THESIS

COUNTER-ATTITUDINAL EXEMPLARS VIEWED THROUGH THE SOCIAL IDENTITY LENS: A CASE OF CLIMATE CHANGE AND POLITICAL PARTISANS

Submitted by

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ABSTRACT

COUNTER-ATTITUDINAL EXEMPLARS VIEWED THROUGH THE SOCIAL IDENTITY LENS: A CASE OF CLIMATE CHANGE AND POLITICAL PARTISANS

This study examined the relationship between social identification theory and exemplification theory through the use of counter-attitudinal exemplars. Exemplification theory predicts that inferences from one single exemplar will be made for an entire group. Social identity theory states that members of groups act in accordance with the group's norms. Therefore, a combination of the two theories predicts that an exemplar from a group will cause the audience to project the exemplar characteristics on the larger group, thus causing in-group and out-group members to re-evaluate the group. Using Democrats and Republicans as the groups and climate change as the attitude issue, this study aimed to understand how people in social groups respond to exemplars that are counter-attitudinal to the group's traditional values.

A 2 x 2 x 2 factorial design was created to manipulate the variables of political partisanship of the exemplar (Democrat or Republican), attitude expressed (pro- or anti-climate change), and political partisanship of the participant (Democrat or Republican). Three-hundred-and-twenty-five participants took both pre- and post-tests in order to gauge their identification with the exemplar and attitude change after viewing the stimulus material. Results showed that participants were willing to change attitude about the exemplar, but had no change in attitude toward climate change (regardless of political affiliation). Article slant had a main effect on participants' attitudes towards the exemplars in addition to an interaction effect between article

slant and participant political party identification. The party of the exemplar did not have an effect on the participants' attitudes toward climate change.

The researcher concluded that climate change attitudes are difficult to influence, regardless of participant stance and political identification. However, the statistically significant findings gave some new theoretical implications for social identity theory research. The interaction effect of political party and slant of the article suggested that social identity theory influenced participants' attitudes about the exemplar. When an exemplar from the participants' group negatively or positively exemplified the group's views on climate change, the participant had a greater attitude change about the exemplar than someone that was not part of the exemplar's political group. The main effect of article slant also had important implications—participants were willing to change attitude about an exemplar based on the exemplar's attitude about climate change. Therefore, political figures can significantly bolster or damage their reputation based on their attitudes about climate change.

.Finally, this study found some areas in social identity theory that need some additional research. The majority of the Republican participants in this study were pro-climate, and therefore were group deviants. Therefore, their responses reflected the attitudes of how deviant members evaluate members of their in-group. This study concluded that deviant members have higher evaluations of deviant exemplars. Upon searching, there was not significant research done in deviant group members' evaluations of other deviants. Future research should be conducted to better understand how deviant and marginalized group members rationalize group membership.

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CHAPTER ONE: INTRODUCTION

Climate change has become an increasing concern in recent years. Ninety-seven percent of climate scientists are in agreement that causes for climate change (also often referred to as global warming) are due to manmade causes—carbon emissions from the energy sources people use to power their homes, electronic devices, and cars (Cook et al., 2013). Natural disasters and increasing temperatures have caused scientists to urge citizens and politicians to take action to reduce carbon emissions (Moss et al., 2010).

However, although climate change has been recognized by a majority of scientists as a manmade problem, not all people are accepting of this claim (Weber & Stern, 2011). Specifically, in the United States, climate change has become a politicized issue—that is, certain political parties believe in manmade climate change and advocate for pro-climate policies, while other parties do not believe in manmade climate change and are not concerned about implementing pro-climate policies (McCright & Dunlap, 2010).

The two major political parties in the United States have helped create this polarization—Democrats are more likely to support pro-climate policies than are Republicans (McCright & Dunlap, 2003). Additionally, Republicans are more likely to support policies that create economic growth at the expense of the environment while Democrats are more likely to support policies that help the environment at the expense of economic growth (Hart & Nisbet, 2011). As partisan-specific news sources, such as Fox News (Republican-leaning news outlet) and MSNBC (Democrat-leaning news outlet), are likely to present information that represents their parties' ideological stances, partisan viewers are more likely to receive polarized messages. These

messages create a wider polarization between political groups and their stances on climate change and climate change policies (Feldman, Maibach, Roser-Renouf, & Leiserowitz, 2011).

As partisans receive information that reinforces their existing attitudes about climate change, their attitudes become strengthened. Additionally, when presented with the oppositions' views about climate change, the partisans' attitudes are again strengthened to reinforce their existing attitudes (rather than shift towards the opposing attitudes for climate change). Therefore, the opinions on any given issue covered by these news outlets become polarized. This polarization of opinions creates a challenge in making policies about the issues because groups most likely favor and support messages from their own side and are not likely to change their stances. Social identity theory (Tajfel & Turner, 1974) offers an explanation as to why groups favor messages from their own side rather than the opposition's.

Social identity theory states that people form meaning of themselves and others based on the groups that they belong to. People take pride in some sort of defining characteristic that unites them with others (Hogg & Gaffney, 2014). As these groups serve as a source of self-identity, people try to maintain a positive distinction between their own group and others (Tajfel & Turner, 1979). Group specific messages are therefore interpreted through the lens of the group's values and defining attributes. Group members receive information from the group source and positively evaluate it in order to reinforce their attitudes so that they align with the group.

On the other hand, group specific messages from outside groups serves to alienate the opposition. As group members strive to have a positive self-identity through their groups, they evaluate their own attitudes as superior to those of opposing groups (Sherif, 1965). Therefore, a message from a partisan specific source that contrasts the group members' attitudes will be

discounted. Opposing group members will view the information and evaluate their group's attitude and stances as being "right" while the other group is "wrong."

In the case of climate change communication, partisan communication channels have served to polarize the two major U.S. political parties. Republicans view Republican-specific news outlets that may increase the belief that climate change is not manmade and that policies should be developed to stimulate the economy rather than help the environment. Likewise, Democrats view Democrat-specific news outlets and further reinforce their own views. However, when partisans view the opposition's news channels that present information that is different than their own beliefs, these messages do not serve to change attitudes but further reinforce their existing attitudes.

Therefore, if attitude change is to occur, a new strategy must be used in order to unite partisans on the topic of climate change. The current state of affairs only serves to alienate the two major political parties and does not serve to promote any one course of action. If Republicans are to embrace the scientific consensus and implement policies that help reduce the impact on the environment, then a new communication strategy must be implemented. Additionally, if Democrats are to accept current Republican attitudes toward climate change, new communication strategies must be developed. As current information from Republicans reinforces existing Republican attitudes and information from Democrats also reinforces Democrat attitudes, communication about polarized issues needs to change.

If news sources were to consider using a counter-attitudinal message from a group member, how would the other group members respond? For the case of climate change, this would mean, for example, a Republican stating that climate change is manmade and that policies need to be developed to support the environment. If the information comes from a Republican

rather than a Democrat, is the information more palatable? Can attitude change occur when it is someone that they share characteristics with rather than someone that they oppose that is delivering the counter-attitudinal information? Because social identity theory predicts that group members will tend to favor information from their own group rather than another group, this strategy could prove to help change attitudes (Abrams & Hogg, 2010).

Another theory that could aid in understanding polarized news issues is exemplification theory. Rather than simply using a story or information about climate change, news sources can use exemplars (or examples) to highlight specific people. The use of exemplars in news stories is the basis of exemplification theory (Zillmann & Brosius, 2000). This theory predicts that people who are presented with exemplars are more likely to remember the information than those who view a story presented with only statements or facts. An exemplar is an example of a given phenomenon that communicators often use to bring pallid information to life. Because exemplars are more vivid than statistics and numbers, people are more likely to recall this type of information (Zillmann, 2002).

Although exemplars are effective in creating a more memorable news story, they also create the potential for misperception of the larger phenomenon. One exemplar is only a small sampling of the larger spread of cases. The specific exemplar that is highlighted may have attributes that are atypical for the phenomenon. However, people view the one exemplar and project its attributes onto the larger phenomenon (Zillmann & Brosius, 2000).

The misperception of phenomena and projection of attributes can help tie together exemplification theory and social identity theory for communication about polarized topics. If a group representative voices a counter-attitudinal message, then exemplification theory predicts that viewers will project the counter-attitudinal attributes to be typical of all members of that

group. Group members who view the counter-attitudinal message will then have to re-evaluate their own attitudes in order to have a positive evaluation of themselves and their group, based on social identity theory.

This strategy can be utilized for the polarized issue of climate change. For example, if a Republican politician states that he is in favor of implementing new policies to help sustain the environment because climate change is occurring due to manmade causes, he is sending a counter-attitudinal message to the audience. The audience may then project the climate change attitude onto Republicans as a whole: all Republicans believe in manmade climate change and in environmentally sustainable policies. Based on social identity theory, Republican viewers may have to re-evaluate their own attitudes in order to fit in with their group. On the other hand, Democrat viewers may re-evaluate their attitudes toward climate change or their attitudes toward Republicans in order to maintain the distinction between attributes typical of Republicans and attributes typical of Democrats.

Although this study is specific to political partisans and climate change, the implications from this study can impact other social groups as well. The information about how social identity theory works in tandem with exemplification theory can help craft messages that appeal to group members. Because this study will determine how the attitude expressed and the exemplar's group membership impact a viewer's attitude toward the issue, communicators can learn how to use exemplars (either counter-attitudinal or attitude congruent) in persuasive communications. This strategy could be especially beneficial in circumstances where there is a wide partisan divide on an issue and policymakers need to unite groups on both sides.

This study aimed to understand how exemplification theory and social identity theory can be united in order to explain the effects of counter-attitudinal exemplars on identification with

political party and attitude towards the polarized issue. First, a review of the research in exemplification theory will be given to demonstrate how projection and misperception occur with the use of exemplars. Next, a review of social identity theory will be given in order to explain how people form and evaluate their own and others' group memberships. Then, an in-depth analysis of how the two theories can be combined to predict the outcomes of using a counter-attitudinal exemplar. This analysis will lead to the research questions that were used to guide the study.

The study consisted of a 2 (audience partisanship) x 2 (exemplar partisanship) x 2 (climate change attitude) experimental design in order to study the effects of counter-attitudinal messages. The method employed manipulated stimulus materials and a questionnaire to gauge whether the counter-attitudinal exemplars had any effect on partisans' attitudes towards climate change. Additionally, this study determined if the group members are more influenced by the attitudes that the exemplar is voicing or if they will be more influenced by the group membership of the exemplar.

This study is not only important for communication practitioners, it is also important in that it adds to the literature on social identity theory and exemplification theory. There have not been any known studies that have combined the two theories in order to explain the effects of counter-attitudinal exemplars. Additionally, the combination of the theories could add knowledge of how exemplars can be used to reduce inter-group bias on polarized topics.

CHAPTER TWO: LITERATURE REVIEW

Exemplification Theory

Exemplification theory "addresses the formation and modification of beliefs about phenomena and issues on the basis of samplings of experienced and directly or indirectly witnessed concrete, unitary occurrences that share focal characteristics" (Zillmann, 2006, p. 221). Pertinent to exemplification theory are the selected phenomena that are used to represent the larger whole. These selected phenomena are called exemplars—in that they are examples of other events or phenomena with similar characteristics (Zillmann & Brosius, 2000). They exemplify characteristics that are shared with the larger population (Zillmann, 20006).

Exemplars can oftentimes be seen in news stories. For example, rather than talk about every single case of Zika virus that has been contracted during pregnancy, journalists will highlight and interview select individuals who contracted the virus. Certain attributes about the individual's experience with the disease might be highlighted—such as the symptoms experienced, the effects on the baby, or the woman's experience finding healthcare. The audience will then assume that the attributes that are highlighted in the news story are typical of other cases. The few cases that are highlighted in the news are the exemplars that represent the phenomenon of Zika virus.

Exemplars vs. Base-Rate Information

As exemplars are single cases that are used to represent a larger issue, they do not provide exact data about the entire phenomenon. Base rate information, on the other hand, does provide facts and detailed information about the phenomenon. Base rate information contrasts with exemplars in that it "…detail[s] the number or proportion of people or things involved in a

given social phenomenon," (Brosius & Bathelt, 1994, p. 604), whereas exemplars use "…individuals whose circumstances illustrate the phenomenon under review" (Brosius & Bathelt, 1994, p. 604).

Because base-rate information is reported in a way that presents the larger picture of the whole, it is typically counted as more valid than an exemplar that paints a picture of only one case (Gibson & Zillmann, 1994). Although exemplars that are used should be representative or typical, it is not possible to have one exemplar that portrays all cases. Additionally, exaggerated or sensational exemplars are often used to create a better story. These exemplars can cause the misperception of the qualitative and quantitative characteristics of an exemplified case. People may infer that the case is typical and therefore infer that all cases have extreme characteristics, or they may infer that the case occurs more often than reality (Zillmann, 2002) (see more specific studies in Exemplification Research section).

Base-rate information does not allow for such inferences because it gives the facts about the cases. However, base-rate information can be varied in its precision. Very precise base-rate information will use exact statistics and numbers about the frequency of cases. For example, a precise base rate statement might say, "68 percent of Democrats believe in anthropogenic climate change." Less precise base-rate information can use language such as "a majority of cases," "many cases," "very few cases," etc. (Zillmann, 2002). Less precise base rate information might simply make the statement that "A majority of Democrats believe in anthropogenic climate change." Less precise base rate information therefore allows for a misperception of the phenomena because the audience can misinterpret how much a "majority" is. They may think that a majority is only 51 percent (lower than what it actually is) or they may think that a majority is 99 percent (higher than it actually is). While the less precise base rate information

may not be as valid as precise base-rate information, it gives the audience a sense for the rate of occurrence of events. One exemplar is still less valid because it cannot give a sense of the overall phenomenon (Zillmann & Brosius, 2000).

However, exemplars are not used for their validity but for the concrete example that they provide for the audience. Concrete events are easier for the audience to process because they "place fewer demands on cognitive processing than do abstract events that require construction and generalization" (Zillmann, 2002, p. 25). Therefore, journalists will use an exemplar in order to give a more memorable and relatable example to their audience. Base-rate information and exemplars can be used in tandem in order to give both a vivid description of the event, and a valid picture of the larger whole.

Exemplars and Cognitive Processes

There are several underlying cognitive processes that make exemplars more memorable than abstract facts. A cognitive shortcut called a heuristic makes an exemplar more influential in the recipient's mind. Two heuristics are used when making inferences about the larger whole from one exemplar: the availability heuristic and the representativeness heuristic (Zillmann, 2002). These two heuristics give insight into why certain exemplars have higher impact on recipients' judgments than other exemplars.

Before examining these specific heuristics, it is important to understand what heuristics are and how they are used in making social judgments. As stated by Zillmann and Brosius (2000), "Heuristics [are] mechanisms that simplify and expedite information intake and utilization" (p. 39). Heuristics are essentially shortcuts that people use to alleviate the amount of cognitive effort used to make judgments. The human brain does not sift through every single piece of information about a given event when making judgments about it. Rather, it simplifies

cognitive processing by taking information from one or a few cases and applies it to similar cases. The availability and representative heuristics further explain which pieces of information are most salient when making such inferences (Zillmann, 1999).

Representativeness Heuristic

The process of classifying and sorting an object into a given category is part of making a judgment about it. When making these judgments, people employ probabilistic thinking in order to determine which group the object might belong to. Based on characteristics of the object, the person can analyze it and categorize it based on existing mental models of other similar objects (Zillmann, 2006). For example, if someone is trying to determine the political party of a politician, he or she might categorize the politician based on the values that the politician holds by comparing them with politicians they already know. Rather than compare and contrast all characteristics of politicians of every party, the person will classify the politician in question based on an existing mental model of political parties.

Because classifying objects heavily relies on a person's subjective experience and knowledge of the categories, there are often errors involved in these judgments (Zillmann & Brosius, 2000). Studies by Kahneman and Tversky (1973) examined this error in judgment by having participants classify a personality description as either a lawyer or engineer based on the attributes described. Two experimental conditions were used—one in which participants were told that 30 percent of the personalities were lawyers, and one where they were told that 70 percent were lawyers. The researchers found that both conditions evaluated that 50 percent were lawyers, regardless of the statistical information presented. This study not only shows that people use existing mental models of lawyers to make judgments of people, but also that they disregard the statistics.

Tversky and Kahneman (1982) later identified the rules that guide how people use the representativeness heuristic in making judgments:

1. People do not base their decision on stated probabilities, but rather on the attributes of the specific case, which they then extend to all cases.
2. People do not take different sample sizes into consideration when making a decision. Although inferences drawn from small samples are not nearly as reliable as those drawn from larger ones, respondents draw essentially the same conclusions from these samples.
3. People misconceive the role of chance.

Although the representativeness heuristic gives rules for how people make judgments about the classification of an object based on existing mental ideas of similar objects, it does not give rules that dictate which exemplars are used in making those judgments. As stated previously, heuristics are shortcuts; therefore, people do not use every single exemplar in making a judgment about a case. The availability heuristic is used in tandem with the representativeness heuristic to give more guidance as to which exemplars are the most salient in making judgments (Aust & Zillmann, 1996).

Availability Heuristic

The availability heuristic is so named because people make judgments about something based on the information that is currently available in their minds (Zillmann & Brosius, 2000). The availability of information is guided by two additional variables: recency and frequency of activation (Zillmann, 2002).

Exemplars that have been recently activated in the audience's mind are more likely to be used in making judgments about other cases. The information used in making a judgment is the

information that comes to mind spontaneously; that is to say that people don't extensively think about all information on the topic. That which is readily available is used, other information is not (Zillmann & Brosius, 2000). Therefore, relevant exemplars that are recent in the audience's minds are more likely to have an effect on the judgment than are exemplars that were activated long ago.

Frequency also has an impact on the ease with which someone recalls an exemplar to make a judgment. Exemplars that are frequently activated are arguably more influential than recently activated exemplars because "recency of exemplar activation…creates only a short-lived accessibility enhancement…[but] the frequency of exemplification is thought capable of fostering enduring and stable influence on the perception of phenomena" (Zillmann, 2002, p. 28).

Vividness and Exemplars

Vividness is a concept that can be used in combination with heuristics to explain why certain exemplars are more memorable than others. Vividness is more related to the availability heuristic than the representativeness heuristic—it explains why certain exemplars are more memorable and influential in making judgments than other exemplars. The more vivid the exemplar, the more memorable it is, therefore making it more available than pallid exemplars (Zillmann & Brosius, 2000).

Studies have examined if vivid exemplars are more influential in making judgments, and have come up with mixed results. A study by Reyes, Thompson, and Bower (1980) examined this relationship by giving participants a simulated court hearing—one group of participants received a stimulus with a defendant using vivid arguments while the other group received a stimulus with a plaintiff using vivid arguments. The participants were then asked to recommend

a sentence. The sentence was harsher for the group that had received the plaintiff stimulus than the group that had received the defendant stimulus.

However, other studies have not established that more vivid information has higher influence on judgments. A study conducted by Collins, Taylor, Wood, and Thompson (1988) found that vivid messages impacted how the audience perceived others would be influenced by the information, but did not impact the audience itself. To conduct this study, the researchers used stories about juvenile crimes. One group of participants received more vivid accounts of juvenile crime (stronger and more concrete language was used to create more vivid account) while the other received pallid accounts of juvenile crime. Those who received the vivid case stated that others were likely to be persuaded by the information, but they themselves were not. However, the pallid condition did not have this result.

While it seems somewhat intuitive that more vivid information should be more influential than less vivid information, research has not fully supported this notion. Another concept called salience explains the discrepancy between the research findings and the hypothesis. Salience is the concept that states what information is personally relevant (Zillmann & Brosius, 2000). Exemplars that are personally relevant to an audience member are likely to be more influential than those that are not. Therefore, although exemplars are vivid, they may not be relevant to the audience. The audience therefore may not pay attention to the exemplar because they do not need the information.

Salient information varies from person to person. For example, a Republican may pay more attention to a Republican exemplar talking about relevant issues rather than if a Democrat exemplar was talking about the same issues. Conversely, a Democrat might pay more attention to

a Democrat exemplar because the Democrat's stance on an issue is more personally relevant than a Republican's.

Exemplification Theory and Social Learning Theory

Although exemplification theory has not been studied in combination with social identity theory, it has been studied in the context of another social psychology theory: social learning theory (Bandura, 1971). Social learning theory states that people learn and model behaviors based on what they observe from others. They view the outcomes of others' behaviors and use that as a basis for deciding whether they want to adopt those behaviors. If they observe that the person exhibiting the behavior has a positive outcome, then they may be more likely to adopt the behavior. However, if they view that the person has a negative outcome, then they learn from that person's experience and may not adopt the behavior.

Social learning theory has been combined with exemplification theory to explain how exemplars may have a persuasive effect on the audience (Zillmann & Brosius, 2000). People may view an exemplar in the media and use that exemplar as a way to evaluate the outcomes of a given behavior. Rather than learning from a direct experience from another individual, the person is learning from the exemplar in the media.

Based on the concept of salience, social learning theory has posited that people pay attention to exemplars that are similar to themselves (Bandura, 1986, Zillmann & Brosius, 2000). This is in line with the expectations for social identity theory and exemplars—people identify with certain individuals in the media and pay attention to their behaviors.

Research in Exemplification Theory

Misperceptions of Larger Whole

Research in exemplification theory examines how an audience perceives the larger population of the exemplar phenomena based on the information given through the exemplar (Brosius & Bathelt, 1994). There is rarely a time when a set of phenomena is exactly the same; therefore, one exemplar does not exactly represent the other cases in the population. People can therefore misjudge the larger phenomenon because exemplars highlight the characteristics that are unique to the reported case. When presented in such a way, the audience generalizes the characteristics from the exemplar and infers that all phenomena from that case have those unique characteristics (Gibson & Zillmann, 1994). Thus these "secondary attributes become primary ones, and variation in the subpopulation is defined by the secondary attributes specific to the events of this subpopulation" (Zillman, 2002).

Several studies have examined the effects of over- and under-exemplifying a single case to understand how readers judge the larger whole (Brosius & Bathelt, 1994; Zillmann, Perkins, & Sundar, 1992, Zillmann, Gibson, Sundar, & Perkins, 1996). These studies examined how distribution of exemplars impacts the judgment of the cases. It is important to note that these studies did not examine how readers perceived characteristics of the larger population. Rather, the research focused on the quantitative judgments readers made about the frequency of these events.

Zillmann et al. (1992) examined how the distribution of exemplars impacts the judgments about how frequently the phenomena. For their study, they used the case of dieters who had regained their weight. There were three experimental conditions—one which used only exemplars who had regained weight (*selective* exemplification), one which used a representative

proportion of exemplars who had both gained or not gained weight (*representative* exemplification), and a final condition in which both exemplars that had and hadn't gained weight were presented but not in the correct proportion (*blended* exemplification). All conditions highlighted the cases, but also gave the base-rate statistics that stated how many dieters regained their weight after dieting. When questioned after exposure to the message, those who received the selective condition overestimated the proportion of weight regain. Those who received the representative and blended exemplification conditions were more likely to perceive lower rates of weight regain. This study gives the implication that when only a single exemplar case is highlighted, the audience is likely to misperceive other cases.

Zillmann et al. (1996) used news stories about family farms to examine manipulated exemplification. The news stories that they presented to the participants highlighted cases of family farms that were facing economic trouble. Similar to the Zillmann et al. (1992) study, they varied how the exemplar cases were presented—selective, representative, and blended. All cases were presented with the base-rate information. Again, they found that when selective exemplars were used, the audience over-estimated the prevalence of the case that was exemplified. The participants in the blended exemplification condition were more accurate at estimating the frequency of the event than those in the selective condition.

Brosius and Bathelt (1994) conducted five experiments to examine the distribution of exemplars and audience judgments. However, this study added additional elements including vividness of the exemplar and the medium of communication used. Rather than using a case of an event as the exemplar, this series used peoples' opinions as the exemplar. Therefore, study participants were asked how many others held the same opinion as what was voiced in the exemplar. The findings about distribution of exemplars was consistent with previous studies—

selective exemplification results in an overestimation of the exemplified phenomena. People therefore estimated that the selective opinion was a majority opinion when that was not in fact the case based on the base-rate information presented. The exemplars also had an effect on the participants' own opinions about the phenomena—when the information was presented as a majority opinion (rather than a minority opinion), people were more likely to adopt the majority opinion.

Gibson and Zillmann (1994) were among the first to examine how the qualitative characteristics of the exemplars affected audience opinions about the characteristics of the larger phenomena. They investigated how an exaggerated case presented in the news would affect the audience perceptions of other similar cases. To conduct the research, they used stories about carjackings with varying levels of exaggeration about the case (ranging from minimally exaggerated to extremely exaggerated). Those who were exposed to the cases with extreme exaggeration were more likely to report that carjackings should be of serious national concern. However, the exemplification was not powerful enough to cause participants to perceive carjackings to be a personal threat to them—it was just seen as a problem that others in the nation might face.

These studies show how different forms of exemplification can lead to accurate or inaccurate perceptions of the actual phenomena. Selective exemplars are most likely to cause misperception of the whole. Even when base-rate information is presented to off-set the effects of the exemplar, the audience tends to disregard it and infer that most cases resemble the exemplar. From this research, Zillmann (2002) formed three assumptions about exemplification:

1. Comprehension, storage, and retrieval of elemental, concrete events are generally superior to those of complex, abstract events.

2. Events of consequence attract more attention and are more vigorously processed than irrelevant events. Accordingly, storage and retrieval of vital events are superior to those of inconsequential events.
3. The incidence of events of the same kind is coded, and basal quantitative assessments are made on grounds of this coding.

Exemplification and Social Identity Theory

Although identification with exemplars has been examined using social learning theory (Brosuis, 1999), there is no known work examining the identification aspect of exemplification through other theoretical perspectives. Another theory in social psychology is social identity theory (Tajfel, 1974). The basis of social identity theory is that people take pride in and define themselves by the groups that they belong to. Because the groups are central to a person's identity, the person acts in accordance with members of that group (Ellemers & Haslam, 2006).

Taken in combination with exemplification theory, social identity theory could provide a novel lens to understand the persuasive effects of exemplar identification. If an audience member belongs to the same group as the exemplar, will the message conveyed by the exemplar have a persuasive effect even if it is counter-attitudinal? If the audience acts in accordance with the group, then information conveyed by an exemplar from that group should influence the message recipients' actions.

Exemplification and social identity theories are a useful combination because of the projection effect that occurs with exemplification. Because of the heuristic shortcuts that are used when judging a larger whole from one exemplar, misjudgments commonly occur. If a member of a group is presented as an exemplar in a news story, then projection about others in that group is likely to occur. Message recipients may think that all others in that group have the same

characteristics or beliefs as the exemplar that is presented. If the message recipient belongs to that group and views characteristics of the exemplar, then perhaps he or she will adopt those characteristics to conform to the behaviors of the group. If the recipient of the message is not part of the group, then his or her attitudes toward the group may be shaped based on the exemplar.

Before examining how exemplification and social identity theory could work together, it is important to understand the foundation of social identity theory and the relevant research conducted on it.

Social Identity Theory

Social identity, as defined by Turner, is "the individual's knowledge that he belongs to certain social groups together with some emotional and value significance to him of this group membership" (1975). Likewise, Tajfel (1978) writes that social identity is "…part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the emotional significance attached to that membership" (p. 63).

Social identity theory was developed by Henri Tajfel, who was a Jewish survivor of World War II (Ellemers & Haslam, 2006). He wanted to study intergroup conflict in order to understand how "people who had been living together as neighbors, colleagues, and friends could come to see each other as dangerous enemies even when there was no rational or objective reason" (Ellemers & Haslam, 2006, p. 380). His first study examined how people categorized others and how they differentiated themselves from an outside group. He conducted a study in which participants were told to allocate points to a member of their own group and a member of an outside group. This study found that just by having participants think of categorizing different groups caused the participants to think of their own groups as "us" and outside group members as "them" (Tajfel et al., 1971).

This study led Tajfel to form the idea that people don't always act as individuals, but rather act socially—that is, they behave as members of a given group rather than on their own. Social identity theory has been further developed to explain why and how people act in groups, and how they distinguish themselves from other groups. Social identity theory has two main foundations: the psychological processes that guide it, and the strategies that people use to cultivate a positive social identity (Ellemers & Haslam, 2006).

Before going into the details of the foundations that guide social identity theory, it is important to first understand what is meant by a "group." Although there have been many definitions for groups in social psychology, there is a specific definition for social identity theory. Hogg (2013) states that a group is "when three or more people define and evaluate themselves in terms of the defining properties of a common self-inclusive group" (p. 534). Another definition by Hogg (2006) states that, "a group exists psychologically if three or more people construe and evaluate themselves in terms of shared attributes that distinguish them collectively from other people" (p. 111). Therefore, a group not only defines the people that belong to it by common characteristics; it also defines the people by what they are not by contrasting to other groups. The psychological processes that guide social identity theory further explain group formation.

Psychological Processes

There are two main psychological processes that guide social identity theory: social categorization and social comparison (Ellemers & Haslam, 2006).

Social categorization is the process that people use to identify others as members of a group. It unites multiple individuals with common characteristics into one cohesive group. This process defines and classifies people by a "central group-defining feature, which distinguishes

them from others who do not possess this feature" (Ellemers & Haslam, 2006). When making social categorizations, people focus on the similarities between people of the same group while also focusing on the differences with other groups. There can be no distinction between groups without social categorization. Social categorization draws the lines between "us" and "them" (Tajfel, 1971). It "creates an accentuation of similarities between self and other ingroup members, and among outgroup members, and a perceived exaggeration of the differences between groups" (Hogg & Abrams, 1988, p. 53).

By classifying people according to similar characteristics, social categorization reduces the amount of cognitive effort required for analyzing and predicting behavior of individuals. People who act accordingly with a group follow a set of group norms; therefore, their behavior can be generalized based on the group they belong to (Abrams & Hogg, 2010). Categorization also helps organize information about individuals—rather than thinking of each and every characteristic that an individual possesses, one can conceptualize that individual based on his or her group memberships.

After an individual has been categorized as belonging to a given group, the group is then valued by comparing the group to other relevant groups. Social comparison is the process that is used to ascribe value to groups by comparing them to other groups (Hogg &Gaffney, 2014). People within groups want to maintain positive self-esteem, therefore they use comparisons that will give their own group a positive evaluation. Members of groups consistently favor in-group members over outgroup members in order to maximize their positive self and group identity (Hogg, 2000).

Group members will accentuate characteristics of their own group that are more favorable than those of out-groups in order to maintain a positive distinction (Hogg &Abrams, 1988). For

example, a basketball team may try to reason that although the opposing team has better defense, their own team is superior because they have better offense. Their own superior characteristics are accentuated while the other group's superior characteristics are minimized in order to achieve a higher evaluation of themselves.

Taken together, social categorization and social comparison make up the process of social competition, defined as the "direct competition between subordinate and dominant groups on dimensions consensually valued by both groups" (Hogg & Abrams, 1988, p. 57). Because each group tries to maintain positive distinction and higher status than the other, there can be insecurity within a group when a positive distinction cannot be maintained. When this happens, the group will try to re-assert power by changing strategies to manage the group identity.

Strategies for Identity Management

There are several strategies that group members use in order to elevate their group's status. Both cognitive and physical action can be taken to increase the positive distinction of the group. These include social mobility and social change. Social change is composed of additional methods called social creativity and social competition (Hogg & Abrams, 1988; Ellemers & Haslam, 2006).

Social mobility is an individual level strategy that is used when a single group member feels that his or her group is of low status. Rather than changing anything about the group's characteristics, the individual decides to change his or her own status by changing groups. Social mobility is based on the concept that the boundaries between groups are permeable and that people can move from group to group by choice. The group member leaves the group in exchange for a higher status group to achieve a positive self-evaluation (Ellemers & Haslam,

2006). While this strategy may change the individual's social status, the group itself does not change.

For some cases, social mobility is not difficult to achieve. Someone can leave a position at an organization to work for a higher status organization. Other cases are not as easy to change. Groups that are defined by personal attributes such as race, gender, age, etc. cannot be manipulated and are not permeable. A Republican can change status to a Democrat (and vice versa) if he or she feels that the political party no longer has a positive distinction. A woman that feels like an unimportant minority in a male-dominated workplace cannot very well change to a male to try to gain status.

Social change, on the other hand, is based on the belief that boundaries of groups are impermeable. Hogg and Abrams (1988) write that social change is used when social mobility fails because, "negative implications of group membership cannot be escaped simply by redefining oneself out of a group and into a dominant group. They can only be overcome by group strategies aimed at accomplishing a relatively positive re-evaluation of the ingroup" (p. 56). There are two strategies that fall under the category of social change: social creativity and social competition.

Social creativity is a psychological strategy that redefines the group value by changing the way the group is thought of. Rather than making physical changes to the group, the members of the group change their mental model of the group. This method is used when the intergroup relations are secure, though not necessarily desirable (Hogg & Abrams, 1988). Tajfel and Turner (1979) give three strategies for bolstering a positive group identity:

1. Group members find new dimensions on which to compare themselves. For example, if members of a company compare themselves to a competing company that makes

more money, they may feel that they are in the inferior group. However, they can re-evaluate themselves more positively by comparing a different quality. Perhaps they have a larger customer base, so they can then feel superior to the other group by the fact that they serve more people.

2. Group members may redefine the value attached to various attributes. A group can create a superior feeling to an outgroup by ascribing higher value to an attribute that the outgroup does not possess.
3. Group members can find different outgroups for which to make comparisons. A higher, more positive status can be achieved by selecting a lower status group for which to make comparisons. For example, a low-income family may have a negative evaluation when comparing themselves to the Royal Family, but their evaluation will be positive if they switch their comparison to a homeless family.

Social competition is the only method that requires physical action to change a group's status (Ellemers & Haslam, 2006). When a group feels that its position is unstable, it seeks action to overthrow dominant and oppressive groups. For example, workers may try to change status at work by going on strike to receive higher compensation. Social competition requires collective action from group members—a single member cannot create enough leverage to overthrow the dominant groups. The group must act as a whole in order to make social change.

Based on the psychological processes and identity management strategies that are central to social identity theory, Tajfel and Turner (1979) made several core predictions about how people will act in accordance with the theory:

1. To the extent that individuals internalize a group membership as a meaningful aspect of their self-concept, they will strive to make favorable comparisons between this

group and relevant outgroups, in order to achieve or maintain a positive social identity.

2. As a result, social categorization can be sufficient to engender intergroup discrimination and intergroup conflict.
3. The search for positive social identity may take different forms depending on consensual definitions of social reality that pertain to socially shared justifications and perceived cognitive alternatives to current status relations.

Processes of identity management are important for this study because it seeks to understand how group members process information that is counter to their group's typical attitude. Identity management strategies dictate how people move from group to group and how they use different cognitive processes to re-evaluate information to have a positive evaluation of their group. If counter-attitudinal information challenges their conception of their group, they may use these strategies in order to establish a positive evaluation of the information and group. If the counter-attitudinal information causes them to have a negative evaluation of their group, they may use strategies to compare it to a different group, or they may even use strategies to move to a different group. Although identity management strategies explain how people use social identity theory to maintain a positive social identity, they do not explain how people act in accordance with the group. Collective group behavior will be explained in the following section to show how people conform to the group's standards.

Collective Group Behavior

Although there are other important processes that are predicted by social identity theory, collective group behavior is of highest interest. Because this study seeks to understand how

members of a group will respond to exemplars that represent their group, understanding how the members conform to behave as members of group (rather than as individuals) is important.

Because social identity theory predicts that groups will make a positive distinction between in-group and out-groups by maximizing the differences between groups, there has to be a standard for which different group members act, think, and behave (Turner, 1982). The standard to which group members compare themselves is called a prototype.

Prototypes

A quintessential representation of a given group is called a prototype. Prototypes both represent the in-group and contrast relevant out-groups through their normative attributes (such as attitudes, beliefs, behaviors, etc.) (Hogg & Reid, 2006). A prototype is not an exacted list of qualities for group members, but rather "fuzzy sets of attributes that define one group and distinguish it from other groups" (Hogg & Reid, 2006, p. 10).

People that belong to groups are often compared to the group prototype in order to see how "typical" of the group they are. Group prototypes are the standards to which people are compared in order to understand their group belongings. If the person matches the prototype, then they can be categorized as a member of that group. The process of comparing oneself or others to prototypes is inherent in social categorization. When group members are categorized and assessed, often times they are "viewed through the lens of the relevant group prototype and are represented in terms of how well they embody the prototype" (Hogg & Reid, 2006, p. 10). Social categorization therefore depersonalizes how people in groups are viewed—rather than viewing them as unique individuals, others view them as group members with prototypic characteristics.

The depersonalization that results from social categorization can cause stereotypic perceptions of people from a given group. Because the group prototype has specific behaviors, attitudes, beliefs, and values, others perceive that the group members therefore also have those same characteristics (Hogg & Gaffney, 2014). The group members' behaviors are then viewed through the lens of the prototype—their actions are then interpreted as either prototypical of the group or not.

When people have categorized themselves as members of a given group, they conform to the prototype in order to better fit in with that group (Hogg, 2006). Some individuals conform to the prototype more than others. A range of group members can exist—those who are more prototypical than the average group member, prototypical group members, and those who do not embrace the prototypical behavior. Those do not act in the prototypical manner are considered deviants. The rules that dictate appropriate behaviors are called norms (Hogg, 2005).

Group Norms

Group norms arise out of the group prototype—they are the characteristics that are deemed appropriate for a prototypical member. Norms are "the set of expectations concerning the appropriate and accepted playing out of roles in society… [they] also embody the socially acceptable modes of action to achieve society's goals" (Hogg, 1988, p. 159). Essentially, norms are the guiding rules of society that tell people what is acceptable and unacceptable behavior.

While there are norms that guide how humans as a whole should act, there are also norms that guide appropriate behavior for smaller subsets of people. Group norms are "defined as regularities in attitudes and behavior that characterize a social group and differentiate it from other social groups" (Hogg & Reid, 2006, p. 7). For example, behavior that is acceptable in the

United States might not be acceptable in European countries. The appropriate behaviors of each society are guided by the group's norms.

Norms are the rules that allow groups to behave as cohesive entities. As different groups have different sets of norms, group members can therefore be distinguished by behavior that is specific to a given group. For example, someone from the United States might distinguish an Englishman based on the fact that he uses the word "lift" rather than the widely used word of "elevator" in the United States. The acceptable words are different in the two different countries, therefore the action of using one or the other distinguishes the country of origin (besides the obvious accent).

For in-group and out-group comparisons, norms are often polarized (Hogg & Terry, 2000). The polarization between a group and its relevant out-group allows for distinction between how "they" behave and how "we" behave. Polarization of group norms is more extreme for individuals who identify strongly with a group. These individuals who identify strongly with the group are also more likely to be the ones to set the group norms—they are the ones who are more likely to speak up about group behavior, thereby setting the norms for the group (Hogg & Reid, 2006).

Cohesion and Deviance

When a group is salient for an individual's identity, that individual is more likely to embody the group prototype and act in accordance with the norms (Hogg & Terry, 2000). People who highly identify with the group wish to fit in better, so they therefore are more likely to adopt the normative behaviors. Those who better embody the group prototype fit in better, and are therefore more liked by other group members than those who do not embody the prototype.

Norm deviance occurs when a group member does not embody the prototypical behavior of the group (Hogg & Terry, 2000). Those who deviate from the norms are often marginalized and treated as black sheep (Hogg & Reid, 2006). However, these black sheep still influence the norms of the group. Group leaders often use them as the negative examples to state what the group is not—thereby shaping behavior in the opposite direction of the marginal members.

Out-group members who have similar positions to the marginal in-group members are often evaluated more positively than the marginal in-group members (Marques & Paez, 1994). The poor treatment of the in-group deviants is because these members threaten the security of the group—their deviant behavior is not representative of the group, and the group does not want to be viewed in the way that the deviants portray it (Hogg & Reid, 2006).

Social Identity Theory Research

Although there has been social identity research in many areas including: "stereotyping, self-conception, motivation, collective behavior, norms and social influence, multiple categorization and diversity, and intragroup phenomena in small groups" (Hogg, 2006, p. 112), this study will focus on group norms and normative actions. Because this study focuses on normative and anti-normative messages from in-group and out-group members, these types of studies are the most important for this line of research.

Deviant Behaviors

Research on deviant behaviors has shown that group members negatively evaluate deviant members (Marques & Paez, 1994; Abrams, Marques, Bown & Henson, 2000).

Marques and Paez (1994) first studied the in-group deviance from a social identity perspective. They set out to study "…the black sheep effect: [when] subjects judge likeable

ingroup members more positively than similar outgroup members, while judging unlikable ingroup members more negatively than similar outgroup members" (p. 37).

To study this "black sheep effect," they conducted a series of six experiments. Each experiment contained an in-group and out-group, and each had a pro- and anti-deviant. The studies built off of one another to eliminate possible artifacts that may have been present in the previous study. The final and sixth study used military school students as the participants. The students first ranked a set of norms from most to least important. They were then asked to think of two hypothetical students: one who followed the top most important norms, and one who followed the four least important norms. Half of the participants were asked to evaluate the students as students who went to their own school, while the other half of the participants were asked to evaluate them as if they went to a rival school.

This experiment found that the students more highly evaluated in-group members when they followed the important norms. However, the in-group members who did not follow the norms were more negatively evaluated than the out-group members who also did not follow the important norms.

In a study by Abrams, Marques, Bown, and Henson (2000), the researchers examined both pro- and anti-norm deviant behaviors. Pro-norm behaviors are those that are more prototypical than what is exhibited by an average member, while anti-norm behaviors are those that go against the normative behaviors of the group. Anti-normative behaviors are often normative behaviors for an out-group.

The goal of the study by Abrams et al. was to understand how deviant group members (pro- and anti-) are perceived by other group members (from both in- and out- groups). They

conducted two experiments: one which examined solely the in-group's reaction to deviant behaviors and one which examined both in-group and out-group reactions to deviant behaviors.

The first study used gender as the reference group. Participants were given manipulations of people that were either more feminine/masculine or less feminine/masculine than average. An average man and woman were also included. They were then asked questions to analyze how well the different people fit the groups' gender norms. The results showed that the participants estimated that the overly masculine or overly feminine people were typical of the group, while the less masculine or feminine members were rated as not typical. Although both were equally deviant from the average male or female, the anti-deviant member was rated lower than the normative member, while the pro-deviant member was rated higher than the normative member.

The second study analyzed psychology students' attitudes towards asylum seeking immigrants in Britain, using the manipulation of group normative attitudes and in-group members. This study used both in-group and out-group manipulations in order to see how pro- and anti- normative behaviors affects out-groups' attitudes. Again, in-group members who were pro-deviant were highly evaluated and anti-deviant members were negatively evaluated. An interesting point to note is that anti-deviant in-group members were evaluated even more negatively than anti-normative out-group members that had the same position as the anti-deviant in-group members. Additionally, pro-norm deviants for out group members are judged more negatively than anti-norm out-group members.

The lower evaluation of anti-deviant group members can be explained by social identity theory—the groups want to maintain a distinct identity from other relevant out-groups. Those members who resemble out-group members threaten the group's distinctness. Therefore, the anti-deviants are treated negatively in order to maintain a positive group identity. On the other

hand, group members who are pro-deviant help distance the in-group from the out-group by having extreme positions. The extreme positions therefore help maintain a distinct identity, therefore enhancing the group's image (Hogg, Fielding, & Darley, 2005).

Attitude and Attitude Change

Because this study aims to evaluate attitude change through the combined effects of exemplification and social identity theories, it is important to discuss both attitudes and attitude change. It is important to examine how research on attitudes has evolved and how it has been used in the past in order to apply relevant methods to this study. This study focuses on how attitudes may or may not change based on a message (either counter-attitudinal or attitude congruent. The studies presented in this section examine attitude change based on message exposure.

First, an explication of attitude will be given. Then persuasive routes to attitude change will be discussed, with a special focus on attitude change in group members. Finally, studies that have examined attitude change with a focus on social identity theory and exemplification will be discussed.

Attitude

Social psychologists began exploring attitudes as early as the 1800s. Early attitude research was not concerned with explaining social behavior, but instead sought to understand what an attitude was. An early definition by Baldwin (1901) describes attitude as "readiness for attention or action of a definite sort" (p. 88). 1918 was the first appearance of attitude as an explanation for human behavior, when Thomas and Znaniecki (1918) described attitudes as "mental processes that can predict a person's response."

The idea of attitude being a direct predictor of human action went unchallenged until the 1960s. While early social psychologists understood that attitude was an important variable in predicting action, they did not have a way of measuring a person's attitude to gauge how it corresponded with his or her behaviors.

In the late 1920s and early 1930s, Thurstone (1928) remedied this problem with the introduction of the scaling technique. He realized that there was a continuum on which attitudes lie—ranging from an extremely unfavorable attitude to an extremely favorable attitude. Although Thurstone developed this scale, he realized that there were problems with using it as a sole predictor of behavior. One of his early studies investigated attitudes held by divinity students compared to attitudes held by other college students. The work found that divinity students had more favorable attitudes toward the church than other students. While the attitudes of these students were investigated, this work told nothing about the behaviors that are associated with these attitudes. Thurstone put forth the fact that although the divinity students had a more favorable attitude of church, their attitude did not necessarily mean that they attended church every Sunday, participated in volunteering, or lead Sunday school.

Thurstone's scale was used, but also put under criticism for being too complicated. In 1932, Likert introduced a similar, but simpler version for attitude assessment. With the introduction of attitude scaling techniques, attitude research became more popular and easier to conduct. However; the ease of conducting research did not mean ease in predicting results. Many researchers were disappointed because the strength of an attitude was not useful in predicting behaviors associated with the attitude.

To explain the apparent discrepancy between attitude and action, various theories and descriptions of attitudes have been suggested. The Theory of Reasoned Action (Fishbein, 1979)

explained the discrepancy by stating that there were other factors that predicted action—including normative beliefs and attitudinal beliefs. An extension of the Theory of Reasoned Action is the Theory of Planned Behavior (Ajzen, 1985). This theory uses the same predictors for behavior, but added an extra element of perceived behavioral control. Both the Theory of Reasoned Action and the Theory of Planned Behavior use the same description for attitude: "a person's general feeling of favorableness or unfavorableness for that concept" **(**1980), or more simply stated "the evaluative dimension of a concept—e.g., is the concept 'good' or 'bad'" (Fishbein, 1961).

Although the Theory of Reasoned Action and the Theory of Planned Behavior are important theories in attitude research, they are not particularly useful for this study. These two theories deal with predicting behavioral outcomes from attitudinal components, but do not necessarily provide a useful explanation for attitude change and processing of persuasive communication messages. One theory that has been used in persuasive communications and attitudes is the Elaboration Likelihood Model, or ELM (Petty & Cacioppo, 1986).

The ELM posits that messages can be processed in one of two ways: either centrally or peripherally. When messages are processed centrally, the person is actively evaluating information presented and making judgments. When messages are processed peripherally, the audience is passively consuming short cues that trigger quick responses without actively thinking about the information presented (Petty & Caccioppo, 1986). These cues are called heuristics and they are cognitive shortcuts that help reduce the amount of effort that is needed to process a message.

Attitudes, as defined by the ELM are, "… general evaluations people hold in regard to themselves, other people, objects, and issues. These general evaluations can be based on a

variety of behavioral, affective, and cognitive experiences, and are capable of influencing or guiding behavioral, affective, and cognitive processes" (Petty & Cacioppo, 1986, p. 127). The ELM predicts that long-lasting attitude change occurs when people centrally process the message, whereas short-term attitude change occurs when people peripherally process the message.

For this study, an especially important variable for message processing and persuasion is group membership. When people receive messages from an explicitly stated group member, the ELM predicts that the message will be processed differently than if the person was not identified as a group member. The stated group membership serves as a heuristic cue that changes the audience's perception of the message. Because the audience is likely to have preconceived notions about the group, the processing of the message will be changed to reflect their existing attitudes. Additionally, information from in-group members is more likely to be perceived as more valid than information from out-group members (Hogg & Smith, 2007). If the message is presented by an in-group member, then the audience is likely to accept the message without centrally processing the information. Conversely, if the message is presented by an out-group member, then the audience is likely to reject the message without centrally processing the information.

A study conducted by Wilder (1990) showed the higher persuasive power of an in-group message. The participants were university students who were given either in-group (students from their university) or out-group (students from a different university) messages. The people who delivered the messages spoke about federal funding to universities, and they wore clothing that reflected the university they attended to simulate the in-group/out-group conditions. The participants were then asked to answer questions about their attitudes towards university funding.

Those who were in the in-group conditions were more persuaded by the arguments for federal funding than those who were in the out-group conditions.

However; a study conducted by McGarty, Haslam, Hutchinson, and Turner (1994) argued that the ELM was wrong in predicting solely peripheral processing from group members. These authors hypothesized that the dual routes of processing do not apply to in-group/out-group persuasive messages. They hypothesized that social categorization can help explain how people process these messages, stating that, "the persuasiveness of a person's arguments is a function of the degree of relative consensual support for his or her position with respect to a currently salient frame of reference…[and] agreement with one's own [group] represents a social consensus. Such a consensus is persuasive because it is held to be more informative about reality than are competing views" (p. 272). Stated more simply, people listen to messages that are similar to their own viewpoints because they already deem that information more valid than groups that oppose their viewpoints.

The authors not only hypothesized that people are more persuaded by in-group messages, but also hypothesized that the more salient the group is for the audience's identity, the more persuasive the message will be. To test this hypothesis, they used an in-group and out-group persuasive message about brain damage. The participants were asked to identify how strongly they supported the group before exposure to the message. The authors found that messages were only persuasive for those who highly identified with the group. The message was not persuasive for in-group members who only slightly identified with the group.

In a second study, the authors tested the elaboration routes predicted by the ELM by testing the number of points that the audience was able to recall from in-group and out-group messages. A higher number of recalls would suggest that they centrally processed the message

and actively thought about the material. The researchers found that group members who highly identified with the group were able to recall the most points. Out-group members had lower recall rates, but the lowest recall rate was for group members who did not highly identify with the group. These results suggest that the ELM is not accurate in predicting peripheral processing of in-group messages—the in-group members processed the information centrally. However; the ELM accurately predicts how out-group members process the information.

Another study by Knippenberg, Lossie, and Wilke (1994) examined how the prototypicality of the person delivering the message influenced in-group members' attitudes. They used a prototypical member and a non-prototypical member to deliver a message about university entrance exams. These messages were given by both in-group and out-group members (university student and university student from a rival school). They found that students were more likely to conform to the in-group message attitude toward entrance exams. The participants were also more likely to rate prototypical messages as being higher quality than a-prototypical messages.

Exemplification and Persuasive Messages

Exemplification theory has also proven that exemplars can increase the persuasiveness of the message. Certain exemplar variables can augment the persuasive power of the exemplar. These include vividness, emotional appeal, identification, and others. Audience identification with an exemplar has the potential to increase the persuasiveness of the message being delivered. In persuasive narrative messages, identification with a character is considered a method for changing attitudes (Green, 2006; Slater & Rouner, 2002). Although exemplars in news stories are not necessarily intended to be persuasive messages, they have the potential to change attitudes through the content they present. Because of the low involvement cognitive heuristics

that are used to process exemplars, the content has the potential to impact attitudes on the issues presented in the message (Andsager, Bemker, Choi, & Torwel, 2006). Several studies have examined how identification with exemplars can impact the persuasiveness of the message (e.g., Andsager et al., 2006; Brosius, 1999; Hart & Nisbett, 2012).

A study conducted by Brosius (1999) was designed to determine why exemplars are more effective than base rate information. Although the cognitive heuristics were already known, Brosius added another element that could explain their effectiveness. He introduced Bandura's (1994) social learning theory as a possible explanation. This theory states that people see others' behaviors and potentially adopt these behaviors based on the outcomes that they see in the other people. If the person modeling the behavior has positive outcomes, then someone is more likely to adopt the behavior. Additionally, if the person modeling the behavior is perceived to be similar to the individual adopting the behavior, then behavior adoption is more likely to occur (Bandura, 1994).

Brosius postulated that exemplars exhibit this type of effect on viewers—people can relate to the exemplars in the news, and they thereby adopt the attitudes of the exemplars. He hypothesized that "exemplar effects are stronger with higher similarity between exemplars and recipients" (p. 216). To examine this hypothesis, exemplars were either crafted as students (in order to match the sample population of university students) and "pensioners." The author did not find any statistically significant link between a similar exemplar and increased message effectiveness.

However, as Andsager et al. (2006) note, this study had some methodological flaws that may have impeded the results. First of all, the study did not measure perceived similarity between the participant and the exemplar. Therefore, there was no way of knowing if the

participants actually identified with the exemplar or not—Brosius merely assumed that students will identify with a student exemplar. Andsager et al. extend the Brosius (1999) study by determining which types of exemplar traits are likely to cause perceived similarity between the audience and exemplar.

This study used college students for the sample population and binge drinking behavior messages as the messages to be evaluated. They predicted that an exemplar that is similar to the students in the study would increase the message's persuasiveness. Rather than just using a student that has similar demographics to the audience, they conducted a focus group to understand what characteristics and traits the sample population looked for in their peers. After conducting factor analysis, the traits of *fun, intelligence, maturity,* and *similarity to friends* were the most important for perceived similarity between audience and exemplars.

Messages were then constructed using the exemplar with and without the identified traits for experimental conditions. Participants were asked if they identified with the exemplars in both situations. Those who received the tailored exemplar were more likely to report perceived similarity. The exemplar that was tailored to have the identified traits had a more persuasive message than the exemplar without the tailored exemplar. This indicates that perceived similarity is an important component in crafting a persuasive exemplar.

Hart and Nisbett (2012) furthered research on identification with exemplars. While other studies aimed to simply see how positive identification with an exemplar caused support of the message, this study also aimed to see if negative perception of the exemplar caused a boomerang effect for the message. Two facets of identification with the exemplar were used: geographic location and political party.

The study was conducted by using an experimental design that varied the geographic location of the exemplars. By doing so, the authors aimed to understand how people process information about socially distant groups. The exemplars that were considered to have low social distance had a geographical location near the audience members. Exemplars with high social distance were those in distant geographic locations. The results showed that messages that portrayed a socially distant exemplar were likely to cause a boomerang effect for Republican participants. They were less likely to support climate change policies when exposed to highly social distant exemplars than they were if they received no message at all.

Study Context

For the context of this study, the groups are Republicans and Democrats. When speaking of a Democrat exemplar, Democrats are the in-group audience and Republicans are the out-group audience. Conversely, a Republican exemplar means that Republicans are the in-group and Democrats are the out-group.

The message that will be used is that of climate change. Climate change has become a politicized topic in the United States. According to a study done by McCright and Dunlap (2010), a majority of Democrats (68percent) believed that climate change was occurring due to manmade causes compared to only a minority of Republicans (42percent) who believed that climate change was occurring due to manmade causes. Additionally, Democrat politicians are more supportive of pro-climate change policy while Republican politicians are more supportive of policies that help the economy, regardless of climate effects.

Therefore, a counter-attitudinal message for a Republican exemplar will be one that mimics the Democrat stance of creating policies that help the environment and stating that climate change is a man-made problem that is occurring now. A counter-attitudinal message for

a Democrat exemplar will therefore be one that reflects the Republican stance by supporting economic growth over the environment because climate change is not a concern.

Research Questions/Hypotheses

As can be seen from the extensive research on exemplification and social identity theory, there are many possible outcomes for attitude change based on how a message is constructed. Both exemplification theory and social identity theory predict that identification will increase the persuasiveness of the message. In the case of social identity theory, the audience must identify with the exemplar on a group level for increased persuasion. The stronger the identification with the group, the more persuasive the message is. For exemplification theory, the exemplar in the story is who the audience must identify with for increased persuasion. Although both theories predict that identification increases persuasion, the theories differ on how people will respond to a counter-attitudinal message.

Based on exemplification theory, it can be predicted that the case of the exemplar will be projected on the larger whole. If the exemplar is a representative of a group, the audience will infer that the rest of the group has similar characteristics to the exemplar. Therefore, if the exemplar voices a counter-attitudinal message for the group he or she represents, then the audience will infer that all members of that group have the same attitude as the exemplar. The effects will differ for in-group or out-group members, based on social identity theory.

For in-group members, there are two potential outcomes. Either they will be aware that their current attitude does not match that of the group's and feel pressure to conform to the group's attitudes. They will then change their existing attitudes to match that of the group's in order to fit the group prototype. On the other hand, the group members might recognize that the exemplar is actually a group deviant. Based on the research about deviance, the group members

will have a highly negative opinion of the exemplar if they deem him as a deviant rather than a prototype of the group. Therefore, the counter-attitudinal exemplar may either persuade group members to change their existing attitudes towards the issue or it may cause the group members to reject the exemplar altogether and hold a highly negative opinion of him or her. Therefore, based on the different predictions from social identity theory and exemplification theory, our first research question is as follows:

Research Question I: Given a counter-attitudinal message, which is more influenced for in-group members: the attitude towards the exemplar or the attitude towards climate change?

> Research Question Ia: Given a Democrat exemplar voicing an anti-climate change message, will a Democrat be more likely to change attitude towards the exemplar or change attitude about climate change?
> Research Question Ib: Given a Republican exemplar voicing a pro-climate change message, will a Republican be more likely to change attitude towards the exemplar or change attitude about climate change?

Group members being exposed to counter-attitudinal out-group message will have differing reactions from in-group members. Again, exemplification theory predicts that they will project the exemplar's attitude to the rest of the group. However, the group in question is a relevant out-group rather than their own group. If the message is counter-attitudinal in the direction of the out-group's attitudes, then the out-group will have a higher evaluation of the exemplar. Deviant out-group members are closer to the in-group prototype, so the out-group is more likely to accept these deviant members and have a more positive evaluation of them. Deviant out-group members are more highly evaluated than deviant in-group members who have similar stances as the out-group members.

However, the counter-attitudinal message could also serve to further alienate the out-group members. Since social identity theory predicts that groups try to maximize the difference between in-group and out-group, a counter-attitudinal message might blur that line. If the

exemplar presents an attitude that is too close to the out-group's attitude, then the out-group member might try to increase the polarization between groups by adopting a contrasting or more extreme attitude (in the opposite direction of the exemplar). Again, because there are different potential outcomes based on the predictions of the theories, our second research question is as follows:

Research Question II: Given a counter-attitudinal exemplar, which will be more influenced for out-group members: the attitude towards the exemplar or the attitude towards climate change?

> Research Question IIa: Given a Republican exemplar voicing a pro-climate change message, will a Democrat be more likely to change attitude towards the exemplar or change attitude about climate change?
>
> Research Question IIb: Given a Democrat exemplar voicing an anti-climate change message, will a Republican be more likely to change attitude towards the exemplar or change attitude about climate change?

In the case of attitude congruent messages, the message effects are predictable based on past research in social identity theory. Prototypical in-group messages are the most persuasive messages, compared to deviant in-group messages and out-group messages. People favor the in-group over out-group messages because they want to maintain a positive social identity. Additionally, exemplification theory predicts that people will project the in-group exemplar attitude to the rest of the group. They will therefore conform to the attitude being presented in order to match the prototype of the group, based on social identity theory. Because these messages are prototypical of the group, there is no chance that the group members will perceive the information as deviant from the group's stance. Therefore, we can predict that an attitude congruent in-group message will strengthen the existing attitude of the in-group members. Our first hypothesis is therefore as follows:

Hypothesis I: Given an attitude congruent message, in-group member's attitudes towards climate change will be strengthened.

Hypothesis Ia: Given a Democrat giving a pro-climate change message, Democrats' attitudes towards climate change will be positively influenced (that is, they will more strongly believe that climate change is happening).

Hypothesis Ib: Given a Republican giving an anti-climate change message, Republicans' attitudes towards climate change will be positively influenced (that is, they will more strongly believe climate change is not happening).

On the other hand, attitude congruent messages from an out-group will serve to further polarize the groups. Because social identity theory predicts that groups try to maximize the distance between out-groups, a prototypical message from an out-group member will serve to reinforce the out-group's existing beliefs. They strive to maintain the distinct identity by being different from the out-group, so a prototypical message will help them draw the line between "us" and "them." Additionally, in-group members consistently favor in-groups over out-groups. Therefore, an attitude congruent message from an out-group exemplar will serve to reinforce existing attitudes. Therefore, our second hypothesis is as follows:

Hypothesis II: Given an attitude congruent message, out-group members' attitudes towards climate change will be strengthened.

Hypothesis IIa: Given a Republican voicing an anti-climate change message, Democrats' attitudes towards climate change will be positively influenced (that is, they will more strongly believe that climate change is happening).

Hypothesis IIb: Given a Democrat voicing an anti-climate change message, Republicans' attitudes towards climate change will be positively influenced (that is, they will more strongly believe climate change is not happening).

Figure 1 (page 45) illustrates the predicted outcomes based on counter-attitudinal and attitude congruent exemplars for both in- and out-groups.

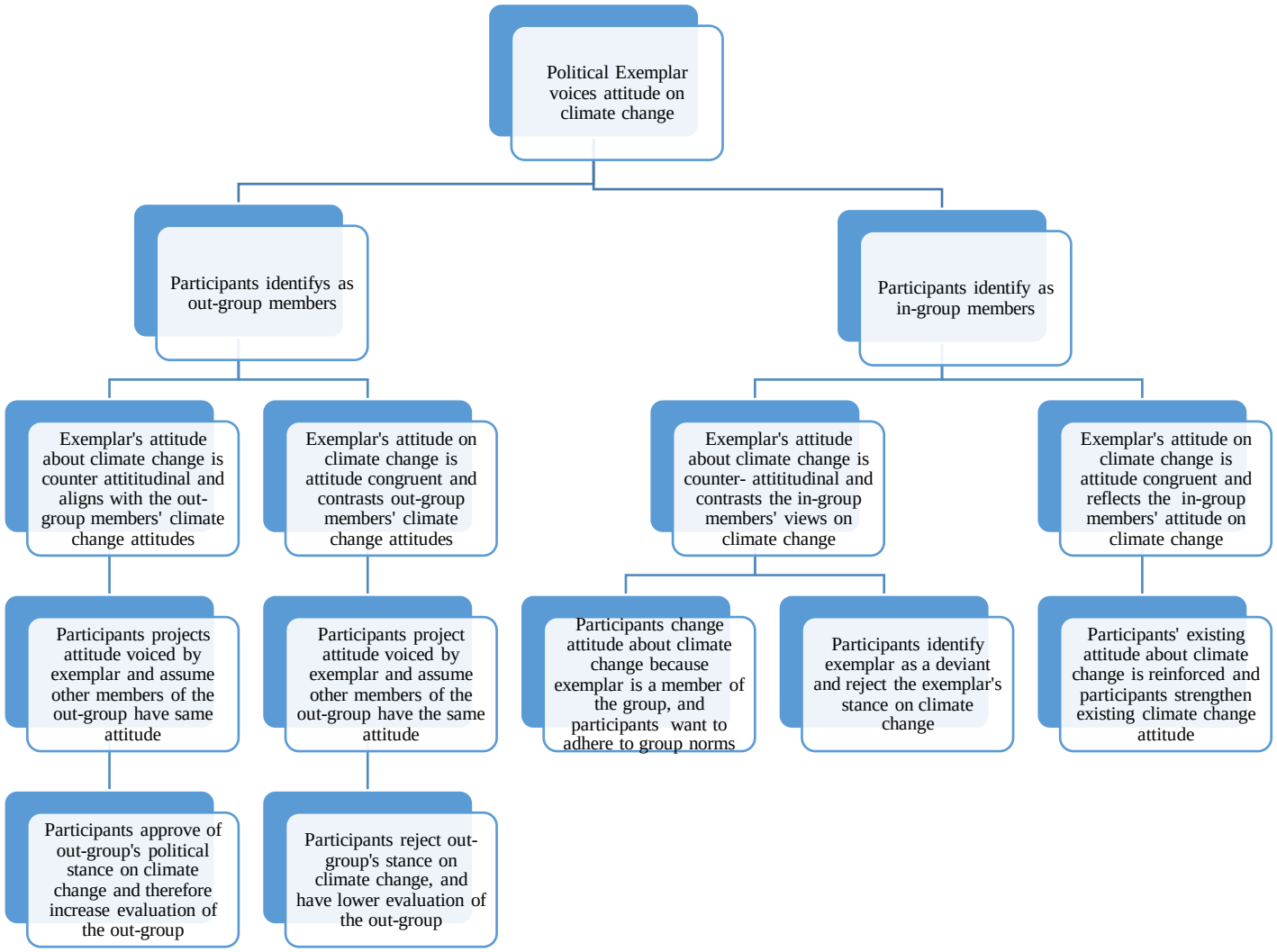

Figure 1: Possible outcomes for group members being exposed to in- or out-group messages from either attitude congruent or counter-attitudinal exemplars.

CHAPTER THREE: METHOD

Experimental Design

The method used a 2 x 2 x 2 factorial between subjects, fully counter balanced, experimental/quasi-experimental pre-test, post-test design.

The experimental design used three independent variables: political partisanship of the study participant (Democrat or Republican), political partisanship of the exemplar (Democrat or Republican), and the direction of the exemplar's opinion (either pro- or anti-climate change). The dependent variables were attitude change toward the exemplar and attitude change toward climate change.

Participants

Three hundred and twenty five students were sampled from the undergraduate class JMC 300. This course is required for all majors at Colorado State University's Fort Collins campus, therefore giving a wide variety of students to sample from. A total of 240 students were recruited in order to have 30 participants in each experimental condition. The participants received 5 extra class credits for their participation. Those opting out of the experiment received an alternate assignment to write a one-page essay about their attitude toward climate change for the same amount of class credit. Prior to passing out the tests, the four conditions for the experimental materials were randomly assigned to participants using a random numbers table. The questionnaire was administered in person during the class period to ensure maximum response rate. The questionnaire took about 15 minutes.

Demographics

The administration of the questionnaire yielded *N*=325 responses. There were slightly more male participants (*n*=167, 51.4 percent) than female participants (*n*=155, 47.7 percent). One participant (0.3percent) selected "Other" for gender, while two participants (0.6 percent) declined to answer.

A majority of participants (*n*=255, 78.5 percent) identified themselves as White/Caucasian. Other participants identified as Hispanic (*n*=16, 4.9 percent), Black/African American (*n*=5, 1.5 percent), Asian (*n*=8, 2.5 percent), Native American (*n*=1, 0.3 percent), and Two or More Races (*n*=35, 10.8 percent).

Over half of the participants (*n*=178, 54.8 percent) identified as Christian for religious identity. Other responses included Muslim (*n*=2, 0.6 percent), Jewish (*n*=6, 1.8 percent), Buddhist (*n*=8, 2.5 percent), other (*n*=11, 3.4 percent), and none (*n*=115, 35.4 percent).

Roughly one third of respondents (*n*=104, 32.0 percent) identified as not being registered to any political party, while 94 are registered as Democrats (28.9 percent), and 89 are registered as Republicans (27.4 percent). Other parties included Libertarian (*n*=13, 4.0 percent), and Green (*n*=1, 0.3 percent). Five (1.5 percent) respondents did not indicate their party registration.

An overwhelming majority of the respondents identified as being between 18 and 24 (*n*=306, 94.2 percent). Other age ranges included 25-34 (*n*=15, 4.6 percent), 35-44 (*n*=1, 0.3 percent), 45-54 (*n*=1, 0.3 percent), and 2 participants (0.6 percent) who did not indicate their age (Appendix E).

Condition Frequencies

The four conditions had a relatively equal distribution. Eighty-three participants (25.5 percent) received the article that featured a Democrat exemplar with a favorable message about

climate change, 85 participants (26.2 percent) received the article that featured a Democrat exemplar with an unfavorable message about climate change, 80 participants (24.6 percent) received an article that featured a Republican exemplar with the favorable message about climate change, and 77 participants (23.7 percent) received the article with a Republican exemplar and an unfavorable message about climate change.

Research Procedure

Students received two copies of the informed consent form (see Appendix A) which they read and signed. They kept one copy for their own records and returned the other to the researcher.

The experimental packet was then distributed. The packet contained three different sections—a pre-exposure questionnaire (Appendix B), stimulus article (Appendix C), and a post-exposure questionnaire (Appendix B). Students were instructed to fill out the packet in the order that the material appeared without going back to previous materials. The first page of the packet included the instructions for completing the experiment (Appendix B).

The entire packet was returned after they completed the whole procedure. To ensure that students received the extra credit for their participation, they wrote their names on the copy of the informed consent form that was returned to the researcher.

After all the participants finished the experiment, they were verbally debriefed following the script in Appendix D. They were told that the stimulus materials were manipulated for the experiment and that they received different versions of manipulated stories.

Stimuli

News stories were crafted to resemble an online news story from the Huffington Post. An online news source was chosen because 71 percent of younger adults (ages 18-29) cite online

sources as their primary source of news (Pew Research Center). Huffington Post was chosen as the outlet because it was one of the top five online news sources in 2015 (Pew Research Center).

Although there are eight experimental conditions, only four stimulus articles are needed due to the quasi-experimental design. The following four stimulus articles were created: an anti-climate change message with a Republican exemplar, an anti-climate change message with a Democrat exemplar, a pro-climate change message with a Republican exemplar, and a pro-climate change message with a Democrat exemplar (Appendix C).

The articles were modeled after actual Huffington Post articles about climate change. The advertisements, fonts, and design of the articles will be constant across all stimulus conditions. Although the students did not view the stimulus articles on a web browser, the print-out of the article looked as though it was directly printed from the web source.

Each article had roughly the same number of words: the pro-climate articles had 281 words while the anti-climate articles had 277 words. The titles were also similar for each article. The pro-climate article was titled, "Michael Bennet (or Cory Gardner) Promotes Climate Change Action" and the anti-climate article was titled, "Michael Bennet (or Cory Gardner) Opposes Climate Change Action." Each article had four paragraphs. The first paragraph talked about how Democrats or Republicans opposed or supported climate change. The next paragraph introduced the exemplars' stance and gave some quotes. The following paragraph detailed policies that the exemplar supported/ opposed, and finally the article concluded with a quote from the exemplar on why climate change action is or is not important.

The pro-climate change article contained the same content, except that the exemplar highlighted in one condition was the Republican exemplar and the exemplar highlighted in the also remained constant except for the names and party affiliation of the exemplars.

The content of the pro- and anti-climate change messages were not the same due to contrasting messages. However; the structure of the articles was held constant. Each article contained an opening line about the politician and his political affiliation. Then, the articles introduced the politicians' views on climate change. Each article gave the same number of quotes from each politician, including one about the politicians' ideas for climate change policies.

For the anti-climate change conditions, an article about Marco Rubio's (Republican) stance on climate change was manipulated. For the pro-climate change conditions, an article about Hillary Clinton's (Democrat) stance on climate change was manipulated. Other politicians' quotes about climate change were pulled in where necessary in order to keep the article structures equivalent across conditions.

Although the articles were modified from Hillary Clinton and Marco Rubio, these were not the exemplars that were chosen. These politicians were prominent in the media at the time of the experiment due to the 2016 presidential campaigns. Controversies and opinions about these politicians were likely to confound the manipulation of the experiment Therefore, less prominent and less controversial politicians, but nonetheless familiar to Colorado students, were chosen as the exemplars for the news stories. Colorado's U.S. senators were used as the exemplars (Republican: Cory Gardner, Democrat: Michael Bennet). Their names were inserted into the manipulated climate change articles.

Pre-test

A pre-test of the stimulus materials and questionnaires were given to a JMC 300 class of 20 students for extra credit. Those opting out of the pre-test received an alternate assignment of writing a one-page essay about their attitude toward climate change. The pre-test ensured that the

stimulus materials made sense to the participants and gauged the amount of time needed to complete the study. Additionally, the measures for the questionnaires were checked to make sure that they effectively measure the attitudes about climate change and partisanship.

Human Subjects Approval

Human subjects' approval was obtained through the IRB at Colorado State University before conducting both the pre-test and experiment. An informed consent form (Appendix A) was given to participants so that they understand what their participation entails. Participants will received two copies: one which signed and returned to the researcher, the other they kept for their own records.

Pre-Exposure Measures

The pre-stimulus questionnaire measured the participants' political partisanship in addition to their attitudes towards climate change.

Political Partisanship Measures

The first set of questions was adapted from Perloff's (1989) measures of ego-involvement. The questions were designed to measure how strong of a partisan the participant is. Each participant is asked to identify "me" on a scale of 0 to 100 for both Democrat and Republican (0 being not at all Democrat/Republican and 100 being extremely strong Republican or Democrat).

Next, questions will be used to measure the participants' attitudes towards the two political parties and the exemplars from those political parties. Questions measuring attitudes toward Democrats and Republicans as well as attitudes toward Cory Gardner and Michael Bennet were adapted from Christen and Huberty's (2007) study of third person perception and different political parties. The questions will be use 11-point Likert scales. These questions will

be used in order to measure the existing attitudes prior to administering the stimulus material. For example, one question that measures the participant's attitude toward the political parties is as follows:

> Would you say that you have a favorable or unfavorable attitude toward the Republican Party?
>
> -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5
>
> Very Unfavorable Attitude Toward Republican Party — Neutral Attitude — Very Favorable Attitude Toward Republican Party

The same questions are asked for Democrat party, Cory Gardner (Republican exemplar), and Michael Bennet (Democrat exemplar).

Climate Change Measures

The next set of questions measured the participants' attitudes about climate change. Questions for this section were adapted from the Gallup Poll's annual environment poll. The questions were taken from the climate change/global warming section of the poll, as there are other topics not relevant to this study also in the Gallup Poll. The questions used 11-point Likert scales. Questions were alternated between positive and negative phrasing about climate change so that participants weren't oriented in a pro- or anti- climate change mindset. An equal number of positive and negative worded questions were asked in alternating order. An example of the questions that were asked are as follows:

I never worry about climate change

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Strongly Disagree					Neutral					Strongly Agree

I worry about climate change often

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Strongly Disagree					Neutral					Strongly Agree

All questions were asked with 11-point scales (-5 being strongly disagree, 0 being neutral, and +5 being strongly agree).

Manipulation Check

To ensure that the stimulus material was effective, a manipulation check was used to confirm that participants perceived either the negative or positive coverage about climate change. The participants rated the coverage of climate change on a -5 (extremely unfavorable coverage) to +5 (extremely favorable coverage). An independent samples *t*-test was performed to compare the means of the participants who received positive articles (M=3.42, SD=1.76) and negative articles (M=-0.031, SD= 3.57). The result was statistically significant (t=11.02, p< 0.001), indicating that participants perceived the slant of the articles.

Reliability of Measures

A factor analysis and reliability check were performed in order to confirm that the 10 questions about climate change effectively measured the participants' climate change attitudes. Both factor analysis and reliability were performed for the participants' responses to the questions pre- and post-exposure. Factor analysis on the pre-exposure climate change questions showed that there was one factor with Eigenvalue=5.87 that accounted for 58.65 percent of the

variance. Cronbach's alpha was 0.92, indicating that the climate change measures were reliable. The post-exposure analysis revealed similar results, with one factor that had an Eigenvalue=6.16, and Cronbach's alpha of 0.93. A unidimensional scale for climate change was constructed using the ten questions that were derived from the Gallup Poll's (2015) Environmental Survey. The questions that were phrased negatively (i.e., "I do not believe in climate change") were coded to reflect the positive statement. For example, someone who responded +4 to a negative question would then have the variable as a -4 in order to reflect all positive questions. Once the variables were all re-coded, the average of the answers for the ten climate change questions was used as the participants' overall attitude toward climate change. Scales were constructed for attitudes both before and after exposure to the stimulus materials.

A reliability check was also performed for the political party measures. Unlike the climate change questions, the party measures were not reliable, with Cronbach's alpha=0.66.

Stimulus Exposure

The participants were asked to spend a few minutes to read the entire news story without looking back at the previous questions.

Dependent Variable Measurement

After being exposed to the news story, the participants were asked to answer the same questions that were on the pre-exposure questionnaire. The same questions were used to measure any attitude changes that occurred after being exposed to the stimulus materials.

Demographic Questions

The questionnaire ended with questions about general demographics, including: age, race, income, and political party membership. The political party question differed from the other

questions which ask the parties that the participants identify with, whereas this question asks which group they formally belong to.

Data Analysis

SPSS was used to enter and analyze the data to see if there were any significant changes after being exposed to the stimulus materials. The data was analyzed to determine if the participants had attitude change in regards to climate change and in regards to attitude toward the exemplar.

CHAPTER FOUR: RESULTS

Research Questions and Hypotheses

Research Question 1

This question sought to determine whether attitude toward exemplar or attitude about climate change is more influenced by a counter-attitudinal message from an in-group member (for both Republican and Democrat audiences)

New variables were computed to measure the gains score of the attitude change about climate change (post-exposure climate change scale value minus the pre-exposure climate change scale value) and gains score of the attitude change for attitude towards the exemplar (post-exposure attitude minus pre-exposure attitude). Gains scores were computed for both attitudes toward Cory Gardner and attitudes toward Michael Bennet. A variable was created that used the gains score for the exemplar that was used in the article that the participant received (rather than using two variables that looked at the change in attitude toward Michael Bennet and change in attitude toward Cory Gardner for all participants). This new variable would ensure that any changes in attitude toward the exemplar was based on the exemplar that the participants read about.

Simple linear regression analysis (Appendix G) was then performed using the gains scores as the dependent variable and independent variables of article slant (positive or negative climate change coverage), exemplar political party (Democrat or Republican), and political party of the participant.

Descriptive statistics of the gains scores for the Democrats receiving an anti-climate change message from a Democrat revealed a mean gains score of -2.47 (*SD*=1.50) for attitude change

about the exemplar (Table 1) and a mean gains score of +0.23 (*SD*=0.24) for attitude change about climate change (Table 2).

Descriptive statistics of the gains scores for the Republicans receiving pro-climate change message from a Republican exemplar revealed a mean gains score of +1.35 (*SD*=2.38) for exemplar attitude change, and a mean gains score of -0.08 (*SD*=0.57) for attitude change about climate change.

Linear regression analysis of between-subjects effects showed that none of the independent variables had a statistically significant effect on the attitude about climate change. Therefore, attitude about climate change was not significantly affected by exposure to the stimulus materials.

However, the independent variable of article slant had a statistically significant effect on the dependent variable of exemplar attitude change (F=45.19, $p < 0.001$). Additionally, exemplar attitude change was affected by the interaction effect between article slant and party of the participant (F=8.78, $p< 0.001$).

Given the larger absolute value of gains scores for exemplar attitude change and the statistically significant effects (article slant and article slant*participant party), the participants' attitudes toward the exemplar were more likely to be affected by the stimulus materials.

Post-hoc analysis was performed to compare the effects of attitude change for the different treatment groups, as well as look at differences between the exemplars individually. Univariate linear analysis was performed for the dependent variables of attitude change about Michael Bennet and Cory Gardner and attitude change about climate change. Bonferroni analysis of the data showed that there was no statistically significant differences between groups for attitude about climate change.

Bonferroni analysis for the attitude about exemplars, however, showed many statistically significant differences between groups (Appendix G). The differences reflect the main effect and interaction effects that were found—slant of the article affected attitude toward the exemplar, as well as slant and party of the participant affected the attitude change about the exemplar.

Table 1: Linear Regression Analysis of Gains Score for Attitude Toward Exemplar

Manipulation: Exemplar Party	Manipulation: Article Slant	Participant Party ID	Mean	Std. Deviation	*n*
Democrat	Pro	Democrat	1.82	1.57	33
		Republican	0.10	1.94	20
		Independent	1.61	2.17	18
		Other	1.40	1.67	5
		None	-0.43	1.62	7
	Con	Democrat	-2.47	1.50	17
		Republican	-0.22	1.73	23
		Independent	-1.56	2.21	27
		Other	-.020	0.84	5
		None	-1.58	2.02	12
Republican	Pro	Democrat	1.65	1.63	20
		Republican	1.35	2.38	26
		Independent	0.92	1.66	25
		Other	0.00	.	1
		None	2.17	3.92	6
	Con	Democrat	-2.35	1.62	31
		Republican	-0.21	1.36	19
		Independent	-1.29	2.00	17
		Other	0.00	0.00	2
		None	-1.29	1.38	7

Results of the simple linear regression analysis using the gains scores of attitude change toward exemplar as the dependent variable and exemplar party, article slant, and participant party identification as the independent variables. Gains scores are calculated as attitude before exposure to article minus the attitude after exposure to article (on an 11 point scale)

Table 2: Linear Regression Analysis of Gains Score for Climate Change Attitude Change

Manipulation: Exemplar Party	Manipulation: Article Slant	Participant Party ID	Mean	Std. Deviation	*n*
Democrat	Pro	Democrat	-0.04	0.56	33
		Republican	-0.03	0.63	20
		Independent	-0.03	0.62	17
		Other	0.18	0.23	5
		None	0.00	0.82	6
	Con	Democrat	0.23	0.24	17
		Republican	0.08	0.60	23
		Independent	-0.17	0.51	27
		Other	-0.14	0.18	5
		None	-0.08	0.57	12
Republican	Pro	Democrat	-0.03	0.36	20
		Republican	-0.08	0.57	26
		Independent	0.18	0.96	23
		Other	0.00		
		None	-0.13	0.47	6
	Con	Democrat	0.02	0.37	30
		Republican	0.01	0.82	19
		Independent	0.03	0.31	17
		Other	0.05	0.35	2
		None	0.04	0.49	7

Results of the simple linear regression analysis using the gains scores of climate change attitude change as the dependent variable and exemplar party, article slant, and participant party identification as the independent variables. Gains scores are calculated as attitude before exposure to article minus the attitude after exposure to article (on an 11 point scale)

Research Question 2

This question sought to determine whether attitude toward exemplar or attitude about climate change is more influenced by a counter-attitudinal message from an out-group member (for both Republican and Democrat audiences)

Linear regression analysis was performed using the same method for RQ1. Descriptive statistics of the gains scores for the Democrats receiving a pro-climate change message from a Republican exemplar revealed a mean gains score of +1.65 (*SD*=1.63) for attitude change about the exemplar and a mean gains score of -0.04 (*SD*=0.36) for attitude change about climate change.

Descriptive statistics of the gains scores for the Republicans receiving anti-climate change message from a Democrat exemplar revealed a mean gains score of -0.22 (*SD*=1.73) for exemplar attitude change, and a mean gains score of +0.08 (*SD*=0.60) for attitude change about climate change.

Linear regression analysis tests of between-subjects effects showed that none of the independent variables had a statistically significant effect on the attitude about climate change. However, the independent variable of article slant had a statistically significant effect on the change in attitude about the exemplar (F=45.19, $p < 0.001$). Additionally, exemplar attitude was affected by the interaction effect with the variables for article slant and party of the participant (F=8.78, $p< 0.001$).

Hypothesis I

This hypothesis predicted that an attitude congruent message given by an in-group exemplar would strengthen the group members' attitudes on the issue (i.e., a Republican audience receiving an anti-climate change message from a Republican exemplar would more

strongly believe that climate change is not happening and a Democrat audience receiving a pro-climate change message from a Democrat exemplar would more strongly believe that climate change is happening).

Linear regression analysis was performed on the gains score for the dependent variable of climate change attitudes, independent variables of exemplar party, article slant, and party of the participant. Analysis revealed that none of the independent variables had any significant effects on the climate change attitude change. No interaction effects were found. Hypothesis I was not supported.

Descriptive statistics revealed that Democrats receiving a pro-climate change message from a Democrat exemplar had a mean attitude change of +0.04 (*SD*=0.56). Republicans receiving an anti-climate change message from a Republican exemplar had a mean change of -0.01 (*SD*=0.82). Hypothesis I was not supported.

Hypothesis II

This hypothesis predicted that an attitude congruent message given by an out-group exemplar would strengthen the group members' attitudes on the issue (i.e., a Democrat audience receiving an anti-climate change message from a Republican exemplar would more strongly believe that climate change is happening and a Republican audience receiving a pro-climate change message from a Democrat exemplar would more strongly believe that climate change is not happening).

Linear regression analysis was performed on the gains score for the dependent variable of climate change attitudes, independent variables of exemplar party, article slant, and party of the participant. Analysis revealed that none of the independent variables had any significant effects on the climate change attitude change. No interaction effects were found.

Attitude change about climate change was not statistically significant. However, descriptive statistics showed that Democrats receiving pro-climate change messages from a Republican exemplar had a mean gains score of +0.023 (*SD*=0.37) and Republicans receiving pro-climate change messages from a Democrat exemplar had a mean gains score of -0.04 (*SD*=0.63). Hypothesis II was not supported.

CHAPTER FIVE: DISCUSSION

The purpose of this study was to examine how attitude congruent and counter-attitudinal exemplars could influence the attitudes of group members. Specifically, this study proposed that exemplification theory and social identity theory worked together in order to influence group members' attitudes on an issue. This study used Democrat and Republicans as the groups, and climate change as the issue.

This study proposed that both counter-attitudinal and attitude congruent exemplars would influence the attitudes of the in-group, as well as influence the attitude of the out-group. Not only would the participants change their attitudes about climate change, they would also change their attitude about the group that the exemplars represent.

The mechanism of attitude change was predicted to vary, depending on if the exemplar was attitude congruent or counter-attitudinal, and if the person viewing the message was an in-group or out-group member of the exemplar's political party. Figure 1 (page 45) represents the predicted outcomes of viewing either in- or out-group exemplars, with either attitude congruent or counter-attitudinal climate change attitudes.

Summary of Significant Findings

The attitude change about the exemplar was statistically significant. The slant had a statistically significant effect on attitude for both Republican and Democrat exemplars, across all conditions (pro- and anti- climate change, Republican and Democrat participants). The greatest change in attitude toward the exemplars was for the Democrat participants who received the article with the anti-climate change Democrat exemplar (M= -2.47, SD=1.50). These participants had an overall significantly lower attitude toward the exemplar in the article. On the other hand,

the group with the least amount of attitude change was the Republicans that received a pro-climate change article from the Democrat exemplar (M= 0.10, SD=1.94).

The data did not support either of the proposed hypotheses. Attitudes about climate change were not strengthened when participants received a message that was attitude congruent from an in-group exemplar, nor were the attitudes strengthened when participants received an attitude congruent message from an out-group exemplar. Additionally, climate change attitudes were not significantly influenced by any type of exemplar or message slant, indicating that climate change attitudes are not likely to be significantly influenced for this particular group of participants.

Because there was not a statistically significant change in climate change attitude for any condition, but there was a statistically significant difference for attitude change about the exemplar, both research questions can be answered. Attitudes about the exemplar are more likely to change than the attitudes about the issue of climate change. However, the exemplar himself is not necessarily the cause of the attitude change. In the case of Michael Bennet, attitudes about him are likely to be influenced by the slant of the article, rather than by him.

In addition to the slant of the article having a main effect on exemplar attitude change, there was also an interaction effect of article slant and the party of the participant.

Theoretical Implications

The original purpose of this study was to better understand how exemplification and social identity theories could work in tandem to influence attitudes on an issue. Theoretically, an audience member could view a message that is given by a member of their group and cause the viewer to identify with the exemplar (Andsager et al., 2006). Because of the identification with the exemplar, the viewer might then be influenced about the topic that the exemplar is giving a

message about (whether the exemplar's attitudes were attitude congruent or counter-attitudinal for the viewer).

On the other hand, if the exemplar was part of an out-group, the attitudes would be influenced differently. If the exemplar voiced an attitude that was congruent with the out-group viewer's point of view, then perhaps the out-group member would have a better view of the exemplar and more accepting of the out-group itself. Additionally, if the out-group exemplar voiced an attitude that was congruent with the group that the exemplar represents, then the out-group viewer would strengthen their existing attitudes and further distance themselves from the out-group (Hart & Nisbett, 2012) (see Figure 1 for illustration of possible outcomes).

This study found that the attitudes toward the exemplar were more influenced than the attitudes toward climate change. Climate change attitudes were not significantly changed, regardless of the manipulated condition that the participants were in. However, the slant of the news article had a statistically significant effect on all participants, in addition to an interaction effect of the slant of the news article and the political party of the participants. Theoretical implications can be drawn from all three of these results, even though they were not the results that were predicted.

Climate Change Attitude Change Implications

The participants had no change in attitude about climate change, regardless of the political identification of the exemplar or the participants and regardless of the pro- or con-message. This lack of attitude change on the issue has several possible implications.

An overwhelming majority of the participants for this study believed in climate change (85 percent). This study assumed that there is a partisan split in views on the issue—Republicans do not believe in climate change, and Democrats do believe in climate change (thus giving a

roughly 50/50 split for participants). However, that was not the case for the participants of this study. Therefore, the counter-attitudinal and attitude congruent exemplars that were assumed for the Republicans did not hold true, and the predicted attitude change would not be observed because the exemplars did not reflect the true attitudes of the participants.

The lack of attitude change on climate change is reasonable for Republican participants, because the Republican exemplar's attitudes were not representative of the participants' views on climate change. However, the lack of attitude change for Democrat participants cannot be explained by unrepresentative exemplars. Because the majority of the Democrat participants believe in climate change, a Democrat exemplar that supports climate change is attitude congruent and a Democrat exemplar that does not support climate change is counter-attitudinal (fitting with the study design).

Therefore, the lack of attitude change for Democrat participants could be due to the fact that the participants had strongly held beliefs about climate change. Climate change is quite a salient topic, particularly at the time this study was conducted. The 2016 presidential campaign was ongoing, with climate change as a topic of importance for the candidates. The Democrat candidate Hillary Clinton had a plan that was pro-climate change, while the Republican candidate Donald Trump stated that climate change was a hoax (Schwartz & Schlossberg, 2016). Study participants may have had exposure to the campaign prior to the study, and may have deep-seeded opinions on the matter. Because they have been exposed to Democrat exemplars with pro-climate stances, they may have seen the anti-climate change Democrat exemplar and realized that he is not representative of the group.

Exemplification theory's representativeness heuristic (Zillmann & Brosius, 2000) can explain the lack of attitude change for the Democrat participants that received the Democrat anti-

climate change article. Exemplification theory states that people draw upon exemplars to make judgments about larger phenomena (Brosius & Bathelt, 1994). Only the exemplars that are readily available in their mind are the ones that are used to make judgments (Zillmann, 2002). The representativeness heuristic states that people call upon the attributes of other exemplars that they have viewed in the past (in this case, the exemplar is a Democrat politician). They examine the qualities of the exemplars, and form a generalized model of the larger group (all Democrat politicians) (Zillmann, 2006). If the majority of Democrat politicians that the participants were exposed to are pro-climate change, then the anti-climate change Democrat exemplar is less likely to be called upon when making judgments about the larger group. Therefore, the anti-climate change Democrat exemplar was not influential enough to cause attitude change for Democrat participants. Perhaps if the audience had exposure to many different anti-climate change Democrat exemplars, then attitude change would be more likely to occur.

Another potential cause of the lack of attitude change could be that the participants did not identify with the exemplar, thus eliminating the persuasive effects of social identity theory. Members of groups act in accordance with a group when it is one that they identify with strongly (Hogg & Abrams, 1988). Additionally, prototypical members of the group are the ones that are more likely to be highly regarded by the group members, and thus be more influential on the members' attitudes (Hogg & Terry, 2000). Although the participants may have the political party in common with the exemplar, the exemplar may not be similar enough to the participants to cause an identification effect. The participants may not identify with the exemplar because the exemplar has a contrasting viewpoint. Therefore, the effects of identification will be lost and there may not be any attitude change.

Exemplification theory research has mixed results on identification and attitude change. Andsager et al. (2006) crafted exemplars to match college students and conducted studies on drinking behaviors. College students were more likely to change their attitudes about drinking when an exemplar similar to them was used. Hart and Nisbett (2012) conducted research about identification with political parties, geographic locations, and how the two could influence climate change attitudes. Contrasting with this study, they found that participants' attitudes toward climate change were influenced by political exemplars from an in-group and were geographically close to the participants. On the other hand, Brosius (1999) conducted a similar study with students and pensioners, and did not find that students were more influenced by student exemplars.

Although participants may have identified with a specific political group, it may not be a salient group that would have affected their beliefs about a given issue. For example, although they identified as Democrat, there may be some other group that they identified with more strongly (such as an environmentalist) that prevented them from changing their attitudes about climate change. Social identity theory does not limit people to one group—people are members of multiple groups, and they choose when to use their group membership as a deciding factor based on different situations (Ashforth & Mael, 1989). The participants also may have identified more strongly with an exemplar based on their beliefs about climate change than their political group. Therefore, those who were pro-climate change may have identified more strongly with an out-group member who was also pro-climate change.

This study predicted that participants would identify with the exemplar based on group membership and project the attitude of the exemplar onto the attitudes of others within that group (based on a combination of exemplification theory and social identity theory). Although climate

change attitude change does not support this phenomenon, a combination of social identity theory and exemplification theory may have occurred. The group members that received the counter-attitudinal messages may have identified with the exemplar and projected the attitudes exemplified in the message to others within the participants' in-group. However, the participants may have perceived that others in the group held these attitudes but they themselves did not alter their own (due to reasons such as topic salience, strongly held beliefs, other salient group membership, etc.). Third-person effect (Davison, 1983) may have caused these participants to not alter their own beliefs—the participants may have believed that others in their political group were affected by the message, but they themselves were not.

On the other hand, perhaps the group members did not think that the exemplar was representative of the group at all. The research on social identity theory has shown that group deviants are perceived very negatively because they threaten the identity of the group (Marques & Paez, 1994; Abrams, Marques, Bown & Henson, 2000). Social identity theory states that groups maintain a distinct identity by maximizing the distance from out-groups (Hogg & Terry, 2000). Therefore, any group member that has characteristics similar to out-group characteristics threaten the identity of the in-group. These group members that are similar to out-group members are viewed negatively and are not typically influential members of the group, except as an example of how not to behave (Hogg, Fielding, & Darley, 2005). The Democrat participants who received an anti-climate change message from the Democrat exemplar may have recognized that the Democrat exemplar's attitude was deviant from the group, and therefore rejected this exemplar and what he had to say about climate change. Democrat participants may have had a negative view of the counter-attitudinal Democrat exemplar (thereby explaining the attitude

change about him as an exemplar) and would also discard his climate change message (thus explaining the lack of climate change attitude change).

Exemplar Attitude Change Implications

Although some of the effects are unclear because of the audience's pre-existing climate change attitudes, there are still some conclusions that can be drawn from this research. For one, people are willing to change their attitudes about representatives from in-groups and out-groups. This research showed that people of both parties had significant attitude change about Democrat and Republican exemplars, depending on the slant of the article.

Aspects of both theories are used in order for the Democrat participants to reject the anti-climate change Democrat exemplar. First, the representativeness heuristic (Tversky & Kahneman, 1982) is used when making the judgment that the anti-climate change message is not typical for Democrat politicians. The Democrat participants compared the exemplar from the study to other Democrat exemplars. Exemplification theory states that people use qualities that are frequently exemplified to make judgments about the larger whole (Brosius & Bathelt, 1994). If the participants have viewed more media that ascribes pro-climate change qualities to Democrat politicians, then the participants would be more likely to use these qualities to judge the exemplar in the study. After realizing that most Democrat politicians are pro-climate, then the Democrat participants would realize that this exemplar was not typical of the Democrat party. The participants would then analyze the information through the lens of social identity theory. As being members of the Democrat party, social identity theory predicts that they want to maintain a positive group identification, and therefore distance themselves from other political groups (Hogg & Abrams, 1988). An anti-climate Democrat politician blurs the line between Democrat and Republican. Social comparison states that in-group members will analyze qualities

of the in-group and out-group to make judgments about other group members (Turner, 1982). When realizing that the anti-climate change Democrat exemplar is not typical, the Democrat participants rejected the counter-attitudinal Democrat exemplar and viewed him as a deviant. Based on the black sheep hypothesis (Marques & Paez, 1994), deviants are outcasts and are negatively evaluated by their group peers. Therefore, through exemplification theory's representativeness heuristic and social identity's social comparison, both theories are in fact used in order to reject the counter-attitudinal exemplar, rather than to accept him.

Also supporting the social identity theory approach is that Democrats had a higher evaluation of the Republican exemplar that had a similar climate change attitude. This again supports the notion of social comparison (Hogg & Terry, 2000) for the exemplar. The Democrat viewers saw the pro-climate Republican exemplar and compared his attitudes to their own. The Democrat participants may have realized that the counter-attitudinal Republican exemplar has a similar attitude and they therefore evaluated him more positively. If exemplification theory held true for this research, then the Democrat participants' attitude change would be taken one step further. They would then project the Republican exemplar's pro-climate change stance onto all other Republicans, resulting in a more positive evaluation of the Republican group as a whole.

However, this phenomenon did not occur. When looking at the attitude change of Democrats who received the pro-climate change message from a Republican exemplar, there was no significant change in attitude toward the Republican Party as a whole. This result therefore suggests that the Democrat participants did not project the attitudes of the exemplar onto the group as whole. Therefore, the attitude change was limited to just the exemplar, suggesting that exemplification theory does not affect the attitudes toward the larger population with this particular issue. However, the representativeness heuristic again may have impacted how

participants projected attitudes onto other groups (Tversky & Kahneman, 1982). If Republicans are frequently portrayed as being anti-climate change in the popular media, then participants are less likely to use the counter-attitudinal exemplar in making judgments about the larger population. Therefore, the representativeness heuristic prevents the counter-attitudinal exemplar from influencing attitudes on the topic.

On the other hand, the Republican participants showed that the representativeness heuristic does not influence how Republicans judge a pro-climate Republican exemplar. A majority of the Republican participants believed in climate change. When presented with the counter-attitudinal exemplar (in the case of the Republicans, the pro-climate change message from Republican exemplar), the Republican participants had a higher evaluation of him. This suggests that they viewed the pro-climate change message from the Republican exemplar, compared it to their own climate change attitudes, and realized that the exemplar had a similar attitude. The Republican participants then had a more positive evaluation of the pro-climate Republican exemplar because his climate change attitude matched the participants' climate change attitudes. The Republican participants did not use the representativeness heuristic to realize that their own views were not typical of other Republican exemplars. Perhaps in this case, the representativeness heuristic was overridden by the participants' own views on the subject. Since these participants would normally be considered group deviants, perhaps their own interests in changing the stances of the group trumped the representativeness heuristic's part in judging the exemplar. They were pro-climate change Republicans, and they wanted the rest of the Republican Party to become pro-climate change. They therefore had a higher opinion of the Republican exemplar when he was similar to them.

Likewise, the Republican participants had a negative evaluation of the anti-climate change Republican exemplar, again suggesting that the representativeness heuristic was not used to judge other Republican exemplars. This begs the question—how do deviant group members judge deviant and prototypical exemplars? Prior research on judgment of deviant group members (Marques & Paez, 1994; Abrams et al., 2000) has been done through the lens of typical group members (i.e., the researchers examine how typical group members evaluate a deviant group member). This present study has unintentionally used deviant Republicans to examine prototypical and deviant exemplars. Based on the attitudes towards the exemplars, deviant group members positively evaluate counter-attitudinal exemplars, and negatively evaluate prototypical members.

Perhaps more research needs to be done to examine how marginalized/ deviant members of groups evaluate both deviant and prototypical members. These studies could add to social identity theory by examining how marginal group members have the potential to shape the main identity of a group. As it stands, social identity theory states that group members who feel marginalized may leave the group for a different group, or use identity management strategies to validate their reasons for staying in the group (Tajfel & Turner, 1979). A new identity management strategy could be possible if group members find that there are others within the group that are similar to themselves. Group members feel validated by having a consensus on the moral ways to behave according to group norms (Hogg & Terry, 2000). Therefore, it would stand to reason that group deviants also want to feel validated for their attitudes on issues pertinent to the group. Deviant group members may evaluate the number of other deviants like themselves to justify their group membership before they abandon the group for a competing one. Based on this study, group deviants have higher evaluations of other group deviants, which

could be part of an identity management strategy used to validate their group membership. If these group members realize that they are not alone in their decision to stay within the group even though they are not the typical member, then perhaps social identity theory needs to examine how deviant exemplars can increase group members' approval of the group.

Interaction Effect Implications

In addition to a main effect of article slant, there was also an interaction effect between the article slant and the participants' political identity. This interaction effect could potentially be explained by social identity theory. Participants that identified with the political party of the exemplar had larger attitude changes than those who did not identify with the exemplar (for the pro- article, they had a larger positive evaluation of the exemplar, and in the anti- article, they had a more negative evaluation of the exemplar).

The participants that identify with the exemplar change their evaluation of him based on the slant of the article because he is a representative of the group. If the exemplar's viewpoints are representative of the participants' viewpoints, they will have a higher evaluation. Conversely, if they are not representative of the participants' viewpoints, they will have a lower evaluation of him. However, those who do not identify with the exemplar are less likely to have attitude change because he is not a representative of the group. He does not give a positive or negative image of the participant's group, so they do not care as much about him as they would an exemplar that is part of their political identity (Ellemers & Haslam, 2006).

Social identity theory predicts that people try to maintain a positive evaluation of the groups they belong to. Members that represent the group negatively challenge the positive evaluation of a group. Therefore, the participants that received a message that they disagreed with from a member of their in-group had a negative evaluation of the in-group exemplar. The

exemplar did not represent the beliefs of the participants, and therefore was not thought of highly by the participants (Hogg & Reid, 2006). On the other hand, if the exemplar represented the viewpoints of the participants, he promoted the positive evaluation of the group. The interaction effect also supports the notion of group deviants and prototypical members.

Previous research on deviant group members has shown that in-group members have more negative evaluations of deviant in-group members than prototypical out-group members (i.e., a Democrat will more negatively evaluate an anti-climate change Democrat than an anti-climate change Republican) (Marques & Paez, 1994; Abrams, Marques, Bown & Henson, 2000). However, this study does not support that research. Although deviant in-group exemplars were very negatively evaluated, there is no statistically significant difference between proto-typical out-group exemplars. Therefore, the participants of this study had very negative evaluations of exemplars that were anti-climate change, regardless of political affiliation. Conversely, participants had highly positive evaluations of pro-climate change exemplars, regardless of political affiliation. This result is reasonable, given the fact that 85 percent of the participants believed that climate change is happening. However, the interaction effect shows that participants of the group had greater attitude changes than those who were not in the group being represented.

In sum, the two theories may have worked as predicted when looking solely at the Democrat participants. The Democrat participants used the representativeness heuristic from exemplification theory to examine the exemplars and compare them to group prototypes from social identity theory. Although this is not the exact mechanism that was predicted in the literature review, it could be the way that the Democrat participants analyzed the exemplars.

However, the Republican participants were mostly deviants in that they were pro-climate change. This deviant group of Republicans may have uncovered a new way of examining how exemplification theory and social identity theory work in tandem in order to improve deviant group members' approval of the group. More research needs to be conducted in order to determine if a new identity management strategy could be used to maintain deviant group members' membership within the group.

Practical Implications

This study offers up several practical implications for creating messages about climate change, as well as a few implications for changing attitudes about a given individual. The results from this study are not generalizable because the population was a convenience sample of college students (primarily ages 18-24), but the implications can be extended to for those looking to craft climate change or political messages.

This study found that a large majority of college students believes that climate change is happening. These climate change beliefs are also strongly held and are not likely to be changed by a single message about climate change. Therefore, climate change messages targeted toward 18-24 year olds are not likely to influence their beliefs. Politicians that are catering to this age group are better off finding a different issue if they want to change this group's attitudes.

However, this study shows that while attitudes about climate change are not easily changed, the attitudes about the person delivering the message are easily changed. Regardless of the political affiliation of the exemplar, a pro-climate change message resulted in a significantly higher evaluation of him by Republican and Democrat participants alike. Therefore, if a public figure or politician is trying to cater to the 18-24 demographic, he or she can bolster his image by using a pro-climate change message. Conversely, politicians and public figures should stay away

from broadcasting anti-climate change messages if they want to maintain a positive image with 18-24 year olds.

Another possible implication from this research is that people do not necessarily infer that political exemplars are representative of their party. If a message creator is trying to influence a specific political audience, simply using a representative from the audience's political group is not enough. The representative is more likely to gain support if his or her messages align with those in the group. When creating political messages, the message creators should conduct research to better understand the specific audience's viewpoints on a given issue to ensure that the participants will receive it well.

Lastly, this study has important implications for deviant group members' group membership. Deviant Republicans that were pro-climate change had highly positive evaluations of the pro-climate change Republican exemplars and highly negative evaluations of the anti-climate change Republican exemplars. In order to maintain high evaluations of the group, groups can cater to the marginalized and deviant members to help the group members feel more included in the group. On the other hand, always using prototypical exemplars may serve to distance the deviant members, which could ultimately end up losing their group membership.

Conversely, the results from the Republican deviants could also imply that the Democrat Party could increase its group membership from the Republican deviants. The Republican deviants had high evaluations of the Democrat exemplars that were pro-climate change, and low evaluations of the Republican exemplars that were anti-climate change. If the group deviants are consistently exposed to messages that reinforce the group prototypes, then they may leave the Republican Party for the Democrat Party because they have values that are more in line with the

deviants' values. Therefore, competing groups could grow their group membership by reaching out to deviant members of other groups.

Study Limitations

A major limitation for this study was the lack of a partisan divide on the issue of climate change. For this study to be carried out as designed, a different issue or a different audience needs to be used. Because there was not a partisan divide on the issue of climate change with this group of participants, the true effects of using counter-attitudinal messages with polarized groups made the observation of significant effects less likely. For future research, participants could be recruited by using a screener question to ensure that they have a polarized view of climate change.

The participants were also a limitation because they were a non-random sample. All of the participants were college students, and therefore were likely to have different attitudes and opinions about the topic than would a general audience. The attitude change may also be different for a wider population. In order to study a wider population in the future, participants should be recruited from a random sample rather than a convenience sample of college students.

Additionally, the population is limited geographically. Because the students all attend Colorado State University, their attitudes and opinions are reflective of the state of Colorado. Colorado has a higher percentage of individuals who believe in climate change than the national average (Yale Project on Climate Change Communication). Therefore, the results of the study do not necessarily reflect how the rest of the United States would respond to the study. Future research would also need to recruit nationally rather than in one location in order to overcome this limitation.

One limitation in the study design is the pre-test/ post-test design. Participants completed a questionnaire prior to reading the article and then took the same questionnaire after reading the article (within the same 15 minute sitting). Because there was very little time between taking the pre- and post-tests, participants may have recalled the answers to the pre-test and used the same ones for the post-test. Additionally, some participants may have gone back to the pre-test and changed answers after reading the article (although they were instructed not to). Participants may have been more likely to have attitude change if they had time between pre- and post-exposure. They would be less likely to recall the questions they answered for the pre-exposure if there was a longer period of time between questionnaires. Therefore, they may have been more likely to have different responses on the post-exposure questionnaire. In order to overcome this limitation, a future study could be designed where the pre- and post- exposure questionnaires are distributed on two separate meetings, perhaps a week apart. This way, the participants may not try to answer the same on both questionnaires.

The manipulated articles could also be a limitation. Because Gardner and Bennet are senators for the state of Colorado, some of the students may already be familiar with their stances on climate change. Therefore, they may have recognized that the articles are false and their answers to the questions may not represent any change in attitude that may have occurred. Using exemplars that are lesser known in the future could help overcome this limitation, but it may also present another problem. Participants may be less likely to change their attitudes if the exemplar is someone that is not of importance to their group membership.

Inherent in any social experiment is the artificial setting in which it takes place. People do not usually read news articles about climate change and have immediate change in attitude about it. Changes in attitude occur over time, and are the result of multiple exposures to messages.

Using one single article in a fifteen minute experiment is not likely to accurately capture how attitude change occurs in natural settings.

The manipulated slant of the article is another item that may have limited the results of this study. Participants perceived the coverage of the pro-climate change article to be highly pro-climate change (M=3.42 on a scale of -5 to +5), while the coverage of the anti-climate change was only slightly negative (M= -0.031 on a scale of -5 to +5). Although the anti-climate change article was perceived as being negative, it was not as not as drastic as the pro-climate change article. The difference in the slant perception could have caused there to be some differences in the responses about climate change. Any future research could craft more negative articles so that the slant is perceived more negatively. The researchers would need to work closely with the pre-test study group in order to come up with an article that has a more polarized stance on climate change.

Future Research

Future research needs to be conducted to determine how counter-attitudinal messages are processed through the combination of exemplification and social identity theories. The main shortcoming of this present study was the lack of a partisan divide on climate change. Because of the lack of partisan divide, the researcher could not come up with adequate explanation of how partisans process counter-attitudinal and prototypical information from in-group and out-group members.

Going forward, more in-depth background research needs to be conducted about the study population in order to determine that the issue being used for the manipulation is indeed partisan between two groups. In order to ensure that there is a partisan divide on the issue, filter questions could be used to select participants to fit the needs of the study.

Another problem with this study was that climate change attitudes were not influenced at all by the exemplar. A potential cause of this is because the topic is salient in the news right now, so people may have stronger attitudes about this particular issue. To conduct further research on counter-attitudinal and attitude congruent messages, it would be interesting to look into how attitudes are affected by salient and less salient issues. To do this, different partisan topics could be selected based on current news coverage. A range of salient to less salient topics could be selected. The study could then examine how attitudes change based on an attitude congruent and counter-attitudinal message on topics ranging in salience. Perhaps less salient topics are more easily influenced by either attitude congruent or counter-attitudinal exemplars from in- or out-groups. If so, the effects of attitude change could help better illuminate how social identity theory and exemplification theory work together.

Future studies could also examine the effect of exemplification theory and social identity theory by using different groups (rather than political parties). People belong to different groups that have different influences on their beliefs. Therefore, a study could examine the effect of these two theories by examining how the different groups affect a given issue specific to the type of group. Perhaps social identity theory and exemplification theory have a higher effect when examining groups such as race, religion, or economic class (among countless other options for groups).

Identification with the group could also be examined. Some participants may identify more strongly with a group than others. Using the group identification strength as a variable, future researchers could examine how attitudes about an issue and about groups change depending on the participants' identification with the group. This study could again use attitude

congruent and counter-attitudinal exemplars from in-groups and out-groups to examine attitude change on the issue and the group.

Perhaps a more tailored and targeted exemplar could be crafted to improve the identification effect. Although the exemplars' political parties were supposed to be the identification factor for political partisans, the exemplar himself may not be close enough to the population of the study for there to be social identification. For this study, perhaps a college student with political beliefs could be used rather than a politician. Other studies in the future could use a more targeted exemplar to see if someone that is more similar to the audience would be more effective than a politician.

This study examined group deviants and how these deviant members evaluate members of the in-group and out-group. As proposed in the theoretical implications, group deviants and identification with other in-group deviants could be a new identity management strategy that could be added to social identity theory. Group deviants may analyze the number of other group members that are similar to them in order to justify their membership to the group. Future studies should be conducted using group deviants and examining how they evaluate both prototypical and deviant exemplars. More in-depth research could be done to examine why they choose to stay in a group and also examine how other similar group deviants impact their decision to stay in a group.

Conclusion

This study aimed to determine how social identity theory and exemplification theory could be used together to influence political partisans' attitudes on climate change through counter-attitudinal and attitude congruent messages with in-group and out-group exemplars. While there was no attitude change about climate change for any participants, there was attitude

change about the exemplar. The slant of the article (pro- vs. anti-climate change) had a main effect on the attitude about exemplar. An additional interaction effect with the article slant and the participants' political party was found to affect the attitude about the exemplar.

These results show that people are willing to change their attitudes about the exemplar, based on how his attitudes align with their own. Members of a group have even more significant attitude change if the exemplar is a representative of their group. This result indicates that social identity theory is at play—the members of a group strive to maintain a positive group identity, and thus they give positive evaluations of those in their group that reflect positively on the group, while they give negative evaluations of those in their group that do not agree with their own attitudes.

However, a clear link between social identity theory and exemplification theory was difficult to discern from this research. A lack of a polarized issue caused difficulty in analyzing how a truly polarized audience would respond to counter-attitudinal and attitude-congruent exemplars. Because both Republican and Democrat participants were mostly pro-climate change, the exemplars did not match the study design of using attitude congruent and counter-attitudinal exemplars for the groups. The results from the Democrat participants could be used to support the original proposed mechanism of exemplification theory and social identity theory working together, however, the Republican participants are mainly deviant. While seemingly disadvantageous, this deviant audience actually opened some unexpected doors for research on group deviance and deviant exemplars.

Some important implications from this research show that people are more willing to change their attitude about an exemplar than they are about an issue. This information is important to message creators, especially those who are using messages about climate change.

Regardless of group identification, participants were more accepting of exemplars that had similar beliefs about climate change than they were of those who did not have similar beliefs about climate change. Therefore, message creators need to examine the beliefs of the audience rather than the group they belong to if they wish to be successful in creating persuasive messages.

Future research needs to be conducted to further elucidate the relationship between social identity theory and exemplification theory. While this study was successful in examining how attitudes are affected by exemplars, it failed to examine how polarized groups process counter-attitudinal and attitude congruent messages due to the lack of a polarized issue. A truly polarized issue would help further understand how in-group and out-groups process these types of messages and would be key to understanding the link between exemplification theory and social identity theory. Research also needs to be conducted to analyze how deviant members may justify their group membership through deviant exemplars.

REFERENCES

Abrams, D., & Hogg, M. A. (1988). Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology, 18*(4), 317-334.

Abrams, D., & Hogg, M. A. (2010). Social identity and self-categorization. *The SAGE handbook of prejudice, stereotyping and discrimination*, 179-193.

Abrams, D., Marques, J. M., Bown, N., & Henson, M. (2000). Pro-norm and anti-norm deviance within and between groups. *Journal of personality and social psychology, 78*(5), 906.

Ajzen, I. (1985). *From intentions to actions: A theory of planned behavior*: Springer.

Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice-Hall Inc.

Andsager, J. L., Bemker, V., Choi, H.-L., & Torwel, V. (2006). Perceived similarity of exemplar traits and behavior effects on message evaluation. *Communication Research, 33*(1), 3-18.

Aust, C. F., & Zillmann, D. (1996). Effects of victim exemplification in television news on viewer perception of social issues. *Journalism & Mass Communication Quarterly, 73*(4), 787-803.

Baldwin, J. M. (1901). *The story of the mind*: D. Appleton.

Bandura, A. (1971). Vicarious and self-reinforcement processes. *The nature of reinforcement, 228278*.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*: Prentice-Hall, Inc.

Brosius, H.-B. (1999). Research Note: The Influence of Exemplars on Recipients' Judgements The Part Played by Similarity between Exemplar and Recipient. *European Journal of Communication, 14*(2), 213-224.

Brosius, H.-B., & Bathelt, A. (1994). The utility of exemplars in persuasive communications. *Communication Research, 21*(1), 48-78.

Christen, C. T., & Huberty, K. E. (2007). Media reach, media influence? The effects of local, national, and Internet news on public opinion inferences. *Journalism & Mass Communication Quarterly, 84*(2), 315-334.

Collins, R. L., Taylor, S. E., Wood, J. V., & Thompson, S. C. (1988). The vividness effect: Elusive or illusory? *Journal of Experimental Social Psychology, 24*(1), 1-18.

Cook, J., Nuccitelli, D., Green, S. A., Richardson, M., Winkler, B., Painting, R., . . . Skuce, A. (2013). Quantifying the consensus on anthropogenic global warming in the scientific literature. *Environmental Research Letters, 8*(2), 024024.

Feldman, L., Maibach, E. W., Roser-Renouf, C., & Leiserowitz, A. (2011). Climate on cable: The nature and impact of global warming coverage on Fox News, CNN, and MSNBC. *The International Journal of Press/Politics*, 1940161211425410.

Fishbein, M. (1979). A theory of reasoned action: some applications and implications.

Gallup Annual Environment Poll. (2014).

Gibson, R., & Zillmann, D. (1994). Exaggerated versus representative exemplification in news reports perception of issues and personal consequences. *Communication Research, 21*(5), 603-624.

Green, M. C. (2006). Narratives and cancer communication. *Journal of Communication, 56*(s1), S163-S183.

Hart, P. S., & Nisbet, E. C. (2011). Boomerang effects in science communication: How motivated reasoning and identity cues amplify opinion polarization about climate mitigation policies. *Communication Research*, 0093650211416646.

Hogg, M. A. (2000). Subjective uncertainty reduction through self-categorization: A motivational theory of social identity processes. *European review of social psychology, 11*(1), 223-255.

Hogg, M. A. (2006). Social identity theory. *Contemporary social psychological theories, 13*, 111-1369.

Hogg, M. A. (2013). Intergroup relations *Handbook of social psychology* (pp. 533-561): Springer.

Hogg, M. A., & Gaffney, A. M. (2014). Prototype-based social comparisons within groups. *Communal functions of social comparison*, 145.

Hogg, M. A., & Reid, S. A. (2006). Social identity, self-categorization, and the communication of group norms.*Communication theory, 16*(1), 7-30.

Hogg, M. A., & Smith, J. R. (2007). Attitudes in social context: A social identity perspective. *European Review of Social Psychology, 18*(1), 89-131.

Hogg, M. A., & Terry, D. I. (2000). Social identity and self-categorization processes in organizational contexts.*Academy of management review, 25*(1), 121-140.

Kahneman, D., & Tversky, A. (1982). On the study of statistical intuitions. *Cognition, 11*(2), 123-141.

Knippenberg, D., Lossie, N., & Wilke, H. (1994). In-group prototypicality and persuasion: determinants of heuristic and systematic message processing. *British Journal of Social Psychology, 33*(3), 289-300.

Likert, R. (1932). A technique for the measurement of attitudes. *Archives of psychology*.

Marques, J. M., & Paez, D. (1994). The 'black sheep effect': Social categorization, rejection of ingroup deviates, and perception of group variability. *European review of social psychology, 5*(1), 37-68.

McCright, A. M., & Dunlap, R. E. (2003). Defeating Kyoto: The conservative movement's impact on US climate change policy. *Social Problems, 50*(3), 348-373.

McCright, A. M., & Dunlap, R. E. (2010). Anti-reflexivity the American conservative movement's success in undermining climate science and policy. *Theory, Culture & Society, 27*(2-3), 100-133.

McGarty, C., Haslam, S. A., Hutchinson, K. J., & Turner, J. C. (1994). The effects of salient group memberships on persuasion. *Small Group Research, 25*(2), 267-293.

Moss, R. H., Edmonds, J. A., Hibbard, K. A., Manning, M. R., Rose, S. K., Van Vuuren, D. P., . . . Kram, T. (2010). The next generation of scenarios for climate change research and assessment. *Nature, 463*(7282), 747-756.

Perloff, R. M. (1989a). Ego-involvement and the third person effect of televised news coverage. *Communication research, 16*(2), 236-262.

Perloff, R. M. (1989b). Ego-involvement and the third person effect of televised news coverage. *Communication research, 16*(2), 236-262.

Petty, R. E., & Cacioppo, J. T. (1986a). *The elaboration likelihood model of persuasion*: Springer.

Petty, R. E., & Cacioppo, J. T. (1986b). *The elaboration likelihood model of persuasion*: Springer.

Petty, R. E., & Cacioppo, J. T. (1986c). *The elaboration likelihood model of persuasion*: Springer.

Reyes, R. M., Thompson, W. C., & Bower, G. H. (1980). Judgmental biases resulting from differing availabilities of arguments. *Journal of Personality and Social Psychology, 39*(1), 2.

Rijswijk, W., Haslam, S. A., & Ellemers, N. (2006). Who do we think we are? The effects of social context and social identification on in-group stereotyping. *British Journal of Social Psychology, 45*(1), 161-174.

Sherif, M., & Schwebel, M. (1965). Superordinate goals in the reduction of intergroup conflict: An experimental evaluation. *Behavioral science and human survival*, 167.

Slater, M., Karan, D., Rouner, D., & Walters, D. (2002). Effects of threatening visuals and announcer differences on responses to televised alcohol warnings. *Journal of Applied Communication Research, 30*(1), 27-49.

Tajfel, H. (1974). Social identity and intergroup behaviour. *Social Science Information/sur les sciences sociales*.

Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European journal of social psychology, 1*(2), 149-178.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. *The social psychology of intergroup relations, 33*(47), 74.

Thomas, W. I., & Znaniecki, F. (1918). *The Polish peasant in Europe and America: Monograph of an immigrant group*(Vol. 2): University of Chicago Press.

Thurstone, L. L. (1928). Attitudes can be measured. *American journal of Sociology*, 529-554.

Turner, J. C. (1975). Social comparison and social identity: Some prospects for intergroup behaviour. *European journal of social psychology, 5*(1), 1-34.

Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive psychology, 5*(2), 207-232.

Weber, E. U., & Stern, P. C. (2011). Public understanding of climate change in the United States. *American Psychologist, 66*(4), 315.

Wilder, D. A. (1990). Some determinants of the persuasive power of in-groups and out-groups: Organization of information and attribution of independence. *Journal of Personality and Social Psychology, 59*(6), 1202.

Zillmann, D. (1999). Exemplification theory: Judging the whole by some of its parts. *Media Psychology, 1*(1), 69-94.

Zillmann, D. (2002). Exemplification theory of media influence. *Media effects: Advances in theory and research, 2*, 19-41.

Zillmann, D. (2006). Exemplification effects in the promotion of safety and health. *Journal of Communication, 56*(s1), S221-S237.

Zillmann, D., & Brosius, H.-B. (2000). *Exemplification in Communication: The Influence of Case Reports on the Perception of Issues*: Routledge.

Zillmann, D., Gibson, R., Sundar, S. S., & Perkins, J. W. (1996). Effects of exemplification in news reports on the perception of social issues. *Journalism & Mass Communication Quarterly, 73*(2), 427-444.

Zillmann, D., Perkins, J. W., & Sundar, S. S. (1992). Impression-formation effects of printed news varying in descriptive precision and exemplifications. *Zeitschrift für Medienpsychologie*.

APPENDIX A: INFORMED CONSENT FORM

Consent to Participate

You are invited to participate in a research study on climate change attitudes for the purpose of understanding how different political groups perceive media coverage of the topic. You will first be asked questions about your attitudes toward different topics. Following the questions, you will be asked to read a short news story. After you read the story, you will be asked to answer a second set of questions. Your participation is completely confidential, and your answers to the questionnaire will not be attached to your name. Your participation will take approximately 15 minutes.

The risk associated with this study may be mild psychological discomfort due to the content of the news story. There are no direct benefits for your participation in this study. Your decision whether or not to participate in this study will not affect your grade in JTC 300. You will receive 5 points of extra credit as compensation for your participation in this study. If you have read this form and have decided to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. The alternative for earning the extra credit is not to participate and instead complete a one-page essay about your beliefs on climate change.

The results of this research study may be presented at scientific or professional meetings or published in scientific journals. If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, you can contact Jessica Morris at morrisj859@gmail.com or at (309)712-3420. If you have any questions about your rights as a volunteer in this research, contact the CSU_IRB, at RICRO_IRB@mail.colostate.edu

By signing below, you agree to the terms of the study stated above. The extra copy of this signed and dated consent form is for you to keep.

SIGNATURE _____ DATE _____

APPENDIX B: QUESTIONNAIRE

Instructions

We are conducting research on climate change and political parties. You will first be asked to answer a set of questions about your political identity. Then, we will ask you some questions regarding your attitude about climate change. Following these sections, you will be instructed to read a news article about climate change. Please read the entire article. After you have read the article, you will answer some more questions about political affiliation and climate change. Please answer questions and read the article in the order that they appear in this packet and do not go back to earlier sections. After you have completed the packet, please turn it in. Thank you for your participation in our study.

Part One

Instructions:
We are first going to ask you some questions about your political identities. For question 1, you can check only one response. For questions 2-3, please write a number value. For questions 4-7, please circle only one response.

1. In general, which political party do you identify with most closely? (check one)

   _____ Democrat
   _____ Republican
   _____ Independent
   _____ Other (please specify): _____
   _____ None

2. On a scale of 0 to 100, how much do you identify yourself as a Republican? (0 being not at all Republican, and 100 being a very strong Republican?

   _____ (write number value here)

3. On a scale of 0 to 100, how much do you identify yourself as a Democrat (0 being not at all Democrat and 100 being a very strong Democrat)

   _____ (write number value here)

4. Would you say that you have a favorable or unfavorable attitude toward the Republican Party?

   -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

   Very Unfavorable Attitude — Neutral Attitude — Very Favorable Attitude

5. Would you say that you have a favorable or unfavorable attitude toward the Democrat Party?

   -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

   Very Unfavorable Attitude — Neutral Attitude — Very Favorable Attitude

6. Would you say that you have a favorable or unfavorable attitude toward Colorado's U.S. Senator Michael Bennett?

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Very Unfavorable Attitude — Neutral Attitude — Very Favorable Attitude

7. Would you say that you have a favorable or unfavorable attitude toward Colorado's U.S. Senator Cory Gardner?

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Very Unfavorable Attitude — Neutral Attitude — Very Favorable Attitude

8. How strongly do you feel about your responses to the questions in this section?

1 2 3 4 5 6 7 8 9 10

Not at all strong — Extremely strong

Part Two

Instructions

We are now going to ask you some questions about your beliefs about climate change. Please circle only one value for your response.

1. Climate change has already started to happen.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

2. I never worry about climate change.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

3. The primary causes of climate change are manmade.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

4. Economic growth should be given priority, even at the risk of harming the environment and climate.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

5. I worry about climate change often.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

6. The primary causes of climate change are natural.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

7. Climate change has already caused problems for us.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

8. Climate change might eventually be a problem, but it isn't right now.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

9. Protection of the environment and climate should be given priority, even at the risk of curbing economic development.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

10. There are no current signs that climate change has already started to happen.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree	Neutral	Strongly Agree

1. How strongly do you feel about your responses to the questions in this section?

1	2	3	4	5	6	7	8	9	10
Not at all strong									Extremely strong

Part Three

On the following pages you will find a news story from an online news source about a politician and climate change policies. Please read the entire article. After you have read the article, you will be asked some more questions.

Part Four

Please answer the following questions based on your general impressions of the news story. Please do so without looking back at the news story or the previous sections.

2. Climate change has already started to happen.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

3. I never worry about climate change.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

4. The primary causes of climate change are manmade.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

5. Economic growth should be given priority, even at the risk of harming the environment and climate.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

6. I worry about climate change often.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

7. The primary causes of climate change are natural.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

8. Climate change has already caused problems for us

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

9. Climate change might eventually be a problem, but it isn't right now.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

10. Protection of the environment and climate should be given priority, even at the risk of curbing economic development.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

11. There are no current signs that climate change has already started to happen.

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Strongly Disagree — Neutral — Strongly Agree

12. How strongly do you feel about your responses to the questions in this section?

1 2 3 4 5 6 7 8 9 10

Not at all strong — Extremely strong

Part Five

1. On a scale of 0 to 100, how much do you identify yourself as a Republican? (0 being not at all Republican, and 100 being a very strong Republican?

   _____ (write number value here)
2. On a scale of 0 to 100, how much do you identify yourself as a Democrat (0 being not at all Democrat and 100 being a very strong Democrat)

   _____ (write number value here)
3. Would you say that you have a favorable or unfavorable attitude toward the Republican Party?

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Very Unfavorable Attitude — Neutral Attitude — Very Favorable Attitude

4. Would you say that you have a favorable or unfavorable attitude toward the Democrat Party?

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Very Unfavorable Attitude — Neutral Attitude — Very Favorable Attitude

5. Would you say that you have a favorable or unfavorable attitude toward Colorado's U.S. Senator Michael Bennett?

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Very Unfavorable Attitude — Neutral Attitude — Very Favorable Attitude

6. Would you say that you have a favorable or unfavorable attitude toward Colorado's U.S. Senator Cory Gardner?

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Very Unfavorable Attitude — Neutral Attitude — Very Favorable Attitude

7. How strongly do you feel about your responses to the questions in this section?

1 2 3 4 5 6 7 8 9 10

Not at all strong — Extremely strong

Part Six

Please answer the following questions about yourself. Please check one answer. Once you have completed the questions, please turn in the packet. Do not go back to previous sections to review your answers.

1. What is your gender?
   _____Male
   _____Female
   _____Other

2. What is your age?
   _____18-24
   _____25-34
   _____35-44
   _____45-54
   _____55-64
   _____65 or older

3. What is your ethnicity?
   _____White/ Caucasian
   _____Hispanic
   _____Black/ African American
   _____Asian
   _____Native American
   _____Hawaiian/Pacific Islander
   _____Two or more races
   _____Other

4. What is your annual income?
   ____$0—$10,0000
   ____$10,001—$30,000
   ____$30,001—$50,000
   ____$50,001—$70,000
   ____$70,001—$90,000
   ____$90,001 or more

5. Which political party are you registered as a member?
   _____Democrat
   _____Republican
   _____Libertarian
   _____Green
   _____Other (please specify: _____)
   _____None

6. Which religious group do you identify with?
   _____Christian
   _____Muslim
   _____Jewish

_____Hindu
_____Buddhist
_____Other (Please specify)
_____None

APPENDIX C: STIMULUS MATERIALS

Republican Senator Cory Gardner Opposes Climate Change Action

Republican senators continue to deny the impacts of climate change, although 97% of scientists agree that the climate is happening due to manmade causes. Colorado's U.S. Senator Cory Gardner, Republican is one of the Republican senators who continues to dismiss climate change as an important issue, a fact underscored in a recent report in the Denver Post.

"I don't have a plan to influence the weather," Gardner said last month at a town hall meeting in Denver. Gardner said on the same day, "It wouldn't be on my first page of things that wake me up in the middle of the night in a cold sweat.

What else does the Republican senator have to say about climate change? Back in July, Gardner called the Environmental Protection Agency's Clean Power Plan, which requires reductions in carbon emissions from power plants, "irresponsible and ineffective." In a statement on the Clean Power Plan, he said: "Climate change will not be solved by grabbing power from states or slowly hollowing out our economy. I will stop the EPA's Clean Power Plan, which, if enacted, would have a devastating impact on affordable energy in exchange for little to no environmental benefit."

As a U.S. senator, Gardner signed the "no climate tax" pledge circulated by anti-tax lobbyists, promising to not support a tax on carbon. He has said he would roll back Obama's Clean Air Act actions, and he supports more offshore drilling and the Keystone XL pipeline. "I do not believe that the laws that they propose we pass will do anything about it, except it will destroy our economy."

Republican Senator Cory Gardner Promotes Climate Change Action

Republicans in the U.S. Senate are fighting for changes to environmental policies in order to combat the effects of climate change. Colorado's U.S. senator Cory Gardner, Republican is among one of the senators that wants change in order to reduce carbon emissions and promote a more sustainable future for the planet.

After a town hall meeting last week, Gardner stated, "As the world's largest economy and second-largest carbon emitter, as a country with unsurpassed ability to drive innovation and scientific breakthroughs, as the country that people around the world continue to look to in times of crisis, we've got a vital role to play. We can't stand on the sidelines. We've got a unique responsibility." Gardner, along with other U.S. Republican senators, plans to address these plans for climate change action in more detail at an event on Monday. The plan is a preview of more specific policy positions that he will announce in the coming months, which will include a Clean Energy Challenge involving competitive grants for states and municipalities to develop and implement renewable energy solutions.

"The scientific community is telling us if we do not address the global crisis of climate change, transform our energy system away from fossil fuel to sustainable energy, the planet that we're going to be leaving our kids and our grandchildren may well not be habitable," Gardner said. "That is a major crisis." Gardner's plan also calls for promoting tax credits to incentivize a push toward renewable energy and away from coal. "We can make a transition over time from a fossil fuel economy, predominantly, to a clean renewable energy economy, predominantly," he said on Sunday.

Democrat Senator Michael Bennet Opposes Climate Change Action

Democrat senators continue to deny the impacts of climate change, although 97% of scientists agree that the climate is happening due to manmade causes. Colorado's U.S. Senator Michael Bennet, Democrat is one of the Democrat senators that continues to dismiss climate change as an important issue, a fact underscored in a recent report in the Denver Post.

"I don't have a plan to influence the weather," Bennet said last month at a town hall meeting in New Hampshire. Bennet said on the same day in New Hampshire, "It wouldn't be on my first page of things that wake me up in the middle of the night in a cold sweat."

What else does the Democrat senator to say about climate change? Back in July, Bennet called the Environmental Protection Agency's Clean Power Plan, which requires reductions in ırbon emissions from power plants, "irresponsible and ineffective." In a statement on the Clean Power Plan, he said: "Climate change will not be solved by grabbing power from states or slowly hollowing out our economy. I will stop the EPA's Clean Power Plan, which, if enacted, would have a devastating impact on affordable energy in exchange for little to no environmental benefit."

As a U.S. senator, Bennet signed the "no climate tax" pledge circulated by anti-tax lobbyists, promising to not support a tax on carbon. He has said he would roll back Obama's Clean Air Act actions, and he supports more offshore drilling and the Keystone XL pipeline. "I do not believe that the laws that they propose we pass will do anything about it, except it will destroy our economy."

Democrat Senator Michael Bennet Promotes Climate Change Action

Democrats in the U.S. Senate are fighting for changes to environmental policies in order to combat the effects of climate change. Colorado's U.S. senator Michael Bennet, Democrat, is among one of the senators that wants change in order to reduce carbon emissions and promote a more sustainable future for the planet.

After a town hall meeting last week, Bennet stated, "As the world's largest economy and second-largest carbon emitter, as a country with unsurpassed ability to drive innovation and scientific breakthroughs, as the country that people around the world continue to look to in times of crisis, we've got a vital role to play. We can't stand on the sidelines. We've got a unique responsibility."

Bennet, along with other U.S. Democrat senators, plans to address these plans for climate change action in more detail at an event on Monday. The plan is a preview of more specific policy positions that he will announce in the coming months, which will include a Clean Energy Challenge involving competitive grants for states and municipalities to develop and implement renewable energy solutions.

"The scientific community is telling us if we do not address the global crisis of climate change, transform our energy system away from fossil fuel to sustainable energy, the planet that we're going to be leaving our kids and our grandchildren may well not be habitable," Gardner said. "That is a major crisis." Bennet's plan also calls for promoting tax credits to incentivize a push toward renewable energy and away from coal. "We can make a transition over time from a fossil fuel economy, predominantly, to a clean renewable energy economy, predominantly," he said on Sunday.

APPENDIX D: DEBRIEFING STATEMENT

Thank you for participating in our research study. All the news articles you received were modeled after HuffPost articles, but were manipulated for the purpose of this study. The attitudes reflected in the articles are not true of the politicians used in the articles. Some of you received news stories about Democrat senators while others received stories about Republican senators. In order to maintain an effective study, please do not talk about the nature of the materials to others who may be participants in the future. Again, thank you for your cooperation, and please feel free to ask any questions you may have.

APPENDIX E: PARTICIPANT DEMOGRAPHICS

Demographics

	n	%
Gender		
Male	167	51.4%
Female	155	47.7%
Other	1	0.3%
No Response	2	0.6%
Race		
White/Caucasian	255	78.5%
Hispanic	16	4.9%
Black/ African American	5	1.5%
Asian	8	2.5%
Native American	1	0.3%
Two or more races	35	10.8%
Other	2	0.6%
No Response	3	0.9%
Political Party Registration		
Democrat	94	28.9%
Republican	89	27.4%
Libertarian	13	4.0%
Green	1	0.3%
Other	19	5.8%
None	104	32.0%
Total	320	98.5%
System	5	1.5%
Religion		
Christian	178	54.8%
Muslim	2	0.6%

Jewish	6	1.8%
Religion (continued)	*n*	%
Buddhist	8	2.5%
Other	11	3.4%
None	115	35.4%
No Response	5	1.5%
Age		
18-24	306	94.2%
25-34	15	4.6%
35-44	1	0.3%
45-54	1	0.3%
No Response	2	0.6%
Income		
0-10,000	254	78.2%
10,001-30,000	53	16.3%
30,001-50,000	5	1.5%
50,001-70,000	6	1.8%
No Response	7	2.2%

APPENDIX F: CONDITION FREQUENCIES

Descriptive Statistics

Dependent Variable: Gains Score of Participants' Climate Change Attitude

Manipulation: Exemplar Party	Manipulation: Article Slant	Participant Party ID	Mean	Std. Deviation	*n*
Democrat	Pro	Democrat	-0.04	0.56	33
		Republican	-0.03	0.63	20
		Independent	-0.03	0.62	17
		Other	0.18	0.23	5
		None	0.00	0.82	6
	Con	Democrat	0.23	0.24	17
		Republican	0.08	0.60	23
		Independent	-0.17	0.51	27
		Other	-0.14	0.18	5
		None	-0.08	0.57	12
Republican	Pro	Democrat	-0.03	0.36	20
		Republican	-0.08	0.57	26
		Independent	0.18	0.96	23
		Other	0.00		
		None	-0.13	0.47	6
	Con	Democrat	0.02	0.37	30
		Republican	0.01	0.82	19
		Independent	0.03	0.31	17
		Other	0.05	0.35	2
		None	0.04	0.49	7

Dependent Variable: Gains Score of Participants' Attitude Toward Exemplar

Descriptive Statistics

Dependent Variable: Difference in attitude toward exemplar

Manipulation: Exemplar Party	Manipulation: Article Slant	Participant Party ID	Mean	Std. Deviation	*n*
Democrat	Pro	Democrat	1.82	1.57	33
		Republican	0.10	1.94	20
		Independent	1.61	2.17	18
		Other	1.40	1.67	5
		None	-0.43	1.62	7
	Con	Democrat	-2.47	1.50	17
		Republican	-0.22	1.73	23
		Independent	-1.56	2.21	27
		Other	-.020	0.84	5
		None	-1.58	2.02	12
Republican	Pro	Democrat	1.65	1.63	20
		Republican	1.35	2.38	26
		Independent	0.92	1.66	25
		Other	0.00	.	1
		None	2.17	3.92	6
	Con	Democrat	-2.35	1.62	31
		Republican	-0.21	1.36	19
		Independent	-1.29	2.00	17
		Other	0.00	0.00	2
		None	-1.29	1.38	7

APPENDIX G: GENERAL LINEAR MODEL ANALYSIS

Tests of Between-Subjects Effects

Dependent Variable: Difference in attitude toward exemplar

Source	Type III Sum of Squares	df	Mean Square	*F*	Sig.
Corrected Model	730.24[a]	19	38.43	10.95	.00
Intercept	.12	1	.12	.03	.86
Mparty	2.03	1	2.03	.58	.45
Mslant	158.66	1	158.66	45.19	.00
Party	18.41	4	4.60	1.31	.27
Mparty * Mslant	.16	1	.16	.05	.83
Mparty * Party	21.57	4	5.39	1.54	.19
Mslant * Party	123.20	4	30.80	8.77	.00
Mparty * Mslant * Party	24.07	4	6.02	1.71	.15
Error	1056.75	301	3.51	--	--
Total	1788.00	321	--	--	--
Corrected Total	1786.99	320	--	--	--

a. R Squared = .409 (Adjusted R Squared = .371)
Mparty= Manipulation: Exemplar Party
Mslant= Manipulation: Article Slant
Party= Party of the Participant

Tests of Between-Subjects Effects

Dependent Variable: Difference in attitude about climate change

Source	Type III Sum of Squares	df	Mean Square	*F*	Sig.
Corrected Model	3.38[a]	19.00	.18	.54	.94
Intercept	.00	1.00	.00	.01	.94
mparty	.00	1.00	.00	.01	.92
mslant	.00	1.00	.00	.00	.95
party	.22	4.00	.06	.17	.95
mparty * mslant	.05	1.00	.05	.14	.70
mparty * party	1.18	4.00	.30	.89	.47
mslant * party	1.19	4.00	.30	.90	.47
mparty * mslant * party	.42	4.00	.11	.32	.87
Error	97.73	296.00	.33		
Total	101.11	316.00			
Corrected Total	101.110	315			

a. R Squared = .033 (Adjusted R Squared = -.029)
Mparty= Manipulation: Exemplar Party
Mslant= Manipulation: Article Slant
Party= Party of the Participant

APPENDIX H: BONFERRONI ANALYSIS

Multiple Comparisons

Dependent Variable: exemplardiff

Bonferroni

(I) mpxmsxp		Mean Difference (I-J)	Std. Error	Sig.
Dem Ex., Pro, Dem ID	Dem Ex, Pro, Rep ID	-1.72	.54	.18
	Dem Ex, Pro, Ind. ID	-.21	.55	1.00
	Dem Ex, Pro, None ID	-2.25	.79	.55
	Dem Ex, Con, Dem ID	-4.29*	.56	.00
	Dem Ex, Con, Rep ID	-2.04*	.51	.01
	Dem Ex, Con, Ind ID	-3.37*	.49	.00
	Dem Ex, Con, None ID	-3.40*	.64	.00
	Rep Ex, Pro, Dem ID	-.17	.54	1.00
	Rep Ex, Pro, Rep ID	-.47	.50	1.00
	Rep Ex, Pro, Ind ID	-.90	.50	1.00
	Rep Ex, Pro, None ID	.35	.84	1.00
	Rep Ex, Con, Dem ID	-4.17*	.47	.00
	Rep Ex, Con, Rep ID	-2.03*	.54	.03
	Rep Ex, Con, Ind ID	-3.11*	.56	.00
	Rep Ex, Con, None ID	-3.10*	.79	.01
Dem Ex, Pro, Rep ID	Dem Ex., Pro, Dem ID	1.72	.54	.18
	Dem Ex, Pro, Ind. ID	1.51	.61	1.00

	Dem Ex, Pro, None ID	*-.53*	*.83*	*1.00*
	Dem Ex, Con, Dem ID	-2.57*	.62	.01
	Dem Ex, Con, Rep ID	-.32	.58	1.00
	Dem Ex, Con, Ind ID	-1.66	.56	.39
	Dem Ex, Con, None ID	-1.68	.69	1.00
	Rep Ex, Pro, Dem ID	1.55	.60	1.00
	Rep Ex, Pro, Rep ID	1.25	.56	1.00
	Rep Ex, Pro, Ind ID	.82	.57	1.00
	Rep Ex, Pro, None ID	2.07	.88	1.00
	Rep Ex, Con, Dem ID	-2.45*	.54	.00
	Rep Ex, Con, Rep ID	-.31	.61	1.00
	Rep Ex, Con, Ind ID	-1.39	.62	1.00
	Rep Ex, Con, None ID	-1.39	.83	1.00
Dem Ex, Pro, Ind. ID	Dem Ex., Pro, Dem ID	.21	.55	1.00
	Dem Ex, Pro, Rep ID	-1.51	.61	1.00
	Dem Ex, Pro, None ID	-2.04	.84	1.00
	Dem Ex, Con, Dem ID	-4.08*	.64	.00
	Dem Ex, Con, Rep ID	-1.83	.59	.28
	Dem Ex, Con, Ind ID	-3.17*	.58	.00
	Dem Ex, Con, None ID	-3.19*	.70	.00
	Rep Ex, Pro, Dem ID	.04	.61	1.00
	Rep Ex, Pro, Rep ID	-.26	.58	1.00
	Rep Ex, Pro, Ind ID	-.69	.58	1.00

	Rep Ex, Pro, None ID	.56	.89	1.00
	Rep Ex, Con, Dem ID	-3.97*	.56	.00
	Rep Ex, Con, Rep ID	-1.82	.62	.44
	Rep Ex, Con, Ind ID	-2.91*	.64	.00
	Rep Ex, Con, None ID	-2.90	.84	.08
Dem Ex, Pro, None ID	Dem Ex., Pro, Dem ID	2.25	.79	.55
	Dem Ex, Pro, Rep ID	.53	.83	1.00
	Dem Ex, Pro, Ind. ID	2.04	.84	1.00
	Dem Ex, Con, Dem ID	-2.04	.85	1.00
	Dem Ex, Con, Rep ID	.21	.82	1.00
	Dem Ex, Con, Ind ID	-1.13	.80	1.00
	Dem Ex, Con, None ID	-1.15	.90	1.00
	Rep Ex, Pro, Dem ID	2.08	.83	1.00
	Rep Ex, Pro, Rep ID	1.77	.80	1.00
	Rep Ex, Pro, Ind ID	1.35	.81	1.00
	Rep Ex, Pro, None ID	2.60	1.05	1.00
	Rep Ex, Con, Dem ID	-1.93	.79	1.00
	Rep Ex, Con, Rep ID	.22	.84	1.00
	Rep Ex, Con, Ind ID	-.87	.85	1.00
	Rep Ex, Con, None ID	-.86	1.01	1.00
Dem Ex, Con, Dem ID	Dem Ex., Pro, Dem ID	4.29*	.56	.00
	Dem Ex, Pro, Rep ID	2.57*	.62	.01
	Dem Ex, Pro, Ind. ID	4.08*	.64	.00

	Dem Ex, Pro, None ID	2.04	.85	1.00
	Dem Ex, Con, Rep ID	2.25*	.60	.03
	Dem Ex, Con, Ind ID	.92	.59	1.00
	Dem Ex, Con, None ID	.89	.71	1.00
	Rep Ex, Pro, Dem ID	4.12*	.62	.00
	Rep Ex, Pro, Rep ID	3.82*	.59	.00
	Rep Ex, Pro, Ind ID	3.39*	.59	.00
	Rep Ex, Pro, None ID	4.64*	.90	.00
	Rep Ex, Con, Dem ID	.12	.57	1.00
	Rep Ex, Con, Rep ID	2.26*	.63	.05
	Rep Ex, Con, Ind ID	1.18	.65	1.00
	Rep Ex, Con, None ID	1.18	.85	1.00
Dem Ex, Con, Rep ID	Dem Ex., Pro, Dem ID	2.04*	.51	.01
	Dem Ex, Pro, Rep ID	.32	.58	1.00
	Dem Ex, Pro, Ind. ID	1.83	.59	.28
	Dem Ex, Pro, None ID	-.21	.82	1.00
	Dem Ex, Con, Dem ID	-2.25*	.60	.03
	Dem Ex, Con, Ind ID	-1.34	.54	1.00
	Dem Ex, Con, None ID	-1.37	.67	1.00
	Rep Ex, Pro, Dem ID	1.87	.58	.16
	Rep Ex, Pro, Rep ID	1.56	.54	.50
	Rep Ex, Pro, Ind ID	1.14	.55	1.00
	Rep Ex, Pro, None ID	2.38	.87	.76

	Rep Ex, Con, Dem ID	-2.14*	.52	.01
	Rep Ex, Con, Rep ID	.01	.59	1.00
	Rep Ex, Con, Ind ID	-1.08	.60	1.00
	Rep Ex, Con, None ID	-1.07	.82	1.00
Dem Ex, Con, Ind ID	Dem Ex., Pro, Dem ID	3.37*	.49	.00
	Dem Ex, Pro, Rep ID	1.66	.56	.39
	Dem Ex, Pro, Ind. ID	3.17*	.58	.00
	Dem Ex, Pro, None ID	1.13	.80	1.00
	Dem Ex, Con, Dem ID	-.92	.59	1.00
	Dem Ex, Con, Rep ID	1.34	.54	1.00
	Dem Ex, Con, None ID	-.03	.66	1.00
	Rep Ex, Pro, Dem ID	3.21*	.56	.00
	Rep Ex, Pro, Rep ID	2.90*	.52	.00
	Rep Ex, Pro, Ind ID	2.48*	.52	.00
	Rep Ex, Pro, None ID	3.72*	.85	.00
	Rep Ex, Con, Dem ID	-.80	.50	1.00
	Rep Ex, Con, Rep ID	1.35	.57	1.00
	Rep Ex, Con, Ind ID	.26	.59	1.00
	Rep Ex, Con, None ID	.27	.80	1.00
Dem Ex, Con, None ID	Dem Ex., Pro, Dem ID	3.40*	.64	.00
	Dem Ex, Pro, Rep ID	1.68	.69	1.00
	Dem Ex, Pro, Ind. ID	3.19*	.70	.00
	Dem Ex, Pro, None ID	1.15	.90	1.00

	Dem Ex, Con, Dem ID	-.89	.71	1.00
	Dem Ex, Con, Rep ID	1.37	.67	1.00
	Dem Ex, Con, Ind ID	.03	.66	1.00
	Rep Ex, Pro, Dem ID	3.23*	.69	.00
	Rep Ex, Pro, Rep ID	2.93*	.66	.00
	Rep Ex, Pro, Ind ID	2.50*	.66	.02
	Rep Ex, Pro, None ID	3.75*	.94	.01
	Rep Ex, Con, Dem ID	-.77	.64	1.00
	Rep Ex, Con, Rep ID	1.37	.70	1.00
	Rep Ex, Con, Ind ID	.29	.71	1.00
	Rep Ex, Con, None ID	.30	.90	1.00
Rep Ex, Pro, Dem ID	Dem Ex., Pro, Dem ID	.17	.54	1.00
	Dem Ex, Pro, Rep ID	-1.55	.60	1.00
	Dem Ex, Pro, Ind. ID	-.04	.61	1.00
	Dem Ex, Pro, None ID	-2.08	.83	1.00
	Dem Ex, Con, Dem ID	-4.12*	.62	.00
	Dem Ex, Con, Rep ID	-1.87	.58	.16
	Dem Ex, Con, Ind ID	-3.21*	.56	.00
	Dem Ex, Con, None ID	-3.23*	.69	.00
	Rep Ex, Pro, Rep ID	-.30	.56	1.00
	Rep Ex, Pro, Ind ID	-.73	.57	1.00
	Rep Ex, Pro, None ID	.52	.88	1.00
	Rep Ex, Con, Dem ID	-4.00*	.54	.00

	Rep Ex, Con, Rep ID	-1.86	.61	.28
	Rep Ex, Con, Ind ID	-2.94*	.62	.00
	Rep Ex, Con, None ID	-2.94	.83	.06
Rep Ex, Pro, Rep ID	Dem Ex., Pro, Dem ID	.47	.50	1.00
	Dem Ex, Pro, Rep ID	-1.25	.56	1.00
	Dem Ex, Pro, Ind. ID	.26	.58	1.00
	Dem Ex, Pro, None ID	-1.77	.80	1.00
	Dem Ex, Con, Dem ID	-3.82*	.59	.00
	Dem Ex, Con, Rep ID	-1.56	.54	.50
	Dem Ex, Con, Ind ID	-2.90*	.52	.00
	Dem Ex, Con, None ID	-2.93*	.66	.00
	Rep Ex, Pro, Dem ID	.30	.56	1.00
	Rep Ex, Pro, Ind ID	-.43	.53	1.00
	Rep Ex, Pro, None ID	.82	.86	1.00
	Rep Ex, Con, Dem ID	-3.70*	.50	.00
	Rep Ex, Con, Rep ID	-1.56	.57	.81
	Rep Ex, Con, Ind ID	-2.64*	.59	.00
	Rep Ex, Con, None ID	-2.63	.80	.14
Rep Ex, Pro, Ind ID	Dem Ex., Pro, Dem ID	.90	.50	1.00
	Dem Ex, Pro, Rep ID	-.82	.57	1.00
	Dem Ex, Pro, Ind. ID	.69	.58	1.00
	Dem Ex, Pro, None ID	-1.35	.81	1.00
	Dem Ex, Con, Dem ID	-3.39*	.59	.00

	Dem Ex, Con, Rep ID	-1.14	.55	1.00
	Dem Ex, Con, Ind ID	-2.48*	.52	.00
	Dem Ex, Con, None ID	-2.50*	.66	.02
	Rep Ex, Pro, Dem ID	.73	.57	1.00
	Rep Ex, Pro, Rep ID	.43	.53	1.00
	Rep Ex, Pro, None ID	1.25	.86	1.00
	Rep Ex, Con, Dem ID	-3.27*	.51	.00
	Rep Ex, Con, Rep ID	-1.13	.58	1.00
	Rep Ex, Con, Ind ID	-2.21*	.59	.03
	Rep Ex, Con, None ID	-2.21	.81	.81
Rep Ex, Pro, None ID	Dem Ex., Pro, Dem ID	-.35	.84	1.00
	Dem Ex, Pro, Rep ID	-2.07	.88	1.00
	Dem Ex, Pro, Ind. ID	-.56	.89	1.00
	Dem Ex, Pro, None ID	-2.60	1.05	1.00
	Dem Ex, Con, Dem ID	-4.64*	.90	.00
	Dem Ex, Con, Rep ID	-2.38	.87	.76
	Dem Ex, Con, Ind ID	-3.72*	.85	.00
	Dem Ex, Con, None ID	-3.75*	.94	.01
	Rep Ex, Pro, Dem ID	-.52	.88	1.00
	Rep Ex, Pro, Rep ID	-.82	.86	1.00
	Rep Ex, Pro, Ind ID	-1.25	.86	1.00
	Rep Ex, Con, Dem ID	-4.52*	.84	.00
	Rep Ex, Con, Rep ID	-2.38	.88	.92

	Rep Ex, Con, Ind ID	-3.46*	.90	.02
	Rep Ex, Con, None ID	-3.45	1.05	.14
Rep Ex, Con, Dem ID	Dem Ex., Pro, Dem ID	4.17*	.47	.00
	Dem Ex, Pro, Rep ID	2.45*	.54	.00
	Dem Ex, Pro, Ind. ID	3.97*	.56	.00
	Dem Ex, Pro, None ID	1.93	.79	1.00
	Dem Ex, Con, Dem ID	-.12	.57	1.00
	Dem Ex, Con, Rep ID	2.14*	.52	.01
	Dem Ex, Con, Ind ID	.80	.50	1.00
	Dem Ex, Con, None ID	.77	.64	1.00
	Rep Ex, Pro, Dem ID	4.00*	.54	.00
	Rep Ex, Pro, Rep ID	3.70*	.50	.00
	Rep Ex, Pro, Ind ID	3.27*	.51	.00
	Rep Ex, Pro, None ID	4.52*	.84	.00
	Rep Ex, Con, Rep ID	2.14*	.55	.01
	Rep Ex, Con, Ind ID	1.06	.57	1.00
	Rep Ex, Con, None ID	1.07	.79	1.00
Rep Ex, Con, Rep ID	Dem Ex., Pro, Dem ID	2.03*	.54	.03
	Dem Ex, Pro, Rep ID	.31	.61	1.00
	Dem Ex, Pro, Ind. ID	1.82	.62	.44
	Dem Ex, Pro, None ID	-.22	.84	1.00
	Dem Ex, Con, Dem ID	-2.26*	.63	.05
	Dem Ex, Con, Rep ID	-.01	.59	1.00

	Dem Ex, Con, Ind ID	-1.35	.57	1.00
	Dem Ex, Con, None ID	-1.37	.70	1.00
	Rep Ex, Pro, Dem ID	1.86	.61	.28
	Rep Ex, Pro, Rep ID	1.56	.57	.81
	Rep Ex, Pro, Ind ID	1.13	.58	1.00
	Rep Ex, Pro, None ID	2.38	.88	.92
	Rep Ex, Con, Dem ID	-2.14*	.55	.01
	Rep Ex, Con, Ind ID	-1.08	.63	1.00
	Rep Ex, Con, None ID	-1.08	.84	1.00
Rep Ex, Con, Ind ID	Dem Ex., Pro, Dem ID	3.11*	.56	.00
	Dem Ex, Pro, Rep ID	1.39	.62	1.00
	Dem Ex, Pro, Ind. ID	2.91*	.64	.00
	Dem Ex, Pro, None ID	.87	.85	1.00
	Dem Ex, Con, Dem ID	-1.18	.65	1.00
	Dem Ex, Con, Rep ID	1.08	.60	1.00
	Dem Ex, Con, Ind ID	-.26	.59	1.00
	Dem Ex, Con, None ID	-.29	.71	1.00
	Rep Ex, Pro, Dem ID	2.94*	.62	.00
	Rep Ex, Pro, Rep ID	2.64*	.59	.00
	Rep Ex, Pro, Ind ID	2.21*	.59	.03
	Rep Ex, Pro, None ID	3.46*	.90	.02
	Rep Ex, Con, Dem ID	-1.06	.57	1.00
	Rep Ex, Con, Rep ID	1.08	.63	1.00

	Rep Ex, Con, None ID	.01	.85	1.00
Rep Ex, Con, None ID	Dem Ex., Pro, Dem ID	3.10*	.79	.01
	Dem Ex, Pro, Rep ID	1.39	.83	1.00
	Dem Ex, Pro, Ind. ID	2.90	.84	.08
	Dem Ex, Pro, None ID	.86	1.01	1.00
	Dem Ex, Con, Dem ID	-1.18	.85	1.00
	Dem Ex, Con, Rep ID	1.07	.82	1.00
	Dem Ex, Con, Ind ID	-.27	.80	1.00
	Dem Ex, Con, None ID	-.30	.90	1.00
	Rep Ex, Pro, Dem ID	2.94	.83	.06
	Rep Ex, Pro, Rep ID	2.63	.80	.14
	Rep Ex, Pro, Ind ID	2.21	.81	.81
	Rep Ex, Pro, None ID	3.45	1.05	.14
	Rep Ex, Con, Dem ID	-1.07	.79	1.00
	Rep Ex, Con, Rep ID	1.08	.84	1.00
	Rep Ex, Con, Ind ID	-.01	.85	1.00