MORAL CONVICTION AS A MODERATOR OF FRAMING EFFECTS

by

SEAN PATRICK GARGUILO

A thesis submitted to the

Graduate School-Camden

Rutgers, The State University of New Jersey

in partial fulfillment of the requirements

for the degree of Master of Arts

Graduate Program in Psychology

written under the direction of

Ira J. Roseman, PhD

and approved by

Ira J. Roseman	
 Mary J. Bravo	
 J. William Whitlow	

ABSTRACT OF THE THESIS

Moral Conviction as a Moderator of Framing Effects

by SEAN PATRICK GARGUILO

Thesis Director:

Ira J Roseman, PhD

Coverage of political issues by the media often contains subtle persuasive content that can go unnoticed. Past research has labeled one such type of persuasion as issue framing; persuasion that works by altering what information within a discussion receives emphasis rather than altering the content of that information. While the relationship between the use of issue frames and resulting opinion is well established, what is less understood is what factors might moderate the relationship. Existing research has suggested that a variety of attitude and message variables might affect this relationship. This study examined whether an especially strong type of belief, moral conviction, acts as a moderator of the relationship between issue frames and opinion. This study also manipulated the extent to which language was used in framed arguments to test whether the effect of moral conviction is dependent on the message. Two political issues, environmental protection and tax policy, were used to test these hypotheses, and to compare the effect of moral conviction to other variables previously studied in the literature. The results of this study did not consistently support the hypotheses presented, but provided at least some evidence that moral conviction moderates the effects of persuasive communications.

Acknowledgments

I would to thank my advisor, Dr. Ira Roseman, for the countless hours he has spent working on this study, for the invaluable advice and guidance he has given me in my academic career, and for the patience and dedication he has shown to me and to all of his students. I would also like to thank the members of my committee, Dr. Mary Bravo and Dr. Bill Whitlow, who gave considerable input on this thesis and gave very generously of their time so that it could be completed on schedule. I owe a great debt to all my student colleagues, especially Brian Johnston, Andrew Bryant and Kevin Byrnes, who never failed to offer their help throughout this masters program, and whose friendship has provided me the fortitude to get through the stress of graduate school these past two years. Finally I would thank my parents, without whose help and support I could not have pursued higher education.

Table of Contents

1.	Title Page	i
2.	Abstract	ii
3.	Acknowledgments	iii
4.	Table of Contents	iv
5.	List of Tables	v
6.	Introduction	1
7.	Method	8
8.	Results	25
9.	Discussion	51
10.	Appendices	61
11	References	74

List of Tables

1. Table 1: Mean Opinion Scores on Environmental Issue by Condition with Standard
Deviations in Parenthesis 16
2. Table 2: Mean Opinion Scores on Tax Policy Issue by Condition with Standard Deviations in
Parentheses 17
3. Table 3: Pearson Correlations Between Measures of Moral Conviction 18
4. Table 4: Mean Opinion Scores on Environmental Issue by Moral Conviction and Condition,
with Standard Deviations in Parentheses 21
5. Table 5: Mean Opinion Scores on Tax Policy Issue by Moral Conviction and Condition, with
Standard Deviations in Parentheses 24
6. Table 6: Pearson Correlations Between Variables Assessed in the Environmental Issue 27
7. Table7: Beta Weights from Regressions of Environmental Issue Opinion Data 28
8. Table 8: Beta Weights from Regression of Issue Considerations in the Environmental Issue 29
9. Table 9: Pearson Correlations Between Variables used in the Tax policy Issue 30
10. Table 10: Beta Weights from Regressions of Tax Policy Issue Opinion Data 31
11. Table 11: Pearson Correlations Between Demographic and Opinion Variables in the
Environmental Policy 32
12. Table 12: Beta Weights from Regressions of Environmental Issue Demographic Data 32
13. Table 13: Pearson Correlations Between Demographic and Opinion Variables in the
Tax Policy Issue 33
14. Table 14: Beta Weights from Regressions of Tax Policy Issue Demographic Data 33

Introduction

Every day we encounter news stories that have political content without giving them a second thought. Yet every example of political communication whether through print, radio or television represents a choice on the part of the publisher as to which facts within the discussion deserve to be emphasized, elaborated on, or ignored. Such decisions, while subtle, can have dramatic effects on the opinions of people exposed to these political messages (Entman, 1993).

These variations in emphasis in how an issue is discussed are referred to as how that issue is "framed". A more thorough definition is provided by Entman (1993): "To Frame is to select some aspects of a perceived reality and make them more salient in communicating context, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, or treatment recommendation for the item described." What distinguishes framing from other types of persuasion is that it works without providing new information. Rather framing works primarily by choosing which considerations within a discussion of an issue receive emphasis and elaboration, and which considerations are glanced over or ignored (Nelson, Oxley & Clawson, 1997a).

There is a large body of literature showing that issue framing works as a persuasive tool. Many studies have shown that framing the same issue in different ways, while keeping the same core facts constant, is effective at influencing opinion (e.g. Jacoby, 2000; Nelson & Kinder, 1996; Nelson, Oxley & Clawson, 1997b; Nelson & Oxley, 1999). While the relationship between the use of framing and resulting opinion is well established, what is poorly understood in the literature is what moderates this relationship, and how these variously studied moderators interact with one another (Entman, 1993; Druckman, 2001). Within the body of literature on potential moderators of framing effects is a line of research that has studied how values and strong beliefs might change or limit the effectiveness of issue framing.

Some research has shown that the presence of prior beliefs about an issue being framed can reduce the effectiveness of framing (Druckman & Nelson, 2003). This study concluded that beliefs that are strong enough to be persistent and that stand up to discussion and deliberation make for the strongest moderators. Related research has shown that individuals' political values relevant to the issue being discussed such as egalitarianism and wealth attribution can affect when issue framing will be effective (Bullock & Fernald, 2005; Slothuus, 2008). Along the same line of thinking, other studies have found that which considerations surrounding the issue resonate with the individual also moderate the framing effects. This has most often been operationalized as what considerations within the argument participants think are important (Nelson, Oxley & Clawson 1997B; Nelson & Oxley, 1999; Nelson & Kinder, 1996).

The conclusion that can be drawn from this body of research is that people's strong or persistent beliefs are the least susceptible to framing. One possible next step from this conclusion is to identify the strongest category of beliefs people hold, and to test what effect these beliefs have on the relationship between frames and opinion. One such category of beliefs has been variously labeled as convictions (Abelson, 1987), moral beliefs (Lakoff, 1996), and sacred values (Tetlock, et al., 2000). A useful paradigm for our purposes is a recent line of research that has attempted to cobble together these various terms into a single concept: moral conviction (Skitka & Mullen, 2002a).

Defining a belief as a moral conviction is meant to describe the differences that exist in people's thinking when they label a belief as moral rather than just strong. According Skitka's theory, beliefs that people label as moral tend to be separate and above their other strong beliefs. They tend to be tied into a person's core sense of right and wrong and how they define themselves. Moral convictions are also separated from other strong beliefs by a motivational component; when people feel moral conviction about something they use the belief not just to describe how the world is, but how it ought to be and feel that some action may be required

(Skitka & Bauman, 2008; Skitka & Mullen, 2002a; Skitka & Mullen, 2002b; Mullen & Skitka, 2006).

If moral conviction truly describes the strongest of strong beliefs, it can be reasonably argued that it should also be among the strongest moderators of the effectiveness of issue framing. However, prior research has also shown that the activation of moral attitudes in the recipient of a political message can depend on the language used in that message (Lakoff, 1996; Westen, 2003). Therefore it is possible moral attitude might not act alone to affect opinion change, but might depend on the moral content of the language used.

The Present Study

The broad long-term goal of this research is to understand the limits of political persuasion through the media. Understanding the extent to which the voting public can be manipulated by media messages has important implications for society and the functioning of democracy. Moreover, understanding which types of people respond to which types of persuasive messages is potentially useful in developing more effective media messages.

Our goal for this study is to expand upon the existing research on framing effects by testing whether moral convictions might serve as a control for the effectiveness of framing as a means of persuasion. Starting from the premise that stronger beliefs make for stronger moderators of framing effects, we propose the following hypothesis:

H1: Moral conviction will moderate the relationship between the way a political issue is framed and the opinion change that results from that frame.

Our independent variable is Issue Frame: it is a categorical variable and composed of two levels: pro issue, anti issue. Our dependent variable is opinion change; it is continuous and ranges from a shift towards a liberal position to shift towards a conservative position. Our moderator is moral

conviction: it is continuous and ranges from low moral conviction to high moral conviction on a given issue.

Because it is possible that moral conviction might not act directly to effect opinion, but might depend on the moral content of the argument presented, we have two additional hypotheses:

H2: A framed political message that uses moral language will be more persuasive than a framed message that uses non-moral, that is, purely practical language.

H3: There will be an interaction between the moral content of a framed message and the moral conviction of the recipient to produce opinion change such that a framed message that contains moral language will have a greater influence on participants who have a moral conviction relevant to the issue.

Our independent variable is again issue frame, but levels for these hypotheses are the type of argument used rather than the direction of persuasion, they are: moral, practical and control.

We have four additional hypotheses that compare the effect of moral conviction to previously studied moderators of the relationship between frames and opinion. Our additional moderators are egalitarianism, opinion strength and ratings of considerations from within a framed argument. Because we are concerned with the effect of moral attitudes on opinion, we break down these moderating variables into moral and non-moral components. Our first moderator is a measure of which considerations within the framed discussion individuals rate as important. The variable is continuous and scores will range from strong emphasis on practical considerations to strong emphasis on moral considerations.

H4a: Participants who give greater emphasis to moral considerations will be less susceptible to persuasion than participants who give greater emphasis to practical considerations.

The independent variable in this case is the participants' ratings of considerations within the argument, while the dependent is again opinion change.

H4b: Participants will rate moral consideration as more important than practical considerations.

Because prior research has shown that an individual's values affect opinion change under the same rationale that we now predict moral conviction will affect opinion change, we test whether a relevant value will interact with the moral content of a framed message.

H5: There will be an interaction between the moral content of a framed message and the level of egalitarianism of the recipient to produce opinion change.

The independent variable added in this hypothesis is a participant's level of egalitarianism, which can vary from low to high.

Finally, we test the relative strength of moral conviction in predicting opinion:

H6: The effect of moral conviction on opinion will remain significant when accounting for the effect of all other predictor variables.

Method

Overview

In order to test these hypotheses, we designed an experiment that tested how the effectiveness of framing differs among people based on their morals, values and their considerations of arguments about the issue. For this study we used two political issues that we selected from previous studies on issue framing effects: tax policy and environmental protection. These two subjects were selected because they contain ambiguous moral content, that is to say they are often discussed using both moral and purely practical arguments (for relevant examples of environmental arguments, see Diamond, 2005; for examples of tax policy arguments, see Krugman, 2009). Tax policy can be discussed in moral terms by making an argument based on egalitarianism, but it can also be argued on purely practical grounds because of the effect it has on the economy and the need for taxes to allow the government to function. Similarly, environmental protection can be argued morally by talking about the rights of people to have their land the way they want, or practically by arguing the need to preserve finite resources. Because these topics have ambiguous moral content we expect to see participants spread across a spectrum of how strong a moral conviction they feel about each issue, allowing us to test whether or not moralistic thinking is a key moderator of whether people are open to having their opinion changed by issue framing.

While our primary hypothesis (H1) was tested directly through framing manipulations of both political issues, we split our other hypotheses and test them separately in the two issues. The primary motivation for separating the hypotheses in this manner is that it facilitates the use of established measures from the literature and allows us to replicate procedures that have been used in prior studies of issue framing. It also allows for more precise tests of our hypotheses by allowing us to test moderators with issues they are most likely to have an effect on.

For the environmental protection issue we used a framing manipulation that discusses the relative importance of environmental protection verses economic development of a wilderness area. This manipulation was devised in order to test the power of particular considerations within an argument to moderate the relationship between frames and opinion (Nelson & Oxley, 1999), so we use this issue to test the effect of individuals' moral conviction against the effect of what importance they give to different considerations (H4). We also use this manipulation to test the effect of moral conviction relative to other predictors (H6).

For the tax policy issue we used a framing manipulation that discusses the debate over whether or not to eliminate taxes on stock dividends. In order to test interactions between moral conviction and the moral vs. practical content of the message, we present our participants with an argument that we have altered to contain increased amounts of moral language or no moral language at all (H2, H3).

This issue also lends itself to a particular political value, egalitarianism, because it has different effects on the rich and poor and because it deals directly with the transfer of wealth (Feldman, 1988). Moreover, egalitarianism has been successfully shown to be a moderator of framing effects within a discussion of economic policy in previous research (Slothuus, 2008). Therefore, we use this issue to test moral conviction against a political value in controlling the effect of issue framing (H5).

As with the environmental issue, we use the manipulation of the tax policy issue to test the effect of opinion strength and the effect of moral conviction relative to other predictors (H6).

Participants

This study used 120 participants drawn from the Rutgers university subject pool and from volunteers from other psychology classes. Participants signed up for the study using the university's Eperimetrix website or by volunteering in class. Participants were compensated for

their time with course credit. The final sample consisted of 69 volunteers and 51 from the subject pool. The sample was 70% female with a mean age of 23 years. The sample was relatively moderate in terms of political partisanship: on a 7 point scale ranging from 1 (very liberal) to 7 (very conservative) the sample averaged 3.5, although 15% of sample returned no response or responded "don't know".

Procedures

The study was split in two half hour sessions spaced 7-14 days apart (M=7.5). The study was administered using paper and pencil questionnaires that were given in a classroom setting.

The study was split into a Part One and Part Two questionnaire that were given in separate sessions, see Table 1. The Part One questionnaire contained pretest opinion measures for each of the two political issues, a measure of moral conviction for each of the two issues, and an egalitarianism scale. After completing the Part One questionnaire, participants were asked to schedule a date and time to take the second portion of study.

For the second session participants were randomly assigned to one of two conditions for the environmental issue manipulation and one of the three conditions of the tax policy manipulation, yielding 6 possible combinations of simulated newspaper stories. The Part Two questionnaire contained one of the two simulated newspaper stories for the environmental protection issue followed by two posttest opinion measures, one general and one specific to what they read about, for that issue. Participants were then asked to rate the importance of different considerations on both sides of the issue being discussed. They next read one of three framing manipulations for the tax policy issue and responded to the same two posttest opinion measures about tax policy. At the end of the Part Two questionnaire participants were asked to report their liberal vs. conservative political orientation and demographic information

Measures

Pretest Support for Development: After reading some preliminary instructions in the Part One questionnaires, participants were asked to read short definitions of the terms "economic development" and "environmental protection" and then to respond to three items to gauge their initial opinion on the issue (alpha for these items= 0.57). The first item asked the question in a bipolar format, asking participants to respond on a seven point scale whether they believe the government should "give much greater priority to the environment" at one extreme or "give much greater priority to economic development" at the other extreme (see appendix for wording of all answer categories). The other two items asked participants' opinion on a unipolar scale, asking them to report the degree to which they believe the government should emphasize economic development, and then the degree to which they believe the government should emphasize environmental protection. The third item concerning environmental protection was reverse coded, and the three items averaged to create a single score ranging from 1 (Pro-Environment) to 7 (prodevelopment).

Pretest Support for Dividend Taxes: After responding to the rest of the items relating to environmental protection, participants were prompted to read a detailed description of what was meant by taxes on dividends (see appendix A) and then to respond to a single item to measure their pretest opinion on the tax issue. The item asked participants to agree or disagree with the statement "Generally speaking I think the taxes individuals currently pay on their stock dividends are a good thing". Their value for this single item serves as their pretest score for the tax policy issue.

Moral Conviction: For each issue, participants were asked to respond to seven Likert type items designed to gauge their level of moral conviction about that issue. These items were adapted from items used in several studies to measure conviction and moral conviction. We separated these items into multiple measures in order to cover the many facets of moral thinking.

The first item is the most commonly used single item measure of moral conviction: "My attitude towards X is closely tied to my core moral values and convictions" (Skitka & Mullen, 2002a). Three more items were adapted from an expanded scale used in more recent studies of moral conviction (Mullen & Skitka, 2006): "My attitude about X is closely tied to how I feel about myself as a person", "I would feel really awful about myself if I did not defend my position on X", "My feelings about X demonstrate that I will stand up for what I think is right". This expanded four item scale was shown to be reliable in the study it was developed for, Cronbach's alpha = .82 (Mullen & Skitka, 2006).

In case this four item scale was not sufficient to cover the entire breadth of moralistic thinking about an issue, and in order to include some reverse coded items in the scale, we added three additional items based on earlier research on conviction (Abelson, 1987) (Items marked with an "R" are reverse coded): "The issue of X is a purely practical rather than a moral issue for me" R, "My attitude about X is unrelated to my moral sense of right and wrong" R, "My attitude about X is important to me because of how I think the world ought to be".

Four scores were generated from these items. The first simply used the original single item measure that labels the issue as moral. The second was calculated by taking an average of the expanded four-item scale, which is composed of the original single item measure and the three additional items having to do with self-identification with the issue. A third was calculated by averaging the original single item measure with our new items adapted from the conviction literature. Together these four items distinguish the basis for participants' opinion on the issue as moral rather than practical. We also combined all seven items into a single composite score. All of the measures yield a range from 1 (low moral conviction) to 7 (high moral conviction) (see Appendix A for full listing of item wording and answer categories).

Egalitarianism: In order to measure egalitarianism for the tax policy issue, we took an established scale from the literature (Feldman & Steenbergen, 2001). The scale is composed of

eight Likert items, half of which are reverse coded (items that are reverse coded are indicated by an "R"): "One of the biggest problems in this country is that we don't give everyone an equal chance", "If wealth were more equal in this country we would have many fewer problems", "We have gone too far in pushing equality in the country" R, All in all, I think economic differences in this country are justified" R, "More equality of income would allow most people to live better", "Incomes should be more equal because every family's needs for food, housing, and so on, are the same", "This country would be better off if we worried less about how equal people are" R, "Incomes cannot be made more equal since people's abilities and talents are unequal" R. This particular scale was selected both because it has used and cited extensively in the framing literature, and because it has been shown to be reliable over a long period time by use in multiple studies, r = .28, Cronbach's Alpha = .76 (Feldman & Steenbergen, 2001; Goren, 2005; Jacoby, 2000; Jacoby, 2006; Slothuus, 2008).

Participants were assigned a score on this scale by averaging the values from the eight items after reversing the values of reverse coded items, producing a range of variation from 1 (low egalitarianism) to 7 (high egalitarianism).

Frames: After reading some preliminary instructions in the Part Two questionnaire, participants were asked to read one of two simulated newspaper stories for the manipulation of the environmental protection issue. The two conditions for the manipulation of the environmental issue are pro-environment and pro-development. The wording of the pro-environment and pro-development frames were taken from a previous framing study (Nelson & Oxley, 1999).

The two simulated news stories are roughly the same length and the pro-environment and pro-development conditions contain the same core set of facts about the issue being discussed (See Appendix C). Hence people in both conditions read that the proposed development would generate jobs and economic growth and that it would place three new species on the endangered

species list, but the conditions differed in the emphasis given to each of these considerations and in supplemental information given to make the argument.

After responding to all of the posttest items for the environmental protection issue, participants were asked to read one of three simulated newspaper stories for the tax policy issue. The manipulation dealt with a discussion of taxes on stock dividends, so participants received one of three articles that opposed the elimination of dividend taxes. However, because we are using this manipulation to test the effect of moral language on opinion change, the three articles differed not in the direction that they try to persuade the reader, but rather in the type of language they use to do so.

The manipulation has three conditions: moral, practical and control (For full wording, see Appendix C). The control condition consists of an unaltered framing manipulation from the literature. (Bullock & Fernald, 2005). The moral condition was created from this original, but with additional moral language inserted. In this condition tax policy was described as a moral question, and arguments center on what outcomes would be fair or unfair, right or wrong. The third, practical condition was also developed from the original Bullock and Fernald manipulation by stripping all moral language from the arguments. In this condition tax policy is described as a question of costs and benefits, and arguments center on what outcomes would be most practical and most efficient.

As in the previous manipulation, the news stories were roughly the same length and the two experimental conditions contained the same core set of facts. Both news stories contained the same definition of dividend tax policy and its effect on wealth distribution. They differed only in the moral valence of the language used to emphasize these facts.

Specific Support for Development / Dividend Taxes: Immediately after participants read each of the simulated newspaper stories for each issue, they were asked to respond to two items to

measure their posttest opinion specifically concerning the issue they read about. The first item asked the degree to which they agreed or disagreed with the proposal put forward in the story (proposal to build over a protected wetland in the environmental issue, proposal to cut taxes on stock dividends in the tax issue), while the second asked how they would be likely to vote on that proposal in a special election (questions 27 and 28 in the appendix). We averaged these two items to generate a single score with a different range of variation for each issue. For the environmental issue, the variable ranged from 1 (opposed to the development) to 7 (supports the development). For the tax issue, the variable ranged from 1 (opposed to dividend taxes) to 7 (supports dividend taxes). The question wording (questions 40 and 41 in the appendix) and procedure for this measure was adapted from previous research into values as moderators of framing effects (Slothuus, 2008).

Opinion Change: To assess opinion change, participants were next asked to respond to the same items that had been used to measure their pretest opinion. Participants' pretest scores (average of items 1-3 for env. issue, item 11 for tax issue in appendix) were subtracted from their posttest scores (average of items 29-31 for env. issue, item 42 for tax issue in appendix) to generate a value for the opinion change variable, which could vary from –6 (movement towards Pro-Environment / anti-tax) to 6 (movement towards pro-development / pro-tax).

Rating of Considerations: After giving their posttest opinion data for the environmental protection issue, participants were asked to rate the importance of various considerations that were presented within the news story they just read. The items themselves (see appendix B for item wording) were taken from a ranking task in the same study as the framing manipulation itself (Nelson & Oxley 1999), while the procedures (having participants rate the items rather than rank them) were taken from similar tasks in other studies on issue framing (Druckman & Nelson, 2003; Nelson, Oxley & Clawson, 1997b; Slothuus, 2008).

While the prior research had used these considerations to gauge whether participants favored one side of the issue (whether they favored pro-environment or pro-development considerations), we are interested in testing whether participants' preference for moral or practical considerations will predict their opinions. To do this, we used the first four of the issue considerations because we felt had a clear moral or practical valence (see items 33-36 in Appendix B for full item wording). The first two items (33, 34; The economic / environmental impact on the area) refer outcomes and were coded as having a practical valence. The second two items (35, 36; The rights of people to use / preserve the land) refer to individuals' rights and were coded as having a moral valence. The first two items were reverse coded and all four items were averaged together to generate as score of the relative importance of moral considerations for each participant.

Ideology/Demographics: At the end of the Part Two questionnaire, participants were asked to report their political views on a seven point scale from ranging from "Extremely Liberal" to "Extremely Conservative" and to report their age and gender.

Results

Did the framing manipulation succeed in influencing opinion?

For an initial assessment of whether the framing manipulation for our environmental issue succeeded in producing opinion change, we entered the opinion data from our two dependent measures into a one-way ANOVA split by frame (Pro-Environment, Pro-Development). The first dependent measure, which we will call "specific support for pro-development proposal," averaged answers to two questions asking participants whether or not they would support a proposal they were presented with in the framing manipulation that would bring about the development of a previously protected wetland. The scores could range from 1 (against the proposal to develop a wetland) to 7 (in favor of the proposal to develop a wetland). The second dependent measure was a computation of how much their opinion changed based on their opinion of the relative importance of environmental protection and economic development changed from pretest to posttest (see appendix questions 1-3, 29). These scores could range from -6 (opinion change in the direction of environmental protection) to +6 (opinion change in the direction of economic development). Table 1 shows the mean scores on each of the opinion measures across the conditions of the framing manipulation for the environmental issue.

Mean Opinion Scores on Environmental Issue by Condition with Standard Deviations in Parentheses

Table 1

	Levels of Issue Frame		
Dependent Variable	Pro- Environment Condition (n=58) Pro- Development Condition (n=62)		
Specific Support for Pro- Development Proposal	2.96 (1.56)	3.42 (1.76)	
Change in General Opinion toward Support for Development	Pretest: 3.52 (1.02) Posttest: 3.44 (0.90) Change: -0.07 (0.87)	Pretest: 3.26 (0.96) Postest: 3.51 (0.96) Change: 0.25 (0.86)	

Note: Higher values indicate greater support for economic development (for the specific support measure) or change toward support for economic development (for the opinion change measure).

The prediction for this analysis is that participants who received the Pro-Environment message would have lower scores than those who received the Pro-Development message for both dependent measures, indicating that one or both levels of the framing manipulation succeeded in affecting the opinion of the participants. The t-test on the data in the first row of the table shows marginal differences between groups for the specific support variable, t(1,118)=1.50, p=.06 one-tailed. The t-test between the levels of frame indicates significant differences between the groups for the opinion change variable, represented by the means in bottom row of Table 1, t(1,118)=2.06, p=.02 one-tailed, in the predicted direction. It is also noteworthy that the mean score for the participants that received the pro-development condition was slightly below the mid-point of the 1-7 scale (M= 3.42), indicating that they maintained a slightly pro-environment position on average.

Table 2 displays the mean scores for each of the opinion measures across conditions for the tax policy framing manipulation. As with the environmental policy manipulation, the first measure is an assessment of the participants' support for a proposal they were presented with in the framing manipulation that would eliminate taxes on stock dividends, with scores ranging from 1

(opposition to dividend taxes) to 7 (support for dividend taxes). The second dependent measure is a computation of how much their support for dividend taxes in general changed between the two halves of the study. Scores range from –6 (opinion change reflecting greater opposition to taxes) to +6 (opinion change reflecting greater support for taxes).

Table 2

Mean Opinion Scores on Tax Policy Issue by Condition with Standard Deviations in Parentheses

	Type of Argument				
Dependent Variable	Moral Argument In Support of Dividend Tax (n=38)	Control Argument in Support of Dividend Tax (n=40)	Practical Argument in Support of Dividend Tax (n=42)		
Specific Support for Dividend Taxes	4.07 (1.13)	3.46 (1.19)	3.64 (1.38)		
Change in General Opinion Toward Support for Dividend Taxes	Pretest: 3.90 (1.42) Postest: 6.13 (0.84) Change: 2.23 (2.45)	Pretest: 4.09 (1.42) Postest: 5.79 (1.20) Change: 1.70 (2.00)	Pretest: 4.22 (1.20) Postest: 5.86 (1.12) Change: 1.64 (0.32)		

Note: Higher values indicate greater support for dividend taxes (specific support measure) or change toward greater support (opinion change measure).

The prediction for these data is that participants in the moral argument condition would have higher scores than either the control or practical conditions, indicating that the moral argument was more effective than the control or practical arguments at persuading the participants in the "pro-tax" direction. The ANOVA shows a marginally significant difference between groups only for the specific support measure, F(2, 117)=2.50, p=.08. The opinion change variable did not produce significant differences, F(2, 117)=.87, ns. Because our hypothesis is that the moral argument will be stronger than the either the practical or the control arguments, we also conducted a linear contrast between the moral argument and the other two conditions. In this contrast the moral argument was assigned a weight of +2, while the practical and control arguments were each weighted -1. The results of this contrast show significant support for predictions on the specific support variable t(117)=2.14, p=.02 one-tailed. There were no

significant results for the opinion change variable, t(117)=1.31, ns, although the pattern of the means is in the hypothesized direction. Although only one of the dependent variables was significant, there is a consistent pattern visible in the data. The practical condition in which we removed all trace of moral language and the unaltered article are weak and have similar values, with the moral condition being noticeably stronger.

Does moral conviction moderate the effect of the framing manipulation in the environmental policy issue?

In order to measure any interactions between the effect of frame and the effect of moral attitude, we first had to determine which of our measures of moral conviction was most appropriate. The four measures of moral conviction were highly inter-correlated as shown in Table 3, and there was high degree of internal consistency between the items (alpha for the environmental issue = .91, alpha for the tax issue = .92).

Pearson Correlations Retween Measures of Moral Conviction

Table 3

Environmental Policy Issue	2.	3.	4.
1.0° 1.7° M	70 to to	77 Calcale	77 A stepte
1. Single Item Measure	.73**	.76**	.74**
2. 4 Items from Mullen & Skitka (2006)	-	.67**	.91**
3. Single Item + 3 Items adapted from Abelson (1987)		-	.90**
4. Composite, average of all items			-
Tax Policy Issue	2.	3.	4.
1. Single Item Measure	.74**	.66**	.67**
2. 4 Items from Mullen & Skitka (2006)	-	.70**	.92**
3. Single Item + 3 Items adapted from Abelson (1987)		-	.90**
4. Composite, average of all items			-

^{**}Indicates significance at the p<.01 level

This result led us to favor the single item measure because it has the greatest degree of comparability with prior research. All of the literature on moral conviction has used this single item as their primary measure (Skitka & Mullen, 2002A; Skitka & Mullen, 2002B; Skitka, Bauman & Sargis, 2005; Skitka & Mullen, 2006; Skitka & Bauman, 2008). Our measures of moral conviction (numbered 3 & 4 in Table 3) have not been used in the prior literature, while the four-item scale developed by Skitka and Mullen (2006) was used in only one study. Analyses for our primary hypotheses were also run using our composite measure, and the results did not differ from those using the single item measure. Because of this, all of our subsequent analyses are based on the single item measure of moral conviction: "My attitude toward [this issue] is closely related to my core moral values and convictions" with scores ranging from 1(strongly disagree) to 7(strongly agree).

We first tested for interactions between condition and moral conviction using a two-way ANOVA. In order to analyze the moral conviction data in a comparable manner to previous research (Skitka & Mullen, 2002a), we converted the moral conviction scores into a categorical variable using a median split. For both manipulations, the median was near the mid-point of the scale, indicating that we had some success in choosing political issues that would split the sample down the middle in labeling the issues "moral" or "not moral". As a result of this median split, participants were considered to have a moral conviction if they indicated some degree of agreement (rather than disagreement) with the item "My attitude toward [this issue] is closely related to my core moral values and convictions".

Table 4 shows the means of the sample divided using this coding of moral conviction for the environmental issue. We are splitting the variable in this way in order to see whether the effect of frame differs depending on participants' level of moral conviction and, if this is so, to see whether participants with moral conviction are not influenced by the effect of frame or if they are pushed further in the direction of their existing opinion. Participants included in the "Moral"

Conviction with Pro-Environment Opinion" group are those who reported agreement with the single moral conviction item and had pretest opinion scores that reflected overall support for environmental protection over economic development (average score on the opinion items less than 4). Participants in the "Moral Conviction with Pro-Development Opinion" group also reported agreement with the single moral conviction item, but gave responses to the pretest opinion items that reflected overall support for economic development over environment protection (average score on the opinion items greater than 4). Participants in the "No Moral Conviction" group reported disagreement with the moral conviction item (scores of 4, neither agree nor disagree or lower).

Table 4

Mean Opinion Scores on Environmental Issue by Moral Conviction and Condition, with Standard Deviations in Parentheses

		Manipul			
Dependent Variable	Measured Type of Moral Conviction	Mean Across Conditions	Pro- Environment Condition	Pro- Development Condition	Simple Main Effect across each Row
Specific Support for Pro- Development Proposal	Moral Conviction with Pro- Environment Opinion	2.64 (1.59) n=34	2.34 (1.59) n=13	2.83 (1.59) n=21	F(1,32)=0.74 ns
Troposai	Moral Conviction with Pro- Development Opinion	4.33 (1.83) n=6	4.83 (2.25) n=3	3.83 (1.60) n=3	F(1,5)=0.39 ns
	No Moral Conviction	3.34 (1.65) n=80	3.01 (1.42) n=42	3.71 (1.82) n=38	F(1,79)=3.65 p=.03
Change in General Opinion toward Support for	Moral Conviction with Pro- Environment Opinion	0.54 (1.01) n=34	0.56 (1.12) n=13	0.54 (0.97) n=21	F(1,32)=0.01 ns
Support for Development	Moral Conviction with Pro- Development Opinion	-0.44 (0.76) n=6	-0.76 (0.38) n=3	-0.11 (0.38) n=3	F(1,5)=0.10 ns
	No Moral Conviction	-0.54 (1.01) n=80	-0.22 (0.76) n=42	0.12 (0.79) n=38	F(1,79)=4.22 p=.02

Note: Higher values indicate greater support for economic development (for the specific support measure) or change toward support for economic development (for the opinion change measure).

A main effect of frame was not observed in these ANOVAs; for the specific support measure, the effect of frame (Pro-Environment / Pro-Development) was F(1, 119)=0.01, ns, and for the opinion change measure, the effect of frame was F(1,119)= 1.68, ns (see Table 1 for means across levels of moral conviction). There was no main effect of moral conviction (moral conviction, no moral conviction) for the specific support measure t(119)=1.36, ns, but there was a main effect of moral conviction on the opinion change measure t(119)=2.76, p=.007.

The prediction tested by this analysis was there would be an interaction between the moral conviction of the participant and the issue frame that they received such that moral conviction would hinder the persuasive effect of the issue frame. This interaction is not observed in the ANOVA, F(2,119)=0.75, ns. However, if this prediction was supported we would expect to see less of a difference between the levels of frame for participants having moral conviction compared to those who had none. Although the pattern of data is not consistently in the predicted direction, the simple main effects across the rows of Table 4 provide some support for our prediction. The nature of the interaction is represented by the results of simple main effects tested across the rows. The rightmost column of Table 4 shows the result of comparisons between the means within each row of the table. Within each subset of subjects who reported a moral conviction there is no effect of issue frame, but within the subset of subjects who reported no moral conviction, there is a significant difference between the levels of issue frame for both dependent measures in the predicted direction (specific support, t(1,79)=3.65, p=.03; opinion change, t(1.79)=4.22, p=.02). That is, in the absence of moral conviction participants were significantly influenced by the framing manipulation, but participants who had moral conviction were not significantly influenced. This result suggests that moral conviction does moderate the effect of frame.

Does moral conviction moderate the effect of the argument type in the tax policy issue?

Table 5 shows the means across conditions and levels of moral conviction for the dependent variables of the tax policy framing manipulation. Participants in the "Moral Conviction in Favor of Tax" group were those who reported agreement with the single moral conviction item and had pretest opinion scores that reflected overall support for dividend taxes. Participants in the "Moral Conviction Against Tax" group were those who reported agreement with the single moral conviction item, but gave responses to the pretest opinion items that reflected opposition to the dividend tax. Participants in the "No Moral Conviction" group did not agree with the moral conviction item.

Table 5

Mean Opinion Scores on Tax Policy Issue by Moral Conviction and Condition, with Standard Deviations in Parentheses

Dependent Variable	Measured Type of Moral Conviction	All Arguments In Support of Dividend Tax	Moral Argument In Support of Dividend Tax	Control Argument in Support of Dividend Tax	Practical Argument in Support of Dividend Tax	Linear Contrast of Moral vs. Practical & Control across each Row
Specific Support for Dividend Taxes ¹	Moral Conviction In Favor of Tax	4.38 (.94) n=39	4.69 (0.80) n=13	4.38 (0.65) n=9	4.14 (1.14) n=17	F(2,38)=1.23 ns
	Moral Conviction Against Tax	4.75 (1.17) n=6	4.66 (1.75) n=3	n=0	4.83 (0.57) n=3	F(1,5)=0.02 ns
	No Moral Conviction	3.29 (1.22) n=75	3.00 (1.21) n=26	3.19 (1.18) n=31	3.88 (1.17) n=18	F(2,74)=3.13 p=.05
Change in General Opinion	Moral Conviction In Favor of Tax	3.28 (1.46) n=39	3.00 (1.47) n=13	3.11 (1.16) n=9	3.58 (1.62) n=17	F(2,38)=0.65 ns
	Moral Conviction Against Tax	-1.50 (2.5) n=6	-1.33 (1.15) n=3	n=0	-1.66 (3.78) n=3	F(1,5)=0.02 ns
	No Moral Conviction	1.37 (1.99) n=75	1.30 (2.01) n=26	1.29 (2.01) n=31	1.61 (2.00) n=18	F(2,74)=0.67 ns

Note: Higher values indicate support for dividend taxes (specific support measure) or change in that direction (opinion change measure).

¹Participants were asked to rate their support for a proposal that would eliminate the dividend tax such that opposition to the proposal indicated support for the tax. For simplicity, we have reported the scores as level of support for the tax.

The prediction tested by this analysis is that the participants' moral conviction and the type of argument they received would produce an interaction effect on the opinion data. The type of argument the participants received, represented by the columns in Table 5, did not produce a main effect for either of the dependent measures. For the specific support measure, F(2,114)=0.34, ns, and for the opinion change measure, F(2,114)=1.34, ns (see Table 2 for means across levels of moral conviction). However there was a main effect of moral conviction (moral conviction, no moral conviction) for both dependent measures: for the specific support measure t(119)=5.30, p<.001, and for the opinion change measure t(119)=3.19, p=.002. The pattern of data indicate an interaction between these variables, participants with moral conviction have higher score than those who do not, and this difference is greater in the moral argument condition than in the other two. The data from the participants in the moral conviction against the tax group are the exception to this pattern, but this group was composed of only 6 participants. Also, given that their opinion change scores conflict with their specific support scores (their specific scores indicate support for the tax while their opinion change scores indicate movement toward opposition to the tax), it could be that they misunderstood the specific support items (they were asked were asked whether they *supported* a proposal to *eliminate* the tax)

An interaction between moral conviction, pretest general support and argument type was not observed, F(3,114)=0.38, ns^1 . The pattern of simple main effects across the rows of the ANOVA table, displayed on the far right of Table 5, shows no difference in opinion between the different argument types for the subset of participants who reported a moral conviction. There is significant difference for the participants reporting no moral conviction, but the differences are not in the predicted direction. We predicted that moral arguments would be the strongest, reflected by higher scores on these opinion measures. Looking at the "No Moral Conviction Group" for the specific support measure in Table 5, we can see that the moral argument produced

¹ The interaction between moral conviction and argument type was also tested with the two levels of moral conviction merged, but this test did not reach significance either, F(2, 119)=3.27, ns.

the lowest scores (M=3.00), followed by the control argument (M=3.19), with the practical argument being the strongest (M=3.88). None of the moral conviction groups showed significant differences based on argument type for the opinion change measure, and the pattern of means does not show most change among participants who received the moral argument, as we had hypothesized. These data do not indicate that moral conviction moderates the effect of argument type. An interaction was not observed in the ANOVA and the pattern of data does not consistently match our hypothesis.

How does the effect of moral conviction compare to previously studied variables in the environmental issue?

To analyze the effect of moral conviction with greater sensitivity, and to compare its effect to other variables studied in the literature, we ran a number of regressions using moral conviction as a continuous variable. To do this, we used the continuous responses from participants' response to the single moral conviction item, "My attitude toward [this issue] is closely related to my core moral values and convictions". For both issues, this resulted in scores that could range from 1 (no moral conviction) to 7 (strong moral conviction).

In addition to testing the effect of moral conviction, other variables were tested for comparison and to test the unique contribution of moral conviction to predict opinion change. Nelson and Oxley (1999) found that participants' rankings of how important different considerations were within an argument was predictive of their opinion after reading a framed news story. For example, participants who rated the survival of endangered species as being very important to forming their opinion were more likely to support environmental protection. In order to further test our hypothesis that moral arguments are stronger than non-moral arguments, we altered this variable to test whether participants' ratings of the relative importance moral vs. practical considerations would predict their opinion after reading our framing manipulations. To do this, we recoded the considerations from Nelson and Oxley based on whether they contained moral or practical language. Recoding the considerations in this way produces a new variable that

.42**

-.51**

ranges from 1 (strongly favors practical considerations) to 7 (strongly favors moral considerations). Before running this variable in the regressions, we first tested whether the participants actually differed in their ratings of the moral and practical considerations using a paired samples t-test. We found that they did differ significantly, with a preference for practical considerations (moral M=3.52, practical M=3.70, t(119)= 2.82, p=.006)

Additionally, in order to see whether having moral conviction about the environmental issue would account for significant variability beyond what is included in a person's opinion about the issue, participants' pretest opinion data was run in the regressions as well, with scores ranging from 1 (favors environmental protection) to 7 (favors economic development).

Pearson Correlations Between Variables Assessed in the Environmental Issue

Variable Name 4. 5. 6. 2. 3. 1. Issue Frame: Pro-Environment / Pro-Development -.03 -.05 .13 -.13 -.18 2. Moral Conviction -.01 -.15 -.16 .05 .32** 3. Relative Importance of Moral Considerations -.03 .10

4. Pretest Support for Development

Table 6

Table 6 displays correlations between all of the variables assessed in the environmental issue. The first four variables in the table are the predictors we are testing, followed by our two dependent measures. The size of the correlations does not indicate problematic multicollinearity between our predictor variables.

^{5.} Specific Support for Pro-Development Proposal - .10
6. Change in Opinion toward Support for Development -

^{**}Indicates significance at the p<.01 level

Reta Weights from Regressions of Environmental Issue Opinion Data

Predictors	Specific
	Support for
	Pro-
	Development
	Proposal ¹
Issue Frame (Pro-Environment / Pro-Development	46
Moral Conviction	.13
Relative Importance of Moral Considerations	.08
Pretest Support for Development	.63
Moral Conviction X Pretest Support for Development	57
Moral Conviction X Issue Frame	.75*
Relative Importance of Moral Considerations X Pretest Support for Development	.31
Relative Importance of Moral Considerations X Issue Frame	.55

Note: Positive beta values indicate that the higher the level of the predictor variable, the greater support for economic development..

Table 7

Table 7 summarizes the result of the regression that was run on the data from the environmental issue framing manipulation. This regression compares the effect of all our predictor variables and different interactions between the variables. Our prediction is that the effect of moral conviction times pretest support for development should be the strongest predictor when accounting for the effect of all of the other predictors. It should be noted that the opinion change dependent variable could not be used in this regression because the pretest opinion strength variable is confounded with opinion change.

The result of this regression containing all of the interaction variables provides some support for our hypothesis. The effect of moral conviction times pretest opinion does not remain significant when accounting for the effect the other predictors on the specific opinion variable (β = -.57, p=.11). However, the hypothesized interaction between moral conviction and frame was present (β =.75, p=.03).

¹The opinion change dependent variable could not be used in this regression because the pretest opinion strength variable is confounded with opinion change.

^{*}Significant at the p<.05 level

^{**}Significant at the p<.01 level

To further test Hypothesis 4 that moral considerations would be more important and more predictive of posttest opinion than practical ones, we entered each of the four considerations into a separate regression.

Beta Weights from Regression of Issue Considerations in the Environmental Issue	
Predictors	Specific
	Support for
	Pro-
	Development
	Proposal ¹
Importance of the Economic Impact of the Development (Practical)	.03
Importance of the Environmental Impact of the Development (Practical)	.04
Importance of the Rights of People to Develop the Land (Moral)	.12
Importance of the Rights of People to Preserve the Land (Moral)	12

Note: Positive beta values indicate that the higher the level of the predictor variable, the greater support for economic development..

Table 8

The results displayed in Table 8 do not support our hypothesis. While the moral considerations produce larger beta weights than the practical considerations, they are not significantly predictive of specific support for the pro-development proposal discussed by in framing manipulation.

How does the effect of moral conviction compare to previously studied variables in the tax policy issue?

Prior research on framing effects has shown that a person's values can be predictive of opinion change, and past research on framing effects of an economic issue in particular have shown that egalitarianism moderates the effect of frame (Slothuus, 2008). Based upon this research, we included a measure of egalitarianism as a comparison to moral conviction and to test whether moral conviction makes an independent contribution to opinion beyond a person's values. The scores for the egalitarianism variable range from 1 (low egalitarianism) to 7 (high egalitarianism).

¹The opinion change dependent variable could not be used in this regression because the pretest opinion strength variable is confounded with opinion change.

^{*}Significant at the p<.05 level

^{**}Significant at the p<.01 level

For the analyses of the tax policy issue, the control condition is excluded. The control condition was included only as a point of comparison to gauge the relative strength of moral and practical arguments in the tax policy manipulation because our manipulation of moral and practical content had never been used in prior research. As the ANOVAs conducted previously have already tested for the relative effectiveness of our manipulation compared to the original article used in the control, there is no further benefit to including control condition in these analyses. Removing the condition has the benefit of making the variable far simpler to enter into a regression.

Doguana Connelations Datacon Vaniables used in the Tan relien Issue

Variable Name	2.	3.	4.	5.	6.
1. Argument Type: Moral, Practical	16	21	06	17	13
2. Moral Conviction	-	07	.24*	.60**	.25*
3. Egalitarianism		-	.12	.01	.28*
4. Pretest Support for Dividend Taxes			-	.07	.80**
5. Specific Support for Dividend Taxes				-	.14
6. Change in Opinion Toward Support for Dividend Taxes					-

^{*}Indicates significance at the p<.05 level

Table 9

Table 9 displays correlations between all of the variables used in the environmental issue.

The first four variables in the table are the predictors we are testing, followed by our two dependent measures. There is very little multicollinearity between the predictors: only egalitarianism and pretest opinion strength are correlated significantly.

^{**}Indicates significance at the p<.01 level

Beta Weights from Regressions of Tax Policy Issue Opinion Data **Predictors** Specific Support for Dividend Taxes¹ .17 Argument Type (Moral / Practical) Moral Conviction .28 Egalitarianism -.12 Moral Conviction X Pretest Support for Dividend Taxes .27 Moral Conviction X Argument Type .52 Egalitarianism X Pretest Support for Dividend Taxes .63 Egalitarianism X Argument Type -.73

Note: Positive beta values indicate that the higher the level of the predictor variable, the greater support for dividend.

Table 10

Table 10 summarizes the results of the regression run for the tax policy issue manipulation. Like Table 7, the regression in table 10 contains all of the predictor variables and interactions between variables entered together. Our prediction is that the effect of moral conviction times pretest opinion strength will remain significant when accounting for the effect of our other predictors.

Again, the opinion change dependent variable could not be used in regressions containing pretest opinion strength because the two variables are confounded.

The result of this regression marginally supports our hypothesis. The interaction of moral conviction times pretest opinion strength is not a significant predictor of posttest opinion when accounting for the effect of all of the predictors (β = .27, p=.51). The hypothesized interaction between moral conviction and argument type is marginal, β =-.73, p=.10.

Did the demographics of our sample affect our results?:

Although no predictions were made that specific demographics might respond differently to our framing manipulations, we also ran regressions to test whether the demographics of our sample may have affected our results. Tables 10 and 11 present correlations and regressions run on the demographic data from the environmental issue.

¹The opinion change dependent variable could not be used in this regression because the pretest opinion strength variable is confounded with opinion change.

^{*}Significant at the p<.05 level

^{**}Significant at the p<.01 level

Table 11

Pearson Correlations Between Demographic and Opinion Variables in the Environmental Policy Issue

155We					
Variable Name	2.	3.	4.	5.	6.
1. Change in Opinion toward Support for Development	.10	01	26**	.09	18
2. Specific Support for Pro-Development Proposal	-	.18	03	19*	13
3. Political Ideology (Liberal Conservative)		-	.05	03	08
4. Gender			-	18	.13
5. Age				-	.13
6. Condition					-

^{*}Indicates significance at the p<.05 level

Beta Weights from Regressions of Environmental Issue Demographic Data

Predictors	Specific Support for Pro- Development Proposal	Change in Opinion toward Support for Development
Condition Age Gender	10 18* 17	19* .07 24**
Political Ideology	.13	03

^{*}Significant at the p<.05 level

Table 12

It appears the demographics of the sample did have some effect on the results for the environmental issue. Younger participants were more likely than older participants to support a pro-environment position, and women displayed significantly more opinion change toward support for environmental protection than men.

^{**}Indicates significance at the p<.01 level

^{**}Significant at the p<.01 level

Pearson Correlations Retween Demographic and Opinion Variables in the Tax Policy Issue

Variable Name	2.	3.	4.	5.	6.
1. Change in Opinion Toward Support for Dividend Taxes	.14	34**	06	.01	.11
2. Specifc Support for Dividend Taxes	-	.03	.16	05	.13
3. Political Ideology (Liberal Conservative)		-	.05	03	08
4. Gender			-	18	.18
5. Age				-	13
6. Condition					-

^{**}Indicates significance at the p<.01 level

Table 13

Table 14

Beta Weights from Regressions of Tax Policy Issue Demographic Data

Predictors	Specific Support for	Change in Opinion Toward
	Dividend Taxes	Support for Dividend Taxes
Condition	.10	.12
Age	05	03
Gender	.28	01
Political Ideology	.03	32**

^{*}Significant at the p<.05 level

As shown in Table 14, regressions run on opinions about the dividend tax indicate that when all the demographic variables were taken into account, only political ideology was predictive of opinion change. None of the other demographic variables were significantly prediction of our posttest opinion measures for the tax issue.

^{**}Significant at the p<.01 level

Discussion

We were able to show with some consistency that moral conviction influences opinion. The hypothesized interaction between moral conviction and issue frame was observed in at least some of our tests (H1). That is, from the ANOVAs it appears that our framing manipulation worked better for people with no moral conviction than people who had moral conviction, as seen in Table 4. Coding moral conviction continuously in the regression in Table 7 provided further support this hypothesis as the moderating effect of moral conviction was the only predictor of posttest opinion when accounting for the effect of all other predictors. However, while it appears that moral conviction did moderate the relationship between frame and opinion, it did not do so for the reason that we had predicted. While we predicted that the framing manipulations would not work for participants with moral conviction because they would be unmovable in their opinions, we did not observe that the opinions participants with moral conviction moved less than participants with no moral conviction. Therefore, while it appears that moral conviction does moderate the relationship between frame and opinion, our hypothesis as we rationalized it was not supported.

Our hypothesis that framed arguments with moral content would be more persuasive was marginally supported (H2), as shown in Table 2. However, we failed to find an interaction between moral conviction and argument type (H3), as shown in Table 5. While we predicted that some interaction between these variables was likely, it was difficult to predict what the shape of this interaction would be. In particular it was unclear how people without moral conviction would react to moral arguments. It could be expected that they would be influenced more because the moral argument was stronger, or, conversely, that they would be influenced less because they are not inclined to think in moral terms about the issue.

Our failure to demonstrate an interaction across different issues may also be due in part to our inability to produce a consistent main effect of condition. The ANOVAs conducted between the conditions taken with the opinion strength data reveal some possible explanations. The

environmental issue manipulation suffered from a floor effect in this college student sample. The sample on average favored environmental protection, resulting in a restriction of range.

Similarly for the tax policy issue, the sample on average were slightly in favor of taxes on stock dividends. Our attempt to persuade the entire sample in the "pro-tax" direction in order to isolate the moral content of the message further exacerbated this restriction of range; we were trying to move the sample towards an opinion most of them already possessed. The moral content of the message may have failed to significantly predict opinion in every test due to the same restriction of range problem. This also helps to explain some of the inconsistency between the results from the two issues and the greater success we had in the environmental issue. For the environmental issue, we attempted to persuade participants in two directions. We tried to persuade half the sample to favor development and half to favor environmental protection. This gave us a greater range over which to move participant's opinions than in the tax policy issue where we tried to move everyone in one direction, towards favoring dividend taxes.

Our hypotheses concerning participants' relative preference for moral considerations in the environmental manipulation were not supported (H4a). The regression run on the data from the environmental issue in Table 7 failed to produce a significant interaction between preference for moral considerations and condition. Participants overall indicated a preference for practical considerations over moral ones, in opposition to our hypothesis (H4b). Moreover, when entered into a separate regression, high ratings of moral considerations were not significantly predictive of posttest opinion as shown in Table 8.

In the regression run on the tax issue in Table 10, the interaction of egalitarianism and argument type was shown to marginally predict opinion, β =-.73, p=.10 (H5). Although this result did not quite reach significance, this predictor did produce the largest beta weight in our regression of the tax policy data. Therefore, our results suggest that egalitarianism moderates the relationship between frame and opinion as it had in the prior literature (Slothuus, 2008).

Our hypothesis that the effect of moral conviction would remain when accounting for other predictors received some support (H6). The main effect of moral conviction was not a significant predictor of posttest opinion for either of the issues. However, the moderating effect moral conviction on the relationship between frame and opinion was the only significant predictor in the regression of the data from the environmental issue, as shown in Table 7. Also, the moderating effect of moral conviction on the relationship between frame and argument type was marginally significant in the regression of the tax policy data shown in Table 10.

One interesting finding of this study is that the values and beliefs of the individual were always more predictive of their opinion than the persuasive message we presented them with.

This could just as well be the result of weak manipulations, but it is reassuring in any case that a sample of young people is not so easily moved by a biased presentation of political issues.

Limitations

Most of the limitations of this study were the consequence of limited time. The breadth of hypotheses attempted was beyond what could be adequately handled in the timeline of study completion. In particular, the moral vs. practical tax policy manipulation could have been improved significantly by further pilot testing. We had no way of knowing that most of the sample would be in favor of dividend taxes, and attempting to persuade the sample in the direction of an opinion most of them already held was likely a contributing factor to lack of results for that manipulation.

Sample size and quality was also a limitation. Studies of this type typically employ samples two to three times the sample we were able to collect under time pressure. Given the number of relationships we observed in the predicted direction, a larger sample size could likely have increased the number of significant results. The quality of the sample could also be called into question: a majority of the sample were volunteers from classes who often took the study under greater time pressure and under less controlled conditions than those from the sample pool. Also,

a sample as young as this, median age 21, is neither ideal nor likely to be representative of public opinion on tax policy given that they have such limited experience paying taxes.

Future Directions

The study of the relationship between personal morality and opinion is a rich area for further inquiry. In particular, there is not a large literature on how moral attitudes relate to opinions on major political issues, a surprising fact given the constant reference to "moral voting" in the media.

We did succeed in showing that moral conviction predicts opinion change and there are probably many psychological processes involved in this. For example there are probably a number of emotional reactions specific to being confronted with a position incongruent with one's moral beliefs. Disgust, for example, has been shown to predict the severity of moral judgments (Schnall, et al, 2008), but has not been tested in a persuasive framework.

Our attempt to test the effect of moral attitudes on persuasion within issue framing made it apparent that there is research yet to be done on how exactly these framing manipulations act to influence opinion. The issue framing literature states that framing works by varying emphasis on particular facts rather than providing new information (Druckman, 2001). Our attempt to test whether providing this emphasis using moral or non-moral language would affect the persuasive power of a framing manipulation suggests that framing itself may constitute a type of information transfer.

Emphasizing a particular fact may not provide new information about issue being discussed, but does provide information about how the author thinks about the issue. The type of language an author uses to provide this emphasis provides further information as we have demonstrated in this study. Through emphasis alone one can define for the reader whether an issue is morally significant. Measuring how much and what type of information participants pick up from a framed discussion of an issue is another avenue for future research on issue framing.

A more refined methodology is the most obvious next step suggested by this study. The moral conviction item we took from the literature was not ideal for the type of opinion data we were attempting to examine. Items tailored to measure how people's specific opinions related to their moral attitudes, rather than the more general question wording we used, would allow for more precision in showing a relationship between moral conviction and opinion. Also, using shorter framing manipulations that more systematically controlled the moral content of the arguments presented would make it easier to measure the interaction between moral conviction and frame.

Appendices

Appendix A: Question Wording For Part One questionnaire:

<u>Pretest Opinion for Environmental Issue:</u>

In this set of questions, you will be asked to indicate your attitudes about economic development and environmental protection.

- When speaking about economic development, we are referring to new construction of buildings like malls and condominiums, and the opening of new businesses.
- By environmental protection, we are referring to efforts by local and national authorities to protect areas such as wetlands and forests (that are rich in wildlife) from economic development.

For Question 1, please circle the letter to the left of the answer choice that is closest to your opinion:

- 1. Generally speaking, I believe the government should take actions that:
- A. Give Much Greater Priority to the Environment
- B. Give Greater Priority to the Environment
- C. Give Somewhat Greater Priority to the Environment
- D. Give Equal Priority to Both the Environment and Economic Development
- E. Give Somewhat Greater Priority to Economic Development
- F. Give Greater Priority to Economic Development
- G. Give Much Greater Priority to Economic Development

For each of the following statements please circle the one response that best describes how much you disagree or agree:

-3	-2	-1	ike actions that pro	1	2	3			
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly			
3. I believe the	e governmer -2	nt should ta -1	ke actions that end	courage eco	nomic deve	elopment.			
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly			
	Moral Conviction Items for Environmental Issue:4. My attitude toward environmental protection and economic development is closely related to								
my core moral					•	•			
-3	-2	-1	0	1	2	3			
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Disagree Very Strongly						Agree Very Strongly			
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly				
Very Strongly 5. The issue of me.	Strongly f environme	Somewha	t Nor Agree	Somewhat c developme	Strongly nt is a pure	Very Strongly ely practical issue for			
Very Strongly 5. The issue of me. -3	Strongly Fenvironme -2	Somewha ntal protect -1 Disagree	tion and economic 0 Neither Disagree	Somewhat e developme 1 Agree	Strongly nt is a pure 2 Agree	Very Strongly ely practical issue for			
Very Strongly 5. The issue of me. -3 Disagree Very Strongly	Strongly F environme -2 Disagree Strongly about envir	Somewha ntal protect -1 Disagree Somewha	tion and economic 0 Neither Disagree t Nor Agree	Somewhat developme 1 Agree Somewhat	Strongly nt is a pure 2 Agree Strongly	Very Strongly ely practical issue for 3 Agree			
Very Strongly 5. The issue of me. -3 Disagree Very Strongly 6. My attitude see myself as a	Strongly F environme -2 Disagree Strongly about envir	Somewhantal protect -1 Disagree Somewhantal promental promental promental protect	tion and economic 0 Neither Disagree t Nor Agree	Somewhat developme 1 Agree Somewhat nomic devel	Strongly nt is a pure 2 Agree Strongly opment is	Very Strongly ely practical issue for 3 Agree Very Strongly closely tied to how I			

protection and economic development.									
-3	-2	-1	0	1	2	3			
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly			
8. My feelings about environmental protection and economic development demonstrate that I will stand up for what I think is right.									
-3	-2	-1	0	1	2	3			
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Very Strongly	Strongly	Somewhat	t Nor Agree	Somewhat	Strongly	Very Strongly			
9. My attitude moral sense of		_	protection and eco	nomic deve	lopment is	unrelated to my			
-3	-2	-1	0	1	2	3			
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Very Strongly	Strongly	Somewhat	t Nor Agree	Somewhat	Strongly	Very Strongly			
•			protection and eco		elopment is	s important to me			
-3	-2	-1	0	1	2	3			
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Very Strongly	Strongly	Somewhat	t Nor Agree	Somewhat	Strongly	Very Strongly			
Pretest Opinion	n for Tax Is	sue:							

In this set of questions, you will be asked to indicate your attitudes about taxes that

individuals pay on dividends.

7. I would feel really awful about myself if I did not defend my position about environmental

Dividends refer to the funds or payments that individual investors receive when their stocks are doing well. When a corporation earns a profit, it pays taxes on those profits. Then, when a corporation pays dividends to individual stockholders, those individuals must pay taxes on the income (dividends) they receive from their stockholdings. The more stock an individual owns, and the better the corporation is doing in the stock market, the larger the dividend paid to the individual. Typically, an individual receives dividend payments in an annual check. At the end of the year, each individual stockholder then pays taxes on the dividends that he or she has received over that time period.

For each of the following statements please circle the one response that best describes how much you disagree or agree:

11. Generally speaking, I think that the taxes individuals currently pay on their stock dividends are a good thing.

-3 0 3 -2 -1 1 2 Disagree Neither Disagree Disagree Disagree Agree Agree Agree Very Strongly Strongly Somewhat Nor Agree Somewhat Strongly Very Strongly

Moral Conviction Items for Tax Issue:

12. My attitude toward taxing dividends is closely related to my core moral values and convictions.

0 -3 -2 2 3 -1 1 Disagree Disagree Disagree Neither Disagree Agree Agree Agree Very Strongly Strongly Somewhat Nor Agree Somewhat Strongly Very Strongly

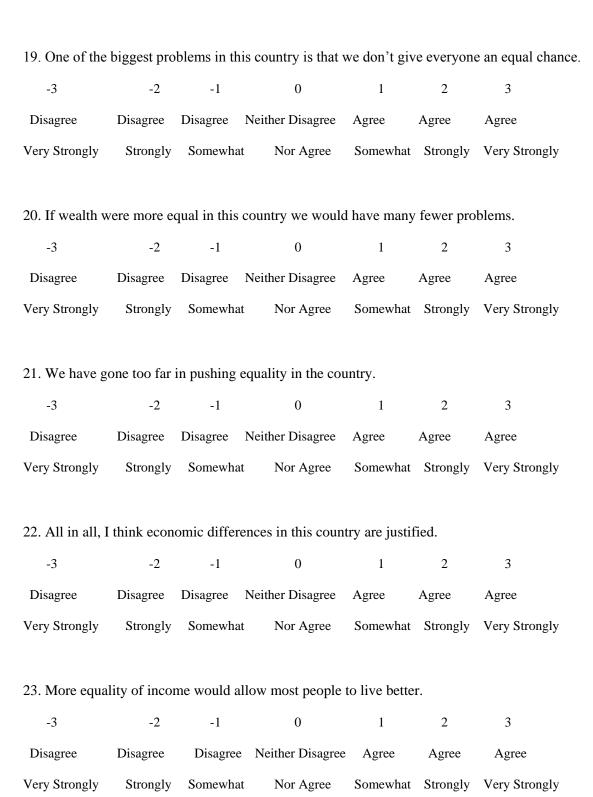
13. The question of whether or not dividends should be taxed should be based on their usefulness rather than on moral considerations.

-3 -2 -1 0 1 2 3

Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly			
14. My attitude about taxing dividends is closely tied to how I see myself as a person.									
-3	-2	-1	0	1	2	3			
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly			
15. I would fee	el really aw	ful about m	yself if I did not d	lefend my po	osition abo	out taxing dividen	ds.		
-3	-2	-1	0	1	2	3			
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly			
16. My feeling	s about taxi	ng dividen	ds demonstrate that	at I will stan	nd up for w	hat I think is righ	t.		
-3	-2	-1	0	1	2	3			
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly			
17. My attitud	e about tax	ing dividen	ds is unrelated to	my moral se	ense of righ	nt and wrong.			
-3	-2	-1	0	1	2	3			
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree			
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly			
18. My belief about taxing dividends is important to me because of my beliefs about how I think the world ought to be.									
the world ough	it to be.								
-3	t to be.	-1	0	1	2	3			
_			0 Neither Disagree	1 Agree	2 Agree	3 Agree			

Egalitarianism Items

For each of the following statements please circle the one response that best describes how much you disagree or agree:



24. Incomes shape the same.	nould be mo	re equal be	cause every famil	y's needs fo	or food, ho	using, and so on, are
-3	-2	-1	0	1	2	3
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly
25. This count	ry would be	better off	if we worried less	about how	equal peop	le are.
-3	-2	-1	0	1	2	3
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly
26. Incomes ca	annot be ma	de more eq	ual since people's	s abilities an	d talents a	re unequal.
-3	-2	-1	0	1	2	3
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly
Appendix B: Q	Question Wo	ording For l	Part Two Question	nnaire:		
<u>Posttest Opinio</u>	on for Envii	ronmental <u>l</u>	<u>Issue</u>			
					•	ment of a previously gree or agree with
-3	-2	-1	0	1	2	3
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree
Very Strongly	Strongly	Somewha	t Nor Agree	Somewhat	Strongly	Very Strongly

•	•	• •	o participate in a splopment of a previ			•	ould you be			
-3	-2	-1	0	1		2	3			
Very Likely Likely	Likely	Somewhat Likel	y Equally Likely	Somew	hat Likely	Likely	Very			
To Vote	To Vote	To Vote	To Vote Against	To V	ote	To Vote	To Vote			
Against	Against	Against	Or In Favo	r In	Favor I	n Favor	In Favor			
Please circle	Please circle the letter to the left of the answer choice that is closest to your opinion:									
29. Generall	y speaking,	I believe the go	overnment should	take actio	ons that:					
B. Give Go C. Give So D. Give Eo E. Give Go G. Give M For each of much you d	A. Give Much Greater Priority to Environmental Protection B. Give Greater Priority to Environmental Protection C. Give Somewhat Greater Priority to Environmental Protection D. Give Equal Priority to Both Environmental Protection and Economic Development E. Give Somewhat Greater Priority to Economic Development F. Give Greater Priority to Economic Development G. Give Much Greater Priority to Economic Development For each of the following statements please circle the one response that best describes how much you disagree or agree:									
30. I believe	the government -2	nent should tak -1	e actions that prot 0	ect the na	atural env 2	ironment.				
Disagree	Disagree	Disagree N	either Disagree A	gree	Agree	Agree				
Very Strongly	Strongl	y Somewhat	Nor Agree S	Somewhat	Strongly	Very Str	ongly			
31. I believe the government should take actions that encourage economic development. -3 -2 -1 0 1 2 3										
Disagree	Disagree	_	C	gree	Agree	Agree				
Very Strongly	Strongl	y Somewhat	Nor Agree S	Somewhat	Strongly	Very Str	ongly			

my core moral			•	conomic de	velopment	is closely related t	.0
-3	-2	-1	0	1	2	3	
Disagree	Disagree	Disagree N	Neither Disagree	Agree	Agree	Agree	
Very Strongly	Strongly	Somewhat	Nor Agree	Somewhat	Strongly	Very Strongly	
Ratings Of Co.	nsideration:	s from within	Argument:				
In this	next section	n, we would	like to know wh	at you think	about the	debate over	
environmental	protection.	In thinking a	about this issue	which consid	derations a	re, in your opinion	l,
the most impor	rtant? Belov	w is a list of c	lifferent conside	erations. Plea	ase indicate	e for each	
consideration l	how importa	ant you think	it is in the deba	te over envi	ronmental	protection and	
economic deve	elopment the	at you read a	bout.				
33. The econor	mic impact	of the proper	ty development	on the area.			
1	2	3	4	5			
Not at All				Extr	emely		
Important				Imp	ortant		
34. The enviro	nmental im	pact of the pr	roperty developi	ment on the	area.		
1	2	3	4	5			
Not at All				Extr	emely		
Important				Imp	ortant		
35. The rights	of people to	use and dev	elop land for the	eir economic	e benefit.		
1	2	3	4	5			
Not at All				Extr	emely		
Important				Imp	ortant		

36. The rights of people to preserve land in its natural, wild condition.

1	2	3	4	5			
Not at All				Extr	emely		
Important				Impo	ortant		
37. The rights o	of people to	have a say	in how land in th	eir area is u	sed.		
1	2	3	4	5			
Not at All				Extr	emely		
Important				Impo	ortant		
38. My general	support for	r the enviro	nment.				
1	2	3	4	5			
Not at All				Extro	emely		
Important				Impo	ortant		
39. My general	support for	r jobs and e	conomic develop	ment.			
1	2	3	4	5			
Not at All				Extr	emely		
Important				Impo	ortant		
Posttest Opinio	n for Tax F	Policy Issue:	<u>:</u>				
dividends. We	would like	to know you	oosal before cong ur opinion on this d be eliminated?				ends
-3	-2	-1	0	1	2	3	
Disagree	Disagree	Disagree	Neither Disagree	Agree	Agree	Agree	
Very Strongly	Strongly	Somewhat	Nor Agree	Somewhat	Strongly	Very Strong	ly
•	-		to participate in a	_		-	ely
2	2	1	0	1		2	2

Very Likely Likely	Likely	Somewhat Like	ely Equally Like	ely Somew	hat Likely	Likely	Very
To Vote	To Vote	To Vote	To Vote Agains	st To V	ote T	Γο Vote	To Vote
Against	Against	Against	Or In Fav	vor In	Favor In	Favor	In Favor
For each of much you d		_	please circle the	e one respo	onse that b	est desci	ribes how
much you d	iisagi ee oi a	igi ee.					
42. Generall	y speaking,	I think that inc	dividuals should p	pay taxes or	n the divid	ends they	receive.
-3	-2	-1	0	1	2	3	
Disagree	Disagree	Disagree 1	Neither Disagree	Agree	Agree	Agree	
Very Strongly	y Strongl	y Somewhat	Nor Agree	Somewhat	Strongly	Very Str	ongly
43. My attituctions.		axing dividend	ls is closely relate	ed to my co	ore moral v	alues and	1
-3	-2	-1	0	1	2	3	
Disagree	Disagree	Disagree 1	Neither Disagree	Agree	Agree	Agree	
Very Strongly	y Strongl	y Somewhat	Nor Agree	Somewhat	Strongly	Very Str	ongly
		•	about liberals a le might hold ar				
-			ould you place y	_		-	iociai to
	1 Extren	nely liberal					
	2 Libera	1					
	3 Slightl	y liberal					
	4 Moder	ate; middle of th	ne road				
	5 Slightl	y conservative					

6 Conservative

7 Extremely conservative

November

December

0 Don't know

45. What is your sex? (Please Circle)
Male

Female

46. What is the month and year of your birth? Month: January Year: 19____.
February

March

April

May

June

July

August

September

October

Appendix C: Framing Manipulation For Environmental Issue

Pro-Environment Frame:

Please read the following news article completely before continuing:

PROPOSED NEW DEVELOPMENT EXPECTED TO DESTROY LOCAL WETLAND

MIAMI, FL: Environmental and economic groups are divided along traditional lines in the argument over south Florida's future. The issue at hand is whether a \$58 million hotel and convention complex, proposed by an association of developers and retailers, should be built in what is currently an undeveloped natural wetland.

A study by the Dade County Regional Economic Development Board has found that such a project would bring 2,000 immediate construction jobs and 500 longer-term retail and service jobs. The study also anticipated an increase in county tax revenues if the project proceeds.

The Florida Department of Natural Resources, however, recently announced the results of its independent environmental impact study. The study states that the project would put three additional species on the endangered species list, and that two species already on the list would be pushed to the brink of extinction because of the increased pollution and destruction of the land that is their natural habitat.

Environmental groups and researchers are allied on the side of preserving the area's wildlife-rich wetlands. Arrayed against them are development advocates, local politicians and corporate heads, who are united in their argument that regional economic growth is the key to south Florida's future.

Douglas Cochise, head of the Florida Sierra Club, argues that a wide array of wildlife species would be wiped out in the development process, "These are not just obscure insects, but multiple important species that represent the wealth of wildlife in the region." Cochise and his organization argue that the loss of non- human species has implications for humanity as well, stating that "the world is becoming a barren, lifeless place. We shouldn't sacrifice planet Earth's diversity for the sake of yet another hotel."

Deborah Hampden, an environmental biologist and wetland expert at Florida Atlantic
University in Boca Raton, says the development project should not be allowed to proceed "We've
gone way too far with development already and this project would have dire implications for the
area's wetland ecosystem."

The debate over the issue is likely to increase in the coming weeks. The state Senate takes up the proposal later this month, as developers seek state and federal permission to proceed with the project.

Pro-Development Frame:

Proposed New Development would Create Jobs

Environmental and economic groups are divided along traditional lines in the argument over south Florida's future. The issue at hand is whether a \$58 million hotel and convention complex, proposed by an association of developers and retailers, should be built in what is currently an undeveloped natural wetland.

A study by the Dade County Regional Economic Development Board has found that such a project would bring 2,000 immediate construction jobs and 500 longer-term retail and service jobs. The study also anticipated an increase in county tax revenues if the project proceeds.

The Florida Department of Natural Resources, however, recently announced the results of its independent environmental impactstudy. The study states that the project would put three additional species on the endangered species list, and that two species already on the list would be pushed to the brink of extinction because of the increased pollution and destruction of the land that is their natural habitat.

Environmental groups and researchers are allied on the side of preserving the area's wildlife-rich wetlands. Arrayed against them are development advocates, local politicians and corporate heads, who are united in their argument that regional economic growth is the key to south Florida's future.

"Creating jobs through development extends the promise of the American way of life to more of our citizens. And that is more important than protecting frogs and snakes," says Dennis

53

Bond, spokesperson for Hutchins Development Partners, Inc. If the plan is approved by the state

legislature, Hutchins would oversee and underwrite construction of the complex.

State Representative Leslie Sharp supports the proposal and claims that such a

development scheme would "expand the tax base to enable us to improve the quality of life for

residents in this area." She adds that "this proposal represents a real economic shot in the arm for

our citizens in terms of jobs and increased income."

The debate over the issue is likely to increase in the coming weeks. The state Senate

takes up the proposal later this month, as developers seek state and federal permission to proceed

with the project.

Control:

Appendix D: Framing Manipulation For Tax Issue

Pro-Tax Frame:

DEBATE TO ELIMINATE DIVIDEND TAX HEATING UP IN THE U.S.

CONGRESS: The Wealthy Expected to Benefit Most from Senate Bill

WASHINGTON, DC. February 18, 2003. Discussion grew heated today as U.S. Senators

continued to debate a bill that would eliminate the taxes that individual stockholders pay on their

dividends (profits from stockholdings). The debate focused on who would benefit most from the

elimination of dividend taxes.

A study by a well regarded, independent research institute found that the wealthiest

Americans, the richest 5 percent of the population, stands to gain the most from eliminating

individual dividend taxes. Nearly 70 percent of the tax cuts would flow to the top 5 percent of the

earners (e.g., people with average annual incomes over \$350,000). Tax filers with incomes over \$1 million dollars would yield an average annual tax savings of \$27,000. The study concludes that the wealthy stand to gain the most from the elimination of dividend taxes.

The bill, if passed, would eliminate the income tax that individuals pay on the dividend payments they receive from corporations. Dividends refer to the funds or payments that individual investors receive when their stocks are doing well. The more stock an individual owns, and the better the corporation is doing in the stock market, the larger the dividend paid to the individual. Typically, an individual receives dividend payments in an annual check.

Under the current system, when a corporation earns a profit, it pays taxes on those profits.

Then, when a corporation pays dividends to individual stockholders, those individuals must pay taxes on the income (dividends) they receive from their stockholdings. The bill being debated in Congress would eliminate the taxes that individual shareholders pay on the returns they receive.

Corporations, however, would still pay taxes on their profits.

Supporters of the bill say it will correct a bias in the tax system, the "double taxation" of corporate income—once at the corporate level as profits and a second time when individuals must pay taxes on their returns. Advocates of the bill argue that this type of "double taxation" is unfair because other forms of income are not taxed twice.

Opponents of the bill disagree, pointing out that not all dividends are taxed twice; some are only taxed once and some not at all. For example, some dividends go directly to tax-exempt retirement funds that are not subject to individual income tax. Thus, opponents argue that "double taxation" is not a significant problem.

Economists agree that tax cuts can help stimulate the sluggish U.S. economy but support for the proposed measure is mixed. Although there is wide agreement that the richest Americans

will benefit most directly from the elimination of dividend taxes, there is considerable uncertainty about how the larger economy will be affected.

Heavy debate is anticipated over the next month and a Senate vote on the measure is expected by early June. At this point it is difficult to predict the fate of this bill or whether an alternative compromise measure will be introduced.

Anti-Tax Frame:

Please read the following news article completely before continuing

DEBATE TO ELIMINATE DIVIDEND TAX HEATING UP IN THE U.S.

CONGRESS: All Economic Groups Expected to Benefit from Senate Bill

WASHINGTON, DC. Discussion grew heated today as U.S. Senators continued to debate a bill that would eliminate the taxes that individual stockholders pay on their dividends (profits from stockholdings). The debate focused on who would benefit most from the elimination of dividend taxes.

A study by a well regarded, independent research institute found that all economic groups would benefit from exempting individual taxes on dividends. If the bill passes, all stockholders, from middle income families earning \$50,000 a year to the richest 5 percent of the Americans (e.g., people with average annual incomes over \$350,000) would no longer be taxed on the returns (profits) they receive from their stockholdings. Although 70 percent of the tax cuts would flow to the top 5 percent of the earners, middle class investors would also gain from keeping more of their earnings. These benefits are expected to spread across economic groups. Ultimately,

by providing a much needed boost to the economy—through encouraging stock market investments and freeing up more money for job creation—the country as a whole is expected to prosper.

The bill, if passed, would eliminate the income tax that individuals pay on the dividend payments they receive from corporations. Dividends refer to the funds or payments that individual investors receive when their stocks are doing well. The more stock an individual owns, and the better the corporation is doing in the stock market, the larger the dividend paid to the individual. Typically, an individual receives dividend payments in an annual check.

Under the current system, when a corporation earns a profit, it pays taxes on those profits.

Then, when a corporation pays dividends to individual stockholders, those individuals must pay taxes on the income (dividends) they receive from their stockholdings. The bill being debated in Congress would eliminate the taxes that individual shareholders pay on the returns they receive.

Corporations, however, would still pay taxes on their profits.

Supporters of the bill say it will correct a bias in the tax system, the "double taxation" of corporate income—once at the corporate level as profits and a second time when individuals must pay taxes on their returns. Advocates of the bill argue that this type of "double taxation" is unfair because other forms of income are not taxed twice.

Opponents of the bill disagree, pointing out that not all dividends are taxed twice; some are only taxed once and some not at all. For example, some dividends go directly to tax-exempt retirement funds that are not subject to individual income tax. Thus, opponents argue that "double taxation" is not a significant problem.

Economists believe that tax cuts can help stimulate the sluggish U.S. economy but support for the proposed measure is mixed. Although there is widespread agreement that the

country overall will benefit from the elimination of dividend taxes, there is considerable uncertainty about how long lasting the benefits will be.

Heavy debate is anticipated over the next month and a Senate vote on the measure is expected by early June. At this point it is difficult to predict the fate of this bill or whether an alternative compromise measure will be introduced.

References

- Abelson, R. P. (1987) Conviction. American Psychologist 43, 267-275.
- Bullock, H. E. & Fernald, J. L. (2005). Predicting Support for eliminating the Dividend Tax: The Role of Framing and Attributions of Wealth. *Analyses of Social Issues and Public Policy* 5, 35-41.
- Diamond, J. (2005). *Collapse: How Societies Choose to Fail or Succeed*. New York, NY: Viking Penguin.
- Druckman, J. N. (2001). The Implications of Framing Effects for Citizen Competence. *Political Behavior* 29, 225-256.
- Druckman, J. N. & Nelson, K. R. (2003). Framing and Deliberation: How Citizens' Conversations Limit Elite Influence. *American Journal of Political Science* 47, 729-745.
- DSS Research: Researcher's Toolkit. (2006). Retrieved July 27, 2009, from DSS Research: http://www.dssresearch.com/toolkit.default.asp.
- Entman, R. M. (1993). Framing: Toward Clarification of a Fractured Paradigm. *Journal of Communication* 43, 51-58.
- Feldman, S. (1988). Structure and Consistency in Public Opinion: the Role of Core Beliefs and Values. *American Journal of Political Science*, 32, p 416-440.
- Feldman, S. & Steenbergen, M. R. (2001). The Humanitarian Foundation of Public Support for Social Welfare. *American Journal of Political Science*, 45, p 658-677.
- Goren, P. (2005). Party Identification and Core Political Values. *American Journal of Political Science*, 49, p 881-896.
- Gross, K. (2008). Framing Persuasive Appeals: Episodic and Thematic Framing, Emotional Response, and Policy Response. *Political Psychology* 29, 169-192.
- Jacoby, W. G. (2000). Issue Framing and Public Opinion on Government Spending. *American Journal of Political Science*, 44, p 750-767.
- Jacoby, W. G. (2006). Value Choices and American Public Opinion. *American Journal of Political Science*. 50, p 706-723.
- Krugman, P. (2009). *The Return of Depression Economics and the Crisis of 2008*. New York, NY: Norton Company.
- Lakoff, G. (1996). Moral Politics. Chicago, IL: University of Chicago Press.
- Mullen, E. & Skitka, L. J. (2006) Exploring the Psychological Underpinnings of the Moral Mandate Effect: Motivated Reasoning, Group Differentiation, or Anger? *Journal of Personality and Social Psychology*, 90, p 629-643.
- Nelson, T. E.& Kinder, D. R. (1996). Issue Frames and Group Centrism in American Public Opinion. *The Journal of Politics* 58, 1055-1078.
- Nelson, T. E.& Oxley, Z. M. (1999). Issue Framing Effects on Belief Importance. *The Journal of Politics* 61, 1040-1087.
- Nelson, T. E., Oxley, Z. M. & Clawson, R. A. (1997a). Toward a Psychology of Framing Effects. *Political Behavior 19*, 221-246.

- Nelson, T. E., Oxley, Z. M. & Clawson, R. A. (1997b). Media Framing of a Civil Liberties Conflict and Its Effect on Tolerance. *American Political Science Review 91*, 567-583.
- Schnall, S., Haidt, J., Clore, G.L., and Jordan, A.H. (2008) Disgust as Embodied Moral Judgment. *Personality and Social Psychology Bulletin 34*, 1096-1109.
- Slothuus, R. (2008). More Than Weighting Cognitive Importance: A Dual-Process Model of Issue Framing Effects. *Political Psychology* 29, 1-28.
- Skitka, L. J. & Bauman, Christopher W. (2008). Moral Conviction and Political Engagement. *Political Psychology*, 29, 29-54.
- Skitka, L. J. & Mullen, Elizabeth. (2002a) Understanding Judgments of Fairness In a Real World Political Context: A Test of the Value Protection Model of Justice Reasoning. *Personality and Social Psychology Bulletin*, 28, 1419-1429.
- Skitka, L. J. & Mullen, Elizabeth. (2002b) The Dark Side of Moral Conviction. *Analyses of Social Issues and Public Policy*, 35-41.
- Tetlock, P. E., Lerner, J. S., Kristel, O. V., Elson, B. & Green, M. C. (2000). The Psychology of the Unthinkable: Taboo Trade Offs, Forbidden Base Rates, and Heretical Counterfactuals. *Journal of Personality and Social Psychology*, 78, p 853-870.