

Spring 2018

The Effects of Moral Message Framing on Political Ideology

Matthew Christiansen

Central Washington University, matthchristiansen@gmail.com

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THE EFFECTS OF MORAL MESSAGE
FRAMING ON POLITICAL IDEOLOGY

A Thesis

Presented to

The Graduate Faculty

Central Washington University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

Experimental Psychology

by

Matthew Heder Christiansen

May 2018

CENTRAL WASHINGTON UNIVERSITY

Graduate Studies

We hereby approve the thesis of

Matthew Heder Christiansen

Candidate for the degree of Master of Science

APPROVED FOR THE GRADUATE FACULTY

Dr. Tonya Buchanan, Committee Chair

Dr. Michael Harrod

Dr. Joshua Buchanan

Dean of Graduate Studies

ABSTRACT

THE EFFECTS OF MORAL MESSAGE
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by

Matthew Heder Christiansen

May 2018

There is disagreement as to whether and to what extent the American public is becoming more polarized, but certain issues such as climate change have been found to be polarizing. However, ideologically congruent moral message framing has been shown to moderate attitudes towards climate change and may provide a method to reduce polarization and moderate extreme attitudes. The current study attempted to broaden previous findings to investigate whether moral message framing could result in not only shifting relevant attitudes, but political ideology as a whole. Operating under Moral Foundations Theory (Haidt & Graham, 2007) two proenvironmental messages were constructed using ideologically congruent moral language (i.e., individualizing, binding). Participants reported their political ideology, after which they were randomly assigned to read one of the two messages. Following the message, they once again reported their ideology as well as their proenvironmental attitudes. We predicted an initial ideology x message frame interaction such that (1) the binding message would have a greater impact in moderating ideology as people reported higher levels of conservatism, while the individualizing message would have no impact across the political spectrum and (2) as people report higher levels of conservatism, they would report more proenvironmental attitudes in the binding message condition and fewer proenvironmental attitudes in the individualizing condition, while there would be little difference in attitudes across message conditions as people

reported lower levels of conservatism. The results from a series of hierarchical regressions failed to support these hypotheses as there was no effect of message condition, finding only that participants reported stronger proenvironmental attitudes as they reported being more liberal. However, an exploratory hierarchical regression found higher levels of initial economic conservatism predicted greater shifts in economic ideology towards moderation. The results suggest that a single issue or a single message frame without the inclusion of additional stimuli may be insufficient to change ideology, as well as a potential unrecognized relationship between economic ideology and environmental attitudes.

ACKNOWLEDGMENTS

I would like to acknowledge each of my committee members for the time and effort they dedicated to making this thesis possible. I would like to thank Dr. Michael Harrod and Dr. Joshua Buchanan for the insight and suggestions they provided for improving this study. I would also like to thank Dr. Tonya Buchanan, my program advisor and committee chair, who's continual feedback, recommendations, and support were truly invaluable for the completion of this project.

Additionally, I would like to extend thanks to Dr. Susan Lonborg, who's instruction and feedback were instrumental in the early stages of this thesis. I would also like to thank the 2016-2018 Experimental Psychology cohort, particularly Anna Wendt, Erik Ekberg, and Elijah Bruner who provided constant feedback and support. Finally, I would like to thank Dr. Matthew Feinberg for providing not only the scale used to measure proenvironmental attitudes, but additional readings and sources relevant to this study.

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CHAPTER I

INTRODUCTION

Over the last several decades, political ideology has become a focal point of research within political psychology. However, the exact definition of ideology is still debated, especially when related to politics. This is likely because the specifics of what constitutes certain political ideologies are contextual and subject to change over time. Because of this, and because an individual's political judgments and political behaviors are driven by his or her political ideology (Jost, Federico & Napier, 2009), it is important to understand what contributes to or changes an individual's ideology, both in the short and long term.

Although there is conflicting evidence as to whether the American public is becoming more polarized (Abramowitz & Saunders, 2008; Iyengar, Sood & Lelkes, 2012; Levendusky, 2009), previous research has indicated that when exposed to a political message on same-sex marriage, individuals are likely to polarize and report stronger attitudes towards the subject in the direction of their self-reported political ideology (Christiansen & Strosser, 2016). Furthermore, polarization in attitudes towards specific issues such as climate change has been established (Feygina, Jost, & Goldsmith, 2010; McCright & Dunlap, 2011).

Message framing, however, may be able to reduce polarization. Recent research on climate change attitudes indicates that framing messages regarding climate change action in a manner in which action is argued to benefit society as a whole (Bain, Hornsey, Bongiorno, & Jeffries, 2012) or in terms consistent with the morality of the individual's ideology (Feinberg & Willer, 2013; Wolsko, Ariceaga, & Seiden, 2016) results in people reporting more favorable views on climate change action. A single attitude, however, is not completely indicative of an

individual's political ideology. The purpose of the current study is to investigate whether moral message framing can shift political ideology as a whole.

CHAPTER II

LITERATURE REVIEW

Political Ideology and Morality

While there is still much debate and disagreement on a specific definition for ideology, it can broadly be defined as a "set of beliefs about the proper order of society and how it can be achieved" (Erikson & Tedin, 2003, p. 64). Although the specific attitudes and beliefs of ideologies may change and evolve over time, political liberalism and conservatism have been the most common descriptors of political ideology in many western liberal countries including the United States for over 200 years (Everett, 2012). It is important to note that while there is a correlation between political ideology and political partisanship (Carpini & Keeter, 1993), ideology and partisanship are separate constructs.

Researchers in social psychology and political science have traditionally used the one-dimensional liberal to conservative approach to political ideology, and the traditional ideology measurements view it through this framework (Kirton, 1978; Wilson & Patterson, 1968). Recently, however, a number of researchers have disputed this traditional model, arguing that there are different factors within ideological factions, namely social and economic (e.g., Crowson, 2009; Swedlow, 2008).

Zumbrunnen and Gangl (2007) investigated different ideological sub-factors in political conservatism by first administering measures of market (economic) conservatism (i.e., a belief in limited government involvement in the marketplace), cultural (social) conservatism (i.e., a belief in upholding traditional values), and limited-government conservatism (i.e., a belief in little action by the federal government) to a sample of 450 U.S. citizens. There was no significant correlation between limited government conservatism and self-reported ideology, indicating that

the traditional belief in a small, non-interfering government is no longer a distinctly conservative belief.

However, the authors also found that both market conservatism and cultural conservatism were correlated with self-identified ideology. Furthermore, there was a weak correlation between market conservatism and cultural conservatism, indicating that the two factors share some variance, but not enough to be considered the same construct. A meta-analysis of data from the 2004 American National Election Studies (ANES) also yielded a distinction between cultural conservatism and economic conservatism. These findings lend further evidence to the claims that a bi-dimensional view is a better representation of political ideology than the traditional, one-dimensional, conservative-liberal view. In some instances, however, such as discussions of "political elites", general classification, or when predicting voting behavior, it is both appropriate and sufficient to use the liberal-conservative continuum (Everett, 2012; Jost, 2006; Jost et al., 2009).

Regardless of whether one views political ideology as a one-dimensional or multi-dimensional construct, there is a large body of research linking it to morality. Broadly, conservatives take a morally-driven avoidance approach (i.e., not taking action in order to protect people and things, such as not enacting gun control to protect people's rights to own and use a firearm) to maintain the status quo, whereas liberals are morally-driven to a prescriptive approach (i.e., taking action to provide for others' well-being such as a food stamps program) to actively address an issue (Janoff-Bulman & Carnes, 2014).

Haidt and Graham (2007) proposed the moral foundations theory, claiming that morality is based on at least five foundations: harm, fairness, in-group, authority, and purity. The foundation of harm is used to make moral judgments and decisions based on of how much

damage or benefit a decision may inflict. Fairness refers to the equitability of a decision. Individuals use the in-group foundation to make judgments based on loyalty to, and the effect that a decision will have on, one's in-group. The authority foundation is based on respecting an individual or group using social hierarchy. The foundation of purity is based on the notion that an item or action has a sense of inherent sanctity or cleanliness, and is most notably characterized by disgust when it is violated (e.g., those who consider same-sex relationships to be immoral may experience disgust when observing a same-sex couple display romantic affection). Authors of the theory suggest that liberals use the harm and fairness foundations (i.e., individualizing foundations) more than the others when making decisions, and conservatives are more likely to use the in-group, authority, and purity foundations (i.e., binding foundations).

To test the moral foundations theory, Graham, Haidt and Nosek, (2009) collected data from 2,212 adults residing in the United States. The researchers used the Implicit Association Test (IAT; see Nosek, Greenwald, & Banaji, 2007) to assess participants' implicit political attitudes. Participants then rated the extent to which they agreed or disagreed with moral judgment items based on the five foundations. Results indicated that those whose implicit attitude scores were more liberal were more likely to agree with moral judgments minimizing harm and promoting fairness, whereas those with more conservative implicit attitude scores were more likely to agree with moral judgments respecting the in-group, authority, and purity standards.

In a follow-up study, Graham et al. (2009) replicated the methods previously used and additionally asked participants the amount of money required (options included \$0, \$10, \$100, \$1,000, \$10,000, \$100,000, *a million dollars*, and *never for any amount of money*) for them to make a visceral moral trade-off (e.g., kick a dog in the head). Participants received instruction

that there would be no repercussions for whatever decision they made. The researchers found that liberals were more willing to make a moral trade-off for money in the foundations of in-group, authority, and purity, and less likely to do so for the foundations of harm and fairness. Conservatives were more likely to make a moral trade-off for money in the foundations of harm and fairness, and less likely to do so for the foundations of in-group, authority, and purity. These results not only support the claim that ideology is tied to morality but provide evidence in support of moral foundations theory.

Based on the findings of Graham et al. (2009) and other researchers (Haidt, Graham & Joseph, 2009; Weber & Federico, 2013), the moral foundations theory can account for the morality of individuals who do not fall directly into the one-dimensional view of liberal-conservative as well. For example, libertarians (i.e., those who are typically socially liberal and economically conservative) tend to score the lowest on the purity foundation (Graham et al., 2009). This indicates moral differences based on varying degrees of social and economic ideology and allows for a more in-depth and sophisticated view of the relationship between ideology and morality.

Additionally, ideological attitudes that are derived from an individual's morality tend to be resistant to persuasion (Skitka, Bauman & Sargis, 2005). Some studies have even found that opposition to morally grounded attitudes may result in individuals becoming angry (Mullen & Skitka, 2006) and reporting more polarized attitudes (Christiansen & Strosser, 2016).

However, the "party over policy" effect demonstrates that individuals are often willing to violate their own moral principles in support of their political party (Cohen, 2003). For example, Cohen (2003) assessed participants' political ideology then randomly assigned them to read a policy proposal that they were told was either supported by Democrats or Republicans.

Regardless of whether the provisions outlined in the policy were conservative or liberal, the participants were more likely to report that they supported the policy if their party's name was on it. That is, liberals were supportive of a conservative policy if they were told it was supported by Democrats, and vice versa. This willingness to violate one's moral principles in support of a political party may contribute to political polarization.

Political Polarization

There is much evidence indicating that over the last 40 years, political party elites (i.e., those who hold positions of influence within a political party), have grown more polarized in their voting behavior (Fleisher and Bond, 2001; McCarty, Pool & Rosenthal, 2006). However, there is still debate as to whether mass polarization is occurring, either along partisan or ideological lines (Fiorina & Abrams, 2009; Hetherington, 2009). For example, Fiorina and Abrams (2009) claim that most Americans are both uninformed and do not have strong political ideologies. Furthermore, they suggest that any polarization is merely among political activists and not moderates (Fiorina, Abrams & Pope, 2008).

Iyengar et al. (2012) conducted an analysis of ANES data, which has ranged in response rates from 60 to 71 percent of American voters. Participants used a thermometer scale ranging from 0 to 100 to assess how "warm" (positive) or "cold" (negative) they felt towards different groups. Researchers found that while ratings of an individual's own party have remained relatively consistent, ratings of the opposing party dropped an average of 15 points between 1988 and 2008. Their data indicate that there is increasing negative affect for the opposing party. Although ratings of opposing political parties have decreased, there has not been a significant change in thermometer ratings of ideological groups (i.e., conservative, liberal) between 1988 to

2008, lending evidence to the claim that polarization is more closely tied to partisanship than ideology.

Although there does not appear to be a change in temperature ratings between or within ideological groups, another analysis of ANES data collected between 1972 and 2004 revealed a decreasing number of ideological moderates (Abramowitz & Saunders, 2008) contrary to Fiorina et al.'s claims (2008).

Political independents are often considered to be ideologically moderate. Although there are those who behave like pure independents, many of those who consider themselves to be independent still behave in a manner consistent with those who identify with a particular party (Greene, 1999, 2004; Hawkins & Nosek, 2012).

In a study by Hawkins and Nosek (2012) which examined independents in more detail, participants read a randomly assigned fabricated newspaper article in which Republicans proposed one welfare plan and Democrats proposed another. Although both groups read the same articles, the policies indicated that they were supported by different political parties between groups. Next, participants rated their preference for each plan. Finally, the researchers assessed participants' implicit party attitudes. Results indicated that independents whose attitudes were implicitly Democratic were more likely to support the liberal plan, whereas those whose attitudes were implicitly Republican were more likely to support the conservative plan. Hawkins and Nosek (2012) repeated the study using a special education article rather than a welfare article and found the same pattern of results. Further replication studies yielded similar results, providing evidence for the claim that self-proclaimed political independents are prone to partisan behavior (Hawkins & Nosek, 2012).

Through cross-sectional survey data, Lupu (2014) found that individuals are likely to recognize the growing partisan polarization, and when they do, are likely to become more polarized themselves. Because they are prone to behave as partisans, leaners (i.e., independents whose political attitudes align to some degree with a political party) may develop stronger affective attachments to their ideology or the party they lean with over time, accentuating in-group/ out-group effects. These affective attachments may result in leaners displaying the behavior noted by Lupu (2014) and becoming more polarized along the lines of the party they lean with. In turn, this polarization may contribute to the decreasing number of ideological moderates.

Counterattitudinal Polarization and Moral Message Framing

Recent research has investigated whether an ideological message could lead to immediate polarization in political attitudes (Christiansen & Strosser, 2016). In this study, ideology was measured using a 6-point Likert scale and baseline attitudes towards same-sex marriage were assessed using the Attitudes Towards Same-Sex Marriage scale (ATSSM: Pearl & Galupo, 2007). Between one to two weeks later, participants were randomly assigned to read either a conservative or liberal message regarding same-sex marriage, or no message at all (control), after which they took the ATSSM again. Results indicated that regardless of the ideological slant of the message, participants reported more polarized attitudes towards same-sex marriage in the direction of their ideological leaning. These results indicate that attitude polarization may occur when exposed to ideological messages, triggering the backfire effect in which people reject evidence that is counter to their beliefs and become not only more entrenched in their own beliefs, but shift their attitudes further in the opposite direction of the given information (Nyhan

& Reifler, 2010). However, this study used a one-dimensional measure of political ideology and provided no method of moderating the polarization.

Effective strategies aimed at reducing polarization may be found in framing messages (i.e., shaping them in a manner that influences individuals' reactions to them) using different moral foundations when communicating between ideological groups. Feinberg and Willer (2013) assessed participants' political ideology and then randomly assigned them to read a message based in the moral foundations of harm, a message based in purity, or a neutral message. Each message was accompanied by three pictures intended to appeal to the same moral foundations. After reading the message, participants reported their environmental attitudes, beliefs in global warming, and attitudes towards proenvironmental legislation. The researchers found that while there was no significant difference between any attitudes reported by liberals across conditions, conservatives in the purity condition reported more proenvironmental attitudes, a higher belief in global warming, and more favorable attitudes towards proenvironmental legislation than conservatives in the harm and neutral conditions. Proenvironmental arguments are counterattitudinal for conservatives, and the shifts indicate that presenting a counterattitudinal issue using a moral frame consistent with an individual's ideology may result in moderation as opposed to polarization in attitudes. It should be noted, however, that because participants saw pictures and text, one cannot be certain that the findings were due to message framing alone.

Additionally, the framing of the messages in the experimental conditions utilized only a single moral foundation (i.e., harm or purity). This weakness was addressed in a similar study conducted by Wolsko, Ariceaga, and Seiden (2016) who used both the harm and fairness foundation in the individualizing message, and the in-group, authority, and purity foundations in

the binding message. The results were consistent with those found by Feinberg and Willer (2013), although pictures were used alongside the messages as well.

Summary

While previous research has indicated moral message framing may lead to shifts in political attitudes, the current study investigated whether ideology as a whole would shift after exposure to morally framed messages. No pictures were used to ensure any possible effects observed were a result of framing alone. Additionally, the messages regarded climate change action, as research has shown it to be a polarizing issue (Dunlap, Xiao, & McCright, 2001; Feinberg & Willer, 2013; McCright & Dunlap, 2011). We hypothesized an interaction between initial ideology and message frame on both shifts in ideology and proenvironmental attitudes. Specifically, we hypothesized that: (1) the binding message would have a larger impact in moderating ideology (i.e., larger shifts in SECS scores) as people report higher levels of conservatism, while the individualizing message would have no impact across the ideological spectrum (see Figure 1 for hypothesized results), and (2) as people report higher levels of conservatism, they would report more proenvironmental attitudes when exposed to the binding message and lower proenvironmental attitudes when exposed to the individualizing, while there would be little difference in attitudes across message conditions as people reported lower levels of conservatism (see Figure 2 for hypothesized results).

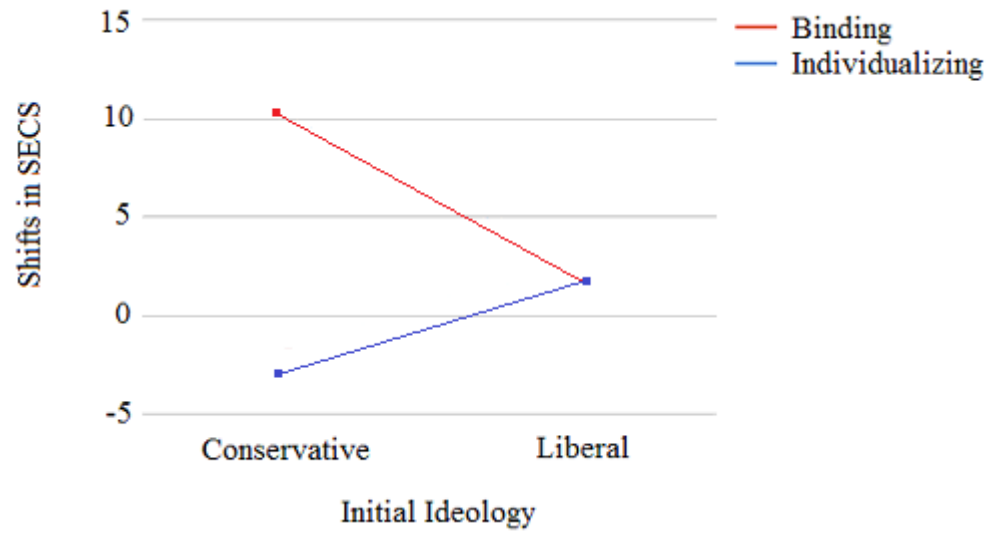


Figure 1. Anticipated results for hypothesis 1. Possible shifts in SECS scores range from -100 to 100. The range displayed is smaller than what is possible to better present moderate anticipated shifts.

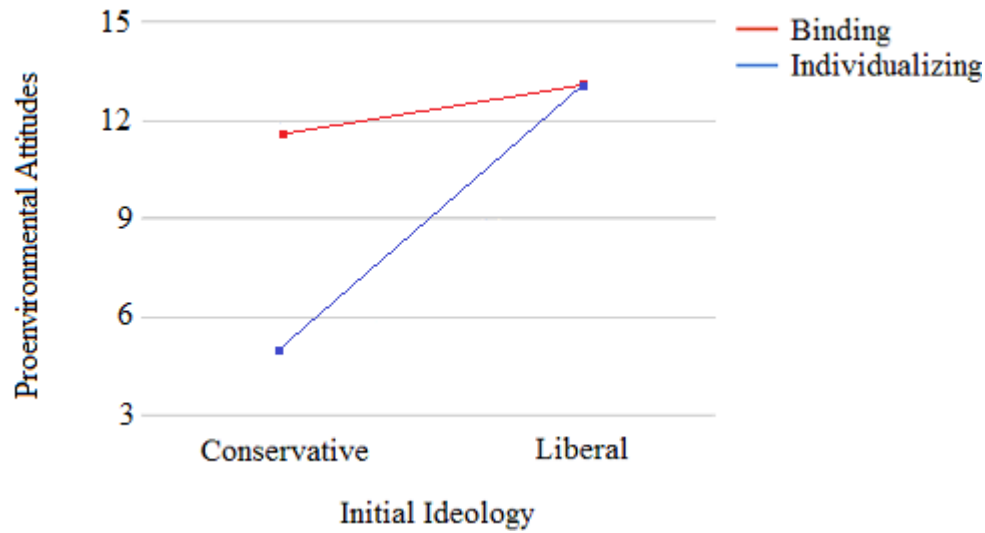


Figure 2. Anticipated results for hypothesis 2. Range of possible scores for proenvironmental attitudes range from 3 to 15.

CHAPTER III

METHODS

Participants

A convenience sample was recruited using the Central Washington University's SONA system. Data was collected from 321 participants following the suggestion of Yin and Fan (2001) of a sample size to predictor ratio of at least 100:1 to reduce R^2 shrinkage. Because the purpose of the study was to investigate political polarization in the United States, only U.S. citizens were sampled. Responses from 19 participants who failed the manipulation check were excluded. Item mean substitution was used to address missing data points. However, to avoid artificially decreasing the variation of scores excessively, data from 59 participants who were missing more than 20% of items on any scale were excluded, resulting in the data from 243 (58 male, 180 female, 5 other/ prefer not to answer; $M_{age} = 20.31$, $SD = 3.94$) participants being included in analyses.

Materials

Measures of Ideology. The 12-Item Social and Economic Conservatism Scale (SECS; Everett, 2012) was used to assess political ideology, which consists of a 5-item economic subscale and a 7-item social subscale (see Appendix A). Response options are feeling thermometers between 0 and 100, with higher scores indicating more conservative ideology (e.g. a more positive view of "Traditional Marriage"). Scores are calculated by averaging responses within each subscale, as well as every item for an overall score. The SECS was created using a sample of 291 U.S. citizens (126 females) with a mean age of 37. The SECS has adequate reliability based on the previous literature (Everett, 2012; social $\alpha=.87$ economic $\alpha=.70$) and the current study (social $\alpha = .84$, economic $\alpha = .61$). Additionally, two Likert scales (i.e., economic,

social) ranging from 1 (*very liberal*) to 7 (*very conservative*) were used as an additional backup measure of ideology, which demonstrated convergent validity for both the social ($r(241) = .63, p < .001$) and economic ($r(241) = .59, p < .001$) subscales of the SECS.

Proenvironmental Attitude Measure. Participants reported proenvironmental attitudes (e.g., "It is important to protect the environment") on a 3-item scale developed by Feinberg and Willer (2013; see Appendix B). Item responses range from 1 (*strongly disagree*) to 5 (*strongly agree*). The coefficient alpha for the measure is .79, indicating acceptable reliability.

Climate Change Message Framing. Messages (IV1) regarding climate change action were constructed using the relevant foundations from moral foundations theory (i.e., harm and fairness for the individualizing frame, authority, in-group, and purity for the binding frame; see Appendix C). The messages were pilot tested on a sample of 49 participants from the Central Washington University SONA system using a within-subjects design to minimize researcher bias and to assess if messages were seen as differing in ideological strength. Participants were also asked to self-report their political ideology on a 7-point Likert scale ranging from *very liberal* (1) to *very conservative* (7) and their responses were normally distributed ($M = 3.86, SD = 1.46$). Online, participants rated how strongly they perceive each message on a 7-point Likert scale ranging from *very liberal* (1) to *very conservative* (7). The order in which they read the messages was randomized. A dependent/repeated measures t-test was conducted to assess whether the messages are perceived as ideologically different from one another. There was a significant difference in ideological rating of the individualizing ($M = 2.49, SD = 1.40$) and binding ($M = 3.71, SD = 1.78$) messages, $t(48) = 4.05, p < .001$, indicating even though neither message was perceived as being conservative, they were distinguishable as being ideologically different (i.e., the individualizing message was seen as more liberal than the binding message). However, this is

not surprising as a proenvironmental stance towards climate change is typically seen as a liberal issue.

Procedure

This study was conducted online and received approval from the Human Subjects Review Council at Central Washington University. Participants read an online consent form before proceeding to participate.

Participants first completed the SECS, followed by the self-reported ideology Likert scales. They then rated their preference for 6 colors, 4 foods, and 5 methods of transportation as a filler task. Participants were then randomly assigned to read either the binding or individualizing message. After reading the message, they again took the SECS and the self-reported ideology Likert scales, and the 3-item proenvironmental attitudes scale. Finally, participants reported demographic information.

CHAPTER IV

RESULTS

Although scores were normally distributed (see Figure 3), on average, participants reported being slightly more conservative than the midpoint of the SECS, (). $t(242) = 7.50, p < .001$. Additionally, participants reported proenvironmental attitudes higher than the midpoint (i.e., 9) of the scale ($\alpha = .76$). However, as participants did not take the proenvironmental attitudes scale prior to message exposure, their ratings may be artificially inflated or reduced. See Table 1 for descriptive statistics.

Table 1

Means and Standard Deviations for Predictor and Criterion Variables

Variable ^a	Initial				Shift			
	M	SD	Min	Max	M	SD	Min	Max
Ideology	57.74	16.11	13.5	100	.38	4.26	-12.23	35.42
Social Ideology	58.90	20.50	3.14	100	.38	5.63	-21.39	48.43
Economic Ideology	56.12	14.92	20.4	100	.38	5.46	-17.0	27.8
Proenvironmental Attitudes	12.60	2.35	3	15	—	—	—	—
Message Condition ^b	1.51	.50	—	—	—	—	—	—

^aN = 243. ^bCoded as 1 = individualizing, 2= binding.

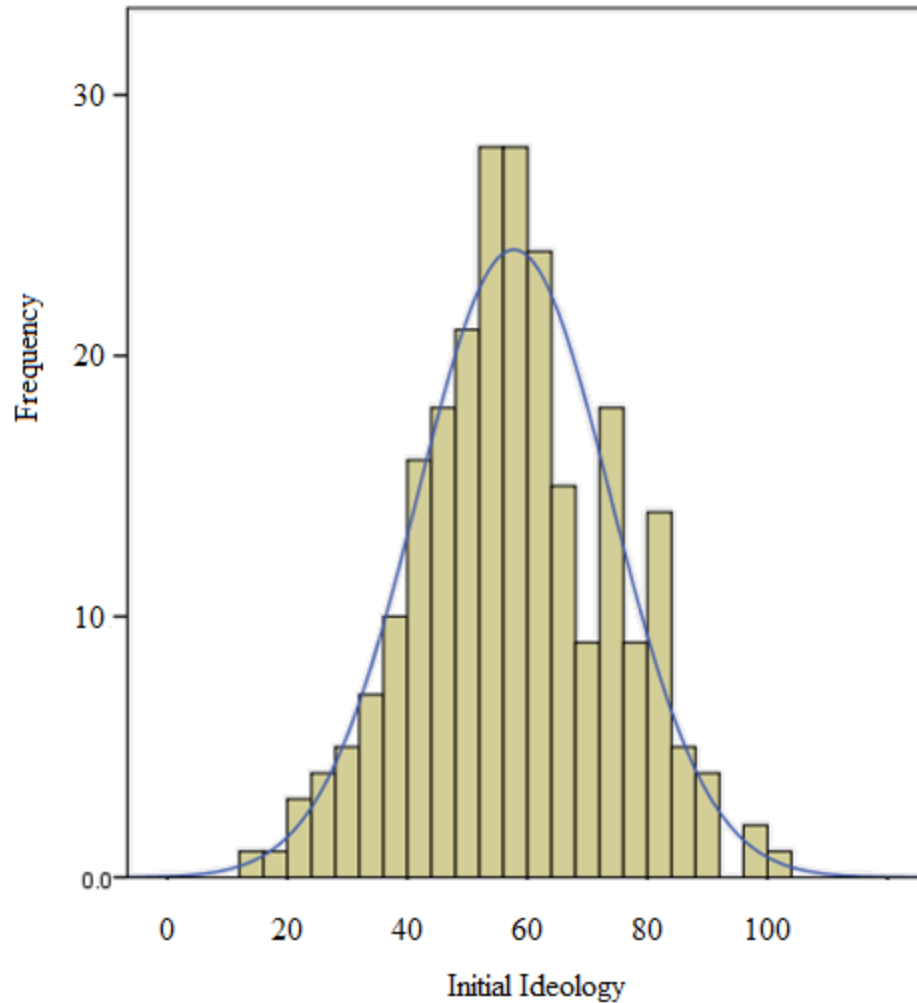


Figure 3. Distribution of participants ideology based on initial SECS scores.

Ideological Shifts

To test Hypothesis 1, a hierarchical regression analysis was run using shifts in ideology as the criterion variable (DV), and a continuous measure of initial ideology (liberal to conservative SECS scores) and message frame (binding vs. individualizing) as initial predictor variables (Figure 4). Shifts in ideology were calculated by subtracting post-manipulation SECS scores from pre-manipulation SECS scores, with higher scores indicating a shift towards liberalism. Results yielded support for the null hypotheses, $R^2 = .01$, $F(2,240) = 2.43$, $p = .09$,

indicating that shifts in ideology were not predicted by initial ideology ($\beta = .02, p = .27$) or message condition ($\beta = -1.00, p = .07$).

Analysis of the regression model including the interaction of ideology \times message frame also yielded support for the null hypothesis, $R^2 = .01, F(3,239) = 1.77, p = .15$, as shifts in ideology were not predicted by initial ideology ($\beta = .05, p = .33$), message condition ($\beta = .32, p = .87$), or their interaction ($\beta = -.02, p = .50$). Additional within subjects analyses suggest that there was no significant difference in pre and post manipulation SECS scores (total or each subscale) for participants as a whole or within each condition ($ps > .05$).

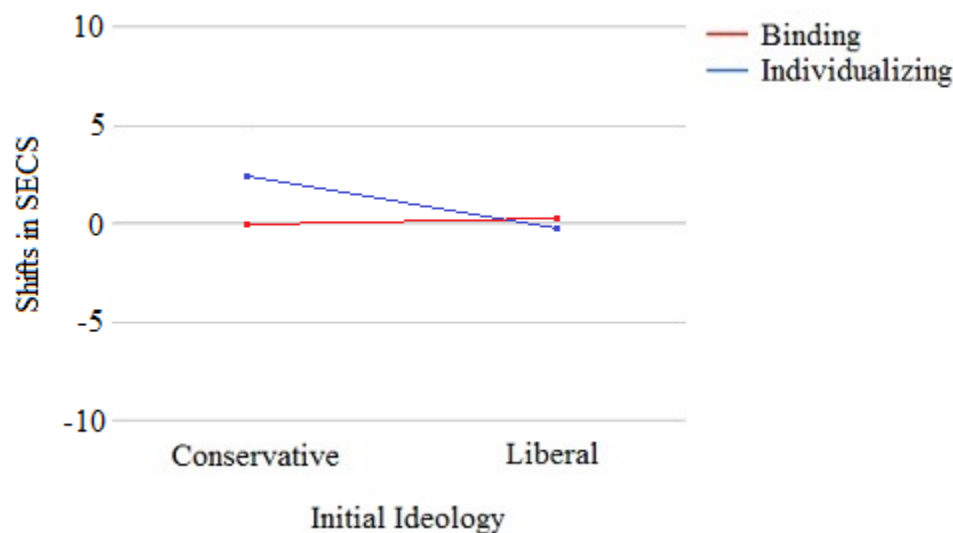


Figure 4. Graph of results for hypothesis 1.

An exploratory hierarchical regression was conducted using participant scores on the social subscale of the SECS only, using initial ideology and message frame as predictor variables, $R^2 = .01, F(2,240) = 1.90, p = .16$ (Figure 5). Shifts in social ideology were not predicted by initial ideology ($\beta = .02, p = .23$) or message condition ($\beta = -1.00, p = .17$). When including the interaction of social ideology \times message frame as an additional predictor variable,

$R^2 = .01$, $F(3,239) = 1.61$, $p = .19$, we again see no effect of initial ideology ($\beta = .08$, $p = .17$), message condition ($\beta = 1.17$, $p = .60$), or their interaction ($\beta = -.04$, $p = .30$) on shifts in ideology.

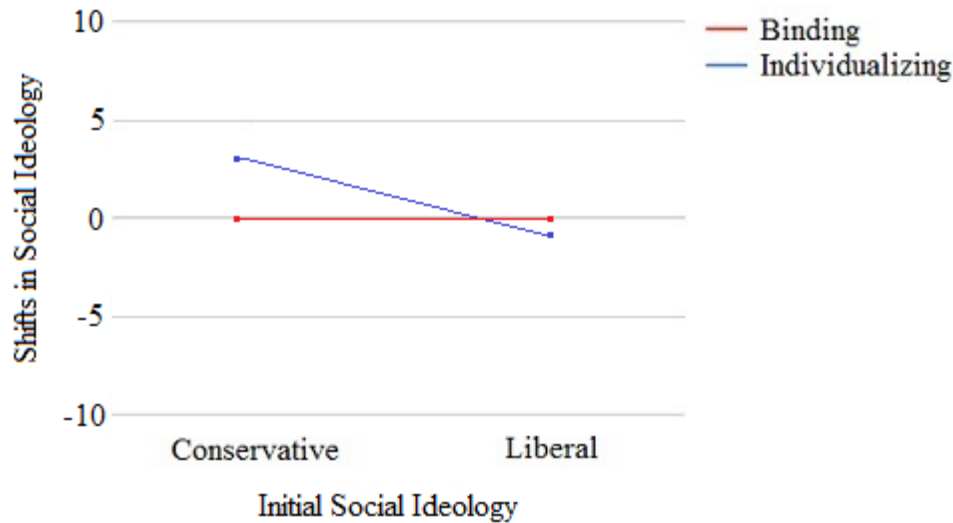


Figure 5. Graph of results for exploratory analysis using social ideology.

Another exploratory hierarchical regression was conducted using the economic subscale of the SECS only. Shifts in economic ideology (criterion variable) could be predicted using initial economic ideology and message condition as predictor variables, $R^2 = .03$, $F(2,240) = 4.44$, $p = .01$ (Figure 6). However, initial economic ideology emerged as the only unique predictor of shifts in ideology ($\beta = .06$, $p = .01$), with participants who reported higher levels of initial economic conservatism demonstrating a larger shift in economic conservatism towards moderation. Message condition was not a significant predictor in the model ($\beta = -1.00$, $p = .15$). However, when including the economic ideology \times message frame interaction in the model, $R^2 = .01$, $F(3,239) = 2.99$, $p = .03$, neither condition ($\beta = -1.86$, $p = .50$), initial ideology ($\beta = .04$, $p = .64$), nor their interaction ($\beta = .02$, $p = .74$) emerged as significant predictors.

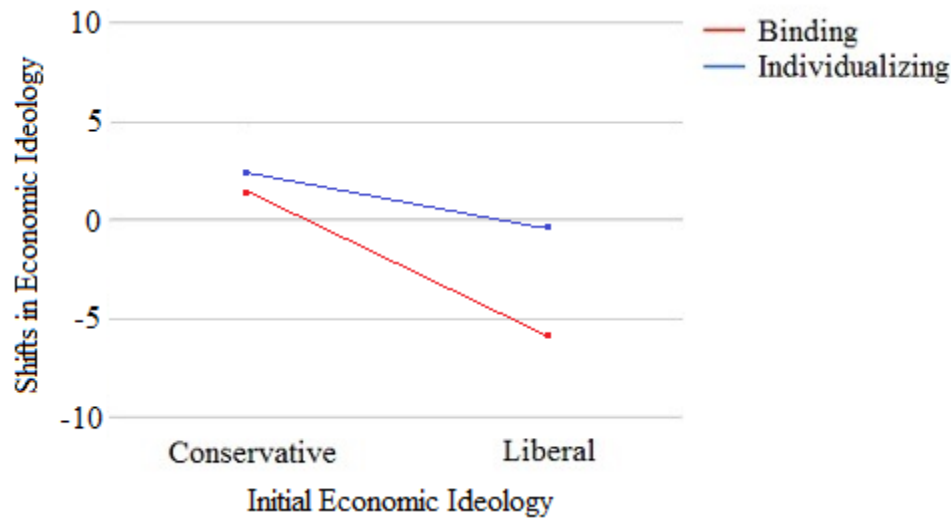


Figure 6. Graph of results for exploratory analysis using economic ideology.

Proenvironmental Attitudes

To test Hypotheses 2, another hierarchical regression analysis was run with proenvironmental attitudes as the criterion variable, and initial ideology and message frame as predictor variables, $R^2 = .14$, $F(2,240) = 19.92$, $p < .001$ (Figure 7). However, it was found that only initial ideology was a significant unique predictor ($\beta = -.05$, $p < .001$), with higher SECS scores (i.e., higher levels of conservatism) predicting lower proenvironmental attitudes, with no effect of message condition ($\beta = .31$, $p = .27$) indicating that initial ideology is a significant predictor of proenvironmental attitudes controlling for message condition. When we include the interaction of ideology \times message frame as an additional predictor variable, $R^2 = .13$, $F(3,239) = 13.278$, $p < .001$, shifts in ideology were still not predicted by message condition ($\beta = .68$, $p = .52$) nor the interaction ($\beta = -.10$, $p = .72$), and ideology was no longer a unique predictor ($\beta = -.01$, $p = .12$).

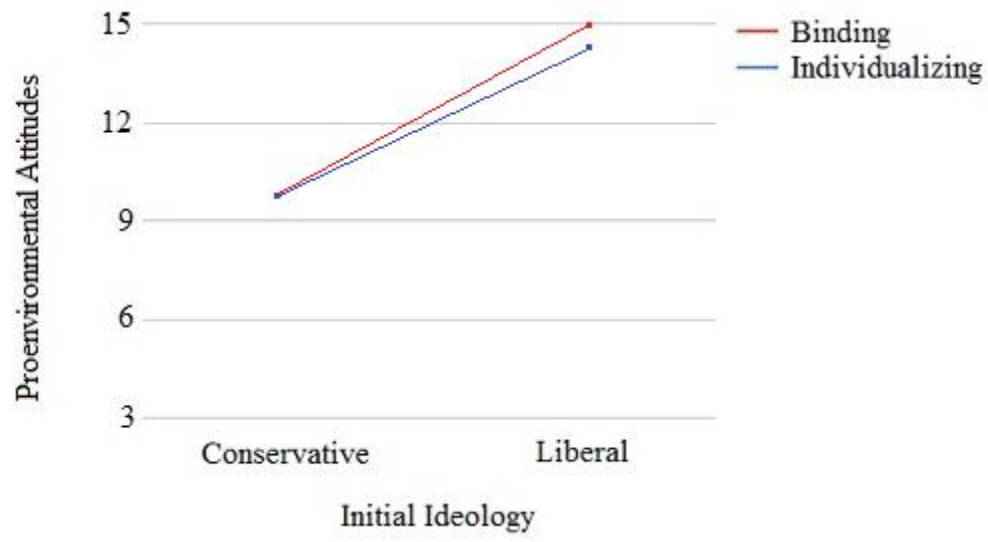


Figure 7. Graph of results for hypothesis 2.

Table 2

Correlation Matrix of Variables

Variables	1	2	3	4	5	6	7
1. Initial Ideology	—						
2. Social Ideology	.95**	—					
3. Economic Ideology	.78**	.53**	—				
4. Proenvironmental Attitudes	-.37**	-.36**	-.27**	—			
5. Ideology Shifts	.23	.08	.04	.05	—		
6. Social Shifts	.04	.09	-.06	.05	.85**	—	
7. Economic Shifts	.09	.03	.17*	.01	.65**	.15*	—
8. Message Condition	-.06	-.09	.01	.09	-.12	-.10	-.09

* $p < .05$, ** $p < .001$

CHAPTER V

DISCUSSION

This study continues the line of emerging research into the effects of moral message framing on shifting and moderating political attitudes, expanding the investigation to political ideology as a whole, as well as examining the role moral message framing has on proenvironmental attitudes. It was hypothesized that (1) the binding message would have a larger impact in moderating ideology (i.e., larger shifts in SECS scores) as people report higher levels of conservatism, while the individualizing would have no impact across the ideological spectrum. The results failed to support this hypothesis, as neither initial ideology nor message condition predicted a shift in ideology regardless of initial ideology. However, initial ideology was a unique predictor for shifts in economic ideology specifically.

It was also hypothesized that (2) to the extent that people report higher levels of conservatism, they would report more proenvironmental attitudes when exposed to the binding message and lower proenvironmental attitudes when exposed to the individualizing message, while there would be little difference in attitudes across message conditions as people reported lower levels of conservatism. The results did not support these hypotheses as there was no effect of message condition, indicating that the moral framing of the message did not influence the proenvironmental attitudes of participants. However, initial ideology was a unique predictor of proenvironmental attitudes overall, with higher levels of conservatism predicting lower proenvironmental attitudes. While previous research has found evidence that moral message framing can shift specific attitudes (e.g., Feinberg & Willer, 2013; Wolsko et al., 2016), our current findings suggest that framing of a single-issue message may be insufficient to shift political ideology.

One potential explanation for the null results may be in the study design itself. Participants took the study in one block, and both the pre-manipulation and post-manipulation administration of the SECS occurred in a single sitting. While the filler task was intended to remove the saliency of the political information that was solicited before exposure to the message, it is possible that the filler task did not provide a sufficient delay and that participants reported similar responses to maintain consistency. While the risk of attrition would increase, it is possible that a two-session design may have yielded significant results.

It is worth noting that while ideology as a whole did not shift, economic ideology by itself did, although there was no effect of message condition. This suggests that mere exposure to a moral proenvironmental message, regardless of framing, may result in a shift in economic ideology toward moderation, though it is unclear why only economic ideology and not social ideology was affected. No control condition (i.e., the absence of a moral message) was used however, so an alternative explanation is that the shifts were due to a test-retest effect, potentially as a result of the relatively lower reliability of the SECS's economic subscale as compared to the social subscale.

Additionally, the messages themselves may have introduced a level of error into the study, as both were perceived as at least somewhat liberal overall during the pilot study, and a lack of perception of conservatism in the binding message may have contributed to our null effects. Proenvironmental rhetoric is typically associated with liberalism, and it is unclear how to shift perception of the messages without changing the stance (in turn changing the study to investigate differences in pro and antienvironmental messages) or the phrasing (removing or changing the moral foundations used). However, there was a significant difference in how the messages were perceived ideologically (i.e., the individualizing message was perceived as

significantly more liberal than the binding message), suggesting that the moral framing used did result in the binding message being seen as less liberal.

Future research may include a replication with a control condition to find evidence for or against a test-retest effect for economic ideology. Furthermore, if the shift was simply an effect of message exposure, additional studies may further investigate the relationship of environmental attitudes and economic political ideology, as it would appear from the current results that environmental attitudes as a factor may load on economic ideology.

It is also important to note that there was no effect of message condition on environmental attitudes, inconsistent with previous research by Feinberg and Willer (2013) and Wolsko et al. (2016). This may be due to differences in the messages used, though a more probable explanation would be the inclusion of additional stimuli (i.e., pictures) with the messages in previous studies and the lack of them in this study. It is possible that an interaction of message condition and an additional stimulus were responsible for differences in environmental attitudes, and that moral message framing alone is insufficient. To address this inconsistency, this study could be replicated with the inclusion of pictures to compare the effects of moral message framing on environmental attitudes when paired or unpaired with additional stimuli.

Overall, this study found that attitudinal shifts resulting from moral message framing do not extend to ideology as a whole but may trigger shifts in smaller factors that comprise ideology. However, additional research is needed to draw any solid conclusions. Furthermore, our results raise additional questions about the relationship of environmental attitudes and economic ideology, as well as the extent to which additional variables play a role in using message framing to shift attitudes towards the environment.

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APPENDIX A

12-Item Social and Economic Conservatism Scale (Everett, 2012)

Please indicate the extent to which you feel positive or negative towards each issue. Scores of 0 indicate greater negativity, and scores of 100 indicate greater positivity. Scores of 50 indicate that you feel neutral about the issue.

1. Abortion (reverse scored)
2. Limited government*
3. Military and national security
4. Religion
5. Welfare benefits (reverse scored)*
6. Gun ownership*
7. Traditional marriage
8. Traditional values
9. Fiscal responsibility*
10. Business*
11. The family unit
12. Patriotism

Items marked with an asterisk comprise the economic subscale. Those unmarked comprise the social subscale.

APPENDIX B

3-Item Environmental Attitudes Scale (Feinberg & Willer, 2013)

How strongly do you agree or disagree with the following statements? 1 (*strongly disagree*) to 5 (*strongly agree*)

1. It is important to protect the environment.
2. It is important to reduce the number of green-house gases people emit into the environment.
3. Compared to other political and social issues, protecting the environment ranks as one of the most important.

APPENDIX C

Messages

Please read the following public service announcement:

Individualizing:

We must take action work to reduce the harm done to this country's natural environment. Creating a sustainable future by taking action to reduce climate change is only fair to future generations and reduces the suffering of countless animals. We must make the world a better place by preventing future harm to the environment. Help protect the natural resources so that everyone has fair access to them by contacting your representatives.

Binding:

We must take action to protect the sacredness and purity of this country's natural environment. Creating a sustainable future by taking action to reduce climate change is our civic duty, and it benefits all Americans. We must make America a better place by following the example of our leaders to better the environment. Help to protect the natural resources of your fellow Americans by contacting your representatives.

APPENDIX D

Demographic Information Questionnaire

Please report the following information about yourself:

- Are you a U.S. Citizen?
 - Yes
 - No
 - Prefer not to answer
- Political Party Affiliation
 - Democrat
 - Republican
 - Independent
 - Other (please specify)
 - Prefer not to answer
- How knowledgeable are you regarding politics?
 - Not at all knowledgeable 1 2 3 4 5 6 7 Extremely knowledgeable
- How engaged are you in politics?
 - Not at all engaged 1 2 3 4 5 6 7 Extremely engaged
- Religion
 - Open entry
- How religious are you?
 - Not at all religious 1 2 3 4 5 6 7 Extremely religious
- Ethnicity
 - White or Caucasian

- Hispanic or Latino
 - Black or African American
 - Native American
 - Asian
 - Pacific Islander
 - Other (please specify)
 - Prefer not to answer
- Gender
 - Male
 - Female
 - Other (please specify)
 - Prefer not to answer
- Age
 - Open entry