheim, R. (1943). *Mein Kampf*. Boston: Houghton Mifflin company.

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, *129*(3), 339-375.

Jost, J. T. (2006). The end of the end of ideology. *American Psychologist*, *61*(7), 651-670.

Kintsch, W. (1988). The role of knowledge in discourse comprehension: a construction-integration model. *Psychological Review*, *95*(2), 163-182.

Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: a personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, *67*(4), 741-763.

Richgels, D. J. (1982). Schema theory, linguistic theory, and representations of reading comprehension. *Journal of Educational Research*, *76*(1), 54-62.

Shen, F. (2004). Effects of news frames and schemas on individuals' issue interpretations

and attitudes. *Journalism and Mass Communication Quarterly*, *81*(2), 400-416.

Steffensen, M. S., Joag-Dev, C., & Anderson, R. C. (1979). A cross-cultural perspective on reading comprehension. *Reading Research Quarterly*, *15*(1), 10-29.

Thee-Brenan, M. (2010, September 29). From poll, a snapshot of Fox News viewers. *New York Times*. Retrieved November 12, 2011, from http://thecaucus.blogs.nytimes.com/2010/09/29/from-poll-a-snapshot-of-fox-news-viewers/

Appendix A

**Title of Research:**

The Elephant (Or Donkey) In the Room: Political Ideology and News Comprehension

**Purpose of Research:**

This study will investigate connections between reading comprehension and political ideology. You must be 19 years of age or older and enrolled in a class in the Educational Psychology department in order to participate in this research.

**Procedures:**

Participation in this study will require approximately 30 minutes. You will be asked to read two passages and answer questions related to those readings, as well as fill out a short survey. Participation will take place in a classroom in Teacher's College.

**Risks and/or Discomforts:**

There are no known risks or discomforts associated with this research.

**Benefits:**

The results of this study will contribute to Educational Psychology research. There are no direct benefits for participation.

**Confidentiality:**

Your responses to this survey will be kept anonymous. Your name will be collected only as proof of participation for your instructors. No information will be kept connecting you with your responses.

**Compensation:**

Participation in this study qualifies as an alternate activity in place of one research journal article review required for this class.

**Opportunity to Ask Questions:**

You may ask any questions concerning this research at anytime by contacting Matt Mehrhoff at (402) 217-1206 or mattmehrhoff@gmail.com. You may also contact Roger Bruning at (402) 472-2225 or rbruning@unl.edu. If you would like to speak to someone else, please call the Research Compliance Services Office at 402-472-6926 or irb@unl.edu.

***Freedom to Withdraw:***

Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researchers or the University of Nebraska-Lincoln, or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

***Consent, Right to Receive a Copy:***

You are voluntarily making a decision whether or not to participate in this research study.

Your signature certifies that you have decided to participate having read and understood

the information presented. You will be given a copy of this consent form to keep.

***Signature of Participant:***

_____

_____

*Signature of Research Participant* *Date*

***Name and Phone number of investigator(s)***

*Matt Mehrhoff, (402) 217-1206, mattmehrhoff@gmail.com*
*Roger Bruning, (402) 472-2225, rbruning@unl.edu*

Appendix B

**Obama to Mandate Rules to Raise Fuel Standards**

WASHINGTON — President Obama has decided to use his executive power to order tougher fuel efficiency standards for cars and trucks, accelerating the fight against climate change without waiting for Congress, administration officials said Thursday.

Mr. Obama plans to announce on Friday that he is ordering the creation of a new national policy that will result in less greenhouse-gas pollution from medium- and heavy-duty trucks for the first time and will further reduce exhaust from cars and light-duty trucks beyond the requirements he has already put in place.

Under rules that were eventually formalized last month, new cars have to meet a combined city and highway fuel economy average of 35.5 miles per gallon by 2016. The administration said the new rules would cut emissions of carbon dioxide and other heat-trapping gases by about 30 percent from 2012 to 2016.

The initiative comes as the spill in the Gulf of Mexico has underscored the problem with dependence on oil, and officials said the president would cite the problem when he discusses his plan. The order allows Mr. Obama to advance his goals even as Senate Democrats have difficulty trying to pass a comprehensive energy bill that he supports.

Medium and heavy trucks represent only 4 percent of all vehicles on American highways but they consume more than 20 percent of on-road transportation fuels, according to the Union of Concerned Scientists, an environmental advocacy organization. Improving the average fuel economy of these trucks by 3.7 miles per gallon would reduce American annual oil consumption by 11 billion gallons in 2030, the group said.

Building cleaner cars costs money but may ultimately save consumers more through lower gasoline bills. The policy already enacted will add about $1,000 to the cost of an average new car by 2016, but save about $3,000 in fuel over the life of the vehicle, according to government officials.

Manufacturers want a single, national standard set over the long term because it is easier to meet than the patchwork quilt of regulations imposed in the past.

Appendix C

**Holy war over health care law? Obama angers Catholic leaders**

Catholics are fired up over new rules implementing Obama's health care reform law forcing Catholic universities, hospitals, and charities to provide insurance for their employees covering contraception -- even though that violates church teachings.

"When you push people of faith and you tell them the government is going to knock down the wall of separation of church and state and overreach like the Obama administration, you've got a war on your hands," said Bill Donohue, president of the Catholic League.

"Never before has the government forced individuals and organizations to go out into the marketplace and buy a product that violates their conscience," said New York Cardinal-designate Timothy Dolan. "This shouldn't happen in a land where free exercise of religion ranks first in the Bill of Rights."

Pressed on the matter at his daily briefing Tuesday, White House Press Secretary Jay Carney repeated several times the administration believes it struck an "appropriate balance" in crafting the policy.

Even some Catholic Democrats are not buying that claim, however, with liberal columnist E.J. Dionne ripping the policy in a Washington Post column. Dionne charged Monday that the president "utterly botched" the issue and "threw his progressive Catholic allies under the bus."

Catholic leaders have also noted that Catholic hospitals can only invoke the "conscience clause" -- and get an exemption on the new rules -- if they turn away patients of other faiths, something that is also anathema to the church.

"That means we can't say what we've been saying for 200 years, 'Are you hungry?'" retired Cardinal Theodore McCarrick said in an interview Tuesday. "We have to say, 'Are you Catholic?' We don't do that."

Catholic voters played a pivotal role in Obama election in 2008 and could be important again in November. Catholics made up 27 percent of the electorate three years ago, which translates into an estimated 35 million voters.

Obama won 54 percent of the Catholic vote in 2008, a nine-point edge over Arizona Republican Sen. John McCain, but White House officials are downplaying any current political fallout.

Appendix D

1. Give a short summary of key points in the article.

2. What action is President Obama taking concerning cars and trucks?

3. According to the Union of Concerned Scientists, which types of vehicles use an unbalanced amount of fuel compared to other vehicles?

4. What are the consequences of too much fuel use mentioned in the article?

5. What type of bill are Senate Democrats having trouble passing in this article?

6. As mentioned in the article, why might manufacturers want a single, national fuel-efficiency standard?

7. In what way will new policies affect the costs of a new car?

8. Do you think the benefits of the new regulations mentioned in the article outweigh their costs?

9. How would you rate your enjoyment of the article? (circle one)

| | | | | | | |
|---|---|---|---|---|---|---|
| Strongly Dislike | Moderately Dislike | Slightly Dislike | Neutral | Slightly Like | Moderately Like | Strongly Like |

10. How would you rate your interest in the article? (circle one)

| | | | | | | |
|---|---|---|---|---|---|---|
| Complete Disinterest | Moderate Disinterest | Slight Disinterest | Neutral | Slight Interest | Moderately Interest | Strong Interest |

11. How would you rate the value of the article? (circle one)

| | | | | | | |
|---|---|---|---|---|---|---|
| Very Low Value | Moderately Low Value | Slightly Low Value | Neutral | Slightly High Value | Moderately High Value | Very High Value |

Appendix E

1. Give a short summary of key points in the article.

2. What new rules mentioned in the article have angered some Catholic leaders?

3. What larger set of laws do these rules come from?

4. What requirements are mentioned in the article for getting an exemption from the rules?

5. What was the White House's response to issues raised in the article?

6. What might be some of the political consequences of the new rules?

7. Which presidential candidate had the support of more Catholic voters in 2008?

8. Are the new rules mentioned in the article justified?

9. How would you rate your enjoyment of the article? (circle one)

| | | | | | | |
|---|---|---|---|---|---|---|
| Strongly Dislike | Moderately Dislike | Slightly Dislike | Neutral | Slightly Like | Moderately Like | Strongly Like |

10. How would you rate your interest in the article? (circle one)

| | | | | | | |
|---|---|---|---|---|---|---|
| Complete Disinterest | Moderate Disinterest | Slight Disinterest | Neutral | Slight Interest | Moderately Interest | Strong Interest |

11. How would you rate the value of the article? (circle one)

| | | | | | | |
|---|---|---|---|---|---|---|
| Very Low Value | Moderately Low Value | Slightly Low Value | Neutral | Slightly High Value | Moderately High Value | Very High Value |

Appendix F

Please rate items 1-38 according to the scale below:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| Strongly Disagree | Moderately Disagree | Slightly Disagree | Neither Agree nor Disagree | Slightly Agree | Moderately Agree | Strongly Agree |

1. The established authorities generally turn out to be right about things, while the radicals and protestors are usually just “loud mouths” showing off their ignorance.

   1 2 3 4 5 6 7

2. Women should have to promise to obey their husbands when they get married.

   1 2 3 4 5 6 7

3. Some groups of people are simply inferior to other groups.

   1 2 3 4 5 6 7

4. Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us.

   1 2 3 4 5 6 7

5. In getting what you want, it is sometimes necessary to use force against other groups.

   1 2 3 4 5 6 7

6. Gays and lesbians are just as healthy and moral as anybody else.

   1 2 3 4 5 6 7

7. It's OK if some groups have more of a chance in life than others.

   1 2 3 4 5 6 7

8. It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people's minds

1 2 3 4 5 6 7

9. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly.

1 2 3 4 5 6 7

10. To get ahead in life, it is sometimes necessary to step on other groups.

1 2 3 4 5 6 7

11. The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.

1 2 3 4 5 6 7

12. If certain groups stayed in their place, we would have fewer problems.

1 2 3 4 5 6 7

13. There is absolutely nothing wrong with nudist camps.

1 2 3 4 5 6 7

14. Our country needs free thinkers who have the courage to defy traditional ways, even if this upsets many people.

1 2 3 4 5 6 7

15. It's probably a good thing that certain groups are at the top and other groups are at the bottom.

1 2 3 4 5 6 7

16. Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.

1 2 3 4 5 6 7

17. Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.

1 2 3 4 5 6 7

18. Inferior groups should stay in their place.

1 2 3 4 5 6 7

19. The “old-fashioned ways” and the “old-fashioned values” still show the best way to live.

1 2 3 4 5 6 7

20. Sometimes other groups must be kept in their place.

1 2 3 4 5 6 7

21. You have to admire those who challenged the law and the majority’s view by protesting for women’s abortion rights, for animal rights, or to abolish school prayer.

1 2 3 4 5 6 7

22. It would be good if groups could be equal.

1 2 3 4 5 6 7

23. What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path.

1 2 3 4 5 6 7

24. Group equality should be our ideal.

1 2 3 4 5 6 7

25. Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the “normal way things are supposed to be done.”

1 2 3 4 5 6 7

26. God's laws about abortion, pornography and marriage must be strictly followed before it is too late, and those who break them must be strongly punished.

1 2 3 4 5 6 7

27. All groups should be given an equal chance in life.

1 2 3 4 5 6 7

28. There are many radical, immoral people in our country today, who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.

1 2 3 4 5 6 7

29. We should do what we can to equalize conditions for different groups.

1 2 3 4 5 6 7

30. A "woman's place" should be wherever she wants to be. The days when women are submissive to their husbands and social conventions belong strictly in the past.

1 2 3 4 5 6 7

31. There should be increased social equality.

1 2 3 4 5 6 7

32. Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the "rotten apples" who are ruining everything.

1 2 3 4 5 6 7

33. We would have fewer problems if we treated people more equally.

1 2 3 4 5 6 7

34. There is no "ONE right way" to live life; everybody has to create their own way.

1 2 3 4 5 6 7

35. We should strive to make incomes as equal as possible.

1 2 3 4 5 6 7

36. Homosexuals and feminists should be praised for being brave enough to defy "traditional family values.

1 2 3 4 5 6 7

37. No one group should dominate in society.

1 2 3 4 5 6 7

38. This country would work a lot better if certain groups of troublemakers would just shut up and accept their group's traditional place in society.

1 2 3 4 5 6 7

How would you rate yourself on the following scale?

| | | | | | | |
|---|---|---|---|---|---|---|
| Strongly Liberal | Liberal | Somewhat Liberal | Moderate | Somewhat Conservative | Conservative | Strongly Conservative |

With what party below do you most strongly identify?

| | | | | | | |
|---|---|---|---|---|---|---|
| Strong Democrat | Democrat | Independent-Leaning Democrat | Independent | Independent-Leaning Republican | Republican | Strong Republican |

# Appendix G

## Recruitment script

Hi, my name is Matt Mehrhoff, and I am a master's student in the Ed Psych department working on my thesis. I'm here today to see if you would like to participate in a study I am working on. In it, I am looking at relationships between political ideology and reading comprehension. If you are interested, the study will take about 30 minutes to complete and will take place at (time and location). Participation is completely voluntary. Not taking part will have no effect on your standing in this class or any other, and you can change your mind at any time during the experiment. If you are interested, please put your name and email on the signup sheet, and I look forward to seeing you for the study!

# Appendix H

## Email Reminder

Hi, this is Matt Mehrhoff, a master's student in the Educational Psychology department. You expressed interest in possibly participating in a study that I am conducting, and this is a reminder that we are meeting at (time) in room (#) in Teacher's College. Participation will take only about 30 minutes, and will be greatly helpful for my research. Again, participation is completely voluntary. I hope to see you there!

If you have any questions, feel free to contact me.

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