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A Test of the Effects of Fictional Framing on Attitudes

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1 Introduction

Almost all research on the effects of mass media on public opinion focuses on the influence of news media or political campaigns. Although some recent work has begun to demonstrate the influence of "infotainment" form of "soft" news that entertains while it enlightens (Baum 2002, Baum 2003), few studies in political science have investigated the effects of explicitly entertainment media on political attitudes, beliefs, and values (but see Jackson 2002). This is unfortunate for two reasons. One, the average American spends much more time with entertainment media than news. Two, entertainment media often contain socially and politically relevant topics, themes, plots, subplots, commentary, and imagery that that may be influential. The ubiquitous use of entertainment media and their apparent politically relevant content call for examination of the nature and influence of entertainment media on attitudes.

Among entertainment media, movies and television attract considerable audiences. In this this study, we focus on the potential influence of fictional film dramas. Dramas involve characters who are engaged in a story whose plot typically centers on how the characters respond to events and challenges. Often these challenges are similar to those one might encounter in real life. The dialogue, actions, or imagery of the story sometimes raise politically relevant topics or issues and, we suggest, influence how viewers think about politics.

One way that fictional dramas might influence attitudes is through framing of issues. Framing is "the process by which a source ... defines the essential problem underlying a particular social or political issue, and outlines a set of considerations purportedly relevant to that issue" (Nelson, Oxley, and Clawson 1997). Although many studies show that media framing influences opinions, most of this research has dealt with news media framing (see Chong and Druckman 2007 for a review). We posit that entertainment media also frame issues and develop the outlines of a theory of the effects of entertainment media on attitudes we call *fictional framing*. We conduct a preliminary test of the effects of fictional framing on attitudes.

We do this in the context of a laboratory experiment that exposes participants in the treatment group to the acclaimed movie *Cider House Rules*, which frames

the issue of legalized abortion in terms of the traumatic case of incest and morality in terms of following one's own conscience. The idea that fictional dramas might influence real world beliefs cuts against the common wisdom on this topic, which suggests that fiction cannot be appreciated, let alone influential, without what the poet Coleridge called "a willing suspension of disbelief." In the next section, we discuss this perspective and review a growing body of research which suggests that fictional accounts *do* affect political opinions. We then discuss fictional framing, apply it empirically in our experiment, and test several possible mechanisms for its influence. Our results suggest that fictional framing is consequential for specific issues or messages but not general ones.

2   The (Ir)relevance of Fictional Media for Public Opinion

Social scientists who study media effects focus on news rather than fiction because news deals with public affairs, depicts reality, and is consequential. Fictional media is fabricated and generally not considered important enough to be taken seriously. Public opinion scholars have mostly ignored fiction because much of it is neither political nor serious (Delli-Carpini & Williams 1994*a*). Viewers are aware of the differences between news and fiction, know that one informs while the other entertains, and, because of this, theorists have presumed that to enjoy fiction viewers must find a way to buy into it by actively suppressing disbelief (Gerrig 1993). Fiction has been largely ignored by those who study persuasion and media effects because it is not imaginary, designed to entertain rather than inform, and viewers know this.

Conventional wisdom notwithstanding, at least four areas of research point to the potential influence of fictional content on real world beliefs and attitudes. First, some of the earliest research on media effects dealt with entertainment and suggested strong effects. Cantril's (1940) study of the 1938 radio broadcast of *War of the Worlds* suggested that about one million of the estimated six million listeners thought that New Jersey really had been invaded by Martians. The Payne Fund studies of

the late 1920's and early 1930's included many experiments, content analyses, and observational studies of the effects of the then-new and wildly popular motion picture industry on young people (Jowett, Jarvie & Fuller 1996). Among these were a series of controlled experiments by Peterson and Thurstone (1933) on the effects of the controversial film *Birth of a Nation*, with its anti-black stereotypes and sympathetic portrayal of the Ku Klux Klan. They found that the young people who watched the film showed more negative sentiments toward African Americans, that the effect of a single viewing persisted, and that watching several films with the same viewpoint had a reinforcing effect.

A second area of research in this vein, prominent since the time of these early studies, focuses on the influence of entertainment media on children and adolescents. The bulk of this work has focused on the effects of violent media. The evidence is overwhelming that children exposed to violence on television and in video games are more likely to engage in aggressive and violent behavior (see Huesmann and Taylor 2006 and Anderson 2007 for reviews). Researchers have also recently begun to establish a link between sex in the media and adolescent behavior. Exposure to sexual content through television, music, and other media is associated with more liberal attitudes toward sex (Eyal, Kunkel, Biely & Finnerty 2007, Zhang, Miller & Harrison 2008), increased sexual activity (Brown, L'Engle, Pardun, Guo, Kenneavy & Jackson 2006, Collins, Elliott, Berry, Kanouse, Kunkel, Hunter & Miu 2004) and teen pregnancy (Chandra, Martino, Collins, Elliott, Berry & Kanouse 2008).

A third body of research has begun to establish links between fictional content and the views of adults. This work shows that information obtained in fictional narratives is often incorporated into real world beliefs (Gerrig & Prentice 1991, Marsh, Meade & Roediger 2003) and this effect may actually increase over time (Appel & Richter 2007). Fictional portrayals on TV have been shown to influence real world perceptions of doctors (Pfau, Mullen, Deidrich & Garrow 1995, Chory-Assad & Tamborini 2003), lawyers (Pfau et al. 1995), racial minorities (Mastro & Greenberg 2000), the president (Holbert, Pillion, Tschida, Armfield, Kinder, Cherry & Daulton 2003, Holbert, Tschida, Dixon, Cherry, Steuber & Airne 2005), and government (Pfau, Moy & Szabo 2001). Studies show that factual and hypothetical sce-

narios are processed in overlapping, though distinct, regions of the brain (Abraham, von Cramon & Schubotz 2008), that messages identified as factual are no more persuasive than those labeled as fiction (Green, Garst, Brock & Chung 2006), and that when arguing a point people are just as likely to cite fictional sources as factual ones as evidence (Delli Carpini & Williams 1994*b*).

Finally, and most important for the present study, a few recent studies have applied theories of media effects typically associated with news to entertainment. Hollbrook and Hill used both experiments in the laboratory and mass sample observational analyses to show that people who watch doctor dramas (2004) and crime dramas (2005) are subject to priming and agenda setting on health care and criminal justice. People who watched these types of shows on television were more likely to see health care and crime, respectively, as important issues and their judgments on these issues influenced their perceptions of the president.

3   Fictional Framing and Public Opinion

The theory of framing has been often associated with news media but also has implications for entertainment. Media framing posits that news organizations, when dealing with social or political issues, must find a way to organize the presentation of complex issues for viewers efficiently and concisely. Time and viewer attention are both limited so they do is is by presenting issues as discrete "interpretive packages" (Gamson & Modigliani 1989) that help viewers understand what is the essence of an issue. These issue packages have, "at [their] core[,] a central organizing idea, or *frame*, for making sense of relevant events, [and] suggesting what is at issue" (Gamson and Modigliani 1989, p. 3, emphasis in original). Media frames help people conceptualize complicated topics by providing clues about what are the most relevant considerations related to issues. In "packaging" an issue for public consumption, news media sometimes present some dimensions of an issue, or some relevant considerations, but not others (Kellstedt 2003). How the media frame an issue affects how people perceive it, and ultimately, their opinions toward it (Nelson, Clawson & Oxley 1997).

In entertainment dramas, the nature of framing is different but the effect is likely to be the same. Socially and politically relevant topics are raised not in the context of a news story but a fictional story. Relevant aspects of an issue are conveyed not by reporters and editors but by fictional characters and dramatic storylines. The theory of fictional framing is that fictional media, like news, present socially or politically relevant topics as "issue packages" that, in varying degrees subtle or overt, give meaning to the issues. The context in which the issues are raised, and the valence, tone, and implications of characters' reactions and dialogue to them, highlight some facets of the issues, or portray some perspectives of the issues, at the expense of others. In doing so, this affects how people think about them, and in consequence, their opinions. Fictional framing implies that entertainment media frame issues with consequences for public opinion.

Almost all framing studies in political science have dealt with news. Early framing experiments by Iyengar (1987, 1990, 1991, 1996) showed that when news media frame a social problem in terms of how it affects individuals, people tend to attribute the causes of the problem to the individuals themselves, but when the media frame the problem in terms of abstractions like aggregate statistics, people tend to attribute the causes to social forces such as poverty. Two recent studies suggest that framing might also apply to entertainment media. Strange and Leung (1999) conducted an experiment similar to Iyengar's, but with the key difference being a manipulation in which participants read a story identified as either factual news or fiction. They found framing effects in both the news and fiction conditions. Even when the story was identified as fiction it still influenced perceived causes, consequences, and the best solutions to the social problem. Another related study showed that participants who watched an episode of the crime drama *Law and Order* that featured the kidnapping and brutal murder of a woman and, in that context, an implictly pro-death penalty ending, lead to more pro-death penalty opinions (Slater, Rouner & Long 2006). However, the same study found that participants who watched the pro-gay-rights *HBO* drama *If These Walls Could Talk II* were not significantly more favorable to gay rights. Nevertheless, the bulk of the available evidence suggests that fictional framing is likely to affect attitudes at least for some people, in some circumstances,

some of the time.

3.1   Mechanisms of Fictional Framing Influence

We address this by investigating the potential moderators of fictional framing. We consider several possible mechanisms for influence. A principal one is related to the way in which subjects process information. Dual-mode theories of persuasion posit that persuasion occurs generally in one of two ways–either through high effort processes, where the individual elaborates on the content of the message and is persuaded (or not) by the cogency and quality of the argument, or low effort processes where the individual does not carefully consider the message but instead relies on peripheral cues or heuristics (see Chaiken and Trope 1999 for a review). Most theories of persuasion have been shown to fall under the dual-mode rubric. Researchers who study the influence of fiction have generally assumed that people are not motivated to elaborate on messages or themes in fictional media and so, to the extent fiction is influential, it is likely to occur through low effort processes (Prentice & Gerrig 1999). It is likely that those who engage in systematic processing would be more likely to discern fact from fiction, and thus should be less likely to be influenced by fictional framing. Although framing is theorized to be a qualitatively different process of influence than persuasion per se (Nelson, Clawson & Oxley 1997), elaboration of the "arguments" in fiction would seem likely to moderate the influence of fictional frames. We engage this higher level processing by motivating subjects to think carefully about information they receive.

A second and related mechanism posits that fictional influence is moderated by the extent to which the person is absorbed by the story (Gerrig 1993, Slater 1997, Green & Brock 2000). People who become so engrossed in the film that they tune out the world around them, lose track of time, and become "transported" into the narrative world might be especially susceptible (Green, Strange & Brock 2002).

Other mechanisms for the influence of fictional framing include the perceived realism of the media and viewers' trust in, and enjoyment of, entertainment media. Some evidence suggests that the more closely fiction resembles reality, the more

likely respondents are to evaluate the fiction as reality, particularly when the circumstances portrayed in the fictional account relate to their own experiences (Busselle & Bilandzic 2008, Green 2004, Oatley 1999, Slater, Rouner & Long 2006). A fourth possible mechanism is enjoyment and trust entertainment media. Papacharissi and Mendelson (2007) found that those who who enjoyed entertainment media the most were especially likely to perceive the narratives of reality TV shows as real, rather than recognizing that reality TV is highly-edited and much of the content is scripted. We believe that those who trust entertainment media will be more likely to be influenced by fictional framing, and those who enjoy film will be especially influenced.

4 *Cider House Rules* Experiment

We evaluate the influence of fictional framing in the context of an experiment conducted in our lab in early 2008. 194 participants were recruited from an introductory course in U.S. government and politics in exchange for course credit. Those in the treatment group watched *Cider House Rules* starring Tobey Maguire and Michael Caine. Those in the control group watched an unrelated film.[1]

Cider House Rules is a coming of age story about Homer Wells (the character played by Tobey Maguire), an adolescent orphan who spends his young life working under the tutelage of Dr. Wilbur Larch (Michael Caine) at an orphanage in rural Maine in the mid-20th century. Dr. Larch has taught Homer his trade from a very young age, hoping that Homer would eventually replace Dr. Larch when he retires. Homer resists the idea throughout because he, not having gone to medical school, is not qualified. Dr. Larch insists that he can teach Homer everything he needs to know. He goes so far as to create fabricated credentials for Homer in the hope he

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[1]Control group participants watched the film *Wag the Dog*. The themes of this film are unrelated to those in the present study. Participants were told that the experiment was being conducted by "researchers in the departments of Cinema/Photography and English" who "want to look at how people think about a story when they read it in a book versus watching it on film. Participants at [their university] are watching the film version of the story. Participants at another university are reading the book version." After watching the movie, participants responded to a series of questions on their computer monitors, were debriefed, and then dismissed.

will succeed him. Over the course of the film we find out that Dr. Larch is addicted to ether, we see Homer grow up and move away for a time, experience romance, and then, after Dr. Larch dies, return to the orphanage to take Dr. Larch's place.

A subtheme and message of the film involves abortion. It is this regard that we expect to find influence of fictional framing on political attitudes. In the film, abortion is illegal. Yet Dr. Larch, who is portrayed as a compassionate and caring physician, performs abortions on young women in need. Early in the movie, a young woman, the victim of a botched abortion at the hands of another, comes to Dr. Larch seeking help. He tries to save her but she dies. While burying her, Dr. Larch and Homer discuss the issue. Larch argues that abortion should be legal to prevent such needless deaths. The movie presents a counter-argument through Homer, who protests, noting that abortion is illegal, and that had his mother been given an abortion, he would not have been born. Later in the film after Homer moves away, a young migrant worker, Rose, becomes pregnant at the hands of her father. Homer, having compassion for the woman, performs an abortion on her, a dramatic change from his earlier objections. He later returns to oversee the orphanage and to continue in Larch's path. The film frames abortion in the case of incest as just, as a humanitarian choice, one necessary to help woman in crises. The scenes associated with the sad event were dramatic, emotional, and sympathetic to the character who sought the abortion. On the other hand, abortion more generally is certainly endorsed by the film, although Homer's counter-argument against abortion serves to balance Dr. Larch's view. Thus the film's framing was strongly one-sided and pro-choice in the case of incest, and more balanced in the general case of abortion.

A second message of the film concerns moral values and moral relativism. Several characters deride the law. Dr. Larch at one point questions, "What has the law ever done for any of us?" Later, when an illiterate worker asks Homer to read the rules posted on the wall of the cider house where they live, the woman's father, who is in charge of the workers, articulates the moral of the film: "Stop it, Homer. They aren't our rules. We didn't write them. I don't see no reason to read them." The cider house rules are perceived as unnecessary and imposed arbitrarily. Framed more explicitly in the film is the value of making one's own decisions, of following one's conscience.

Homer makes such a decision when offering abortion in the case of incest. Homer and his love interest violate social conventions when they engage in an extramartial affair. Dr. Larch represents the epitome of following his own personal morality by offering abortions and using illicit drugs. Thus we expect to see influence on the extent to which one should follow their own conscience rather than the law, and possibly on general moral values.

4.1 Abortion Attitudes and Moral Values

Given the subthemes of the film, we expect the influence of fictional framing will be strongest for attitudes toward abortion in the case of incest, and possibly for abortion more generally. Following the viewing of the film, we asked participants several questions designed to tap their attitudes toward abortion. We also asked these same questions of the control group who watched a different film. On abortion, we questioned whether abortion should be legal (coded 1) or illegal (coded 0) in the case of incest, and we asked the participants' opinions of legalized abortion in 11 other circumstances, such as "when the woman cannot afford a child," "when the child would be born with mental or physical disabilities," and "when the woman is under 18 years of age." The wording of these questions came from standard surveys including those conducted by the National Opinion Research Center and *Newsweek*.[2] We created a scale of general abortion attitude based on the 12 items.[3]

We also expect the influence of fictional framing to be evident in subjects' attitudes toward the extent to which one should follow one's own conscience rather than the law, and possibly for general moral relativism attitudes as well. We asked those who saw the film and a control group a series of six Likert (agree–disagree) questions designed to tap the general principle of moral values and relativism. One of these items mapped directly onto the moral of the rules posted on the cider house wall. Participants were asked to respond to the statement closely related to the framing of the film: "People should always follow their own conscience, even if it results in

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[2]The order of the abortion questions was randomized for each subject.

[3]The items are highly correlated, and the scale has adequate reliability.

doing something illegal" on a five-point agree-disagree scale. The other five statements were more abstract (e.g., "There are objective moral truths that are valid in all times and circumstances") but indicative of the general principle.[4]

Below, we examine how the framing of abortion and morality affected participants' attitudes toward these two constructs. For abortion attitudes, we conduct two analyses. First, we use logit to regress the item that taps support for legal abortion in the case of incest on the experimental manipulations. Second, we use OLS to regress the support-for-legalized-abortion scale on the manipulations. We also conduct two analyses for moral values. First, we use ordered logit to regress the Likert item that tapped the specific moral message of the film ("People should always follow their own conscience") on the manipulations. Second, we use OLS to regress the moral relativism scale on the manipulations.

4.2 Elaboration Manipulation

In addition to the film, the experiment included a second manipulation designed to engage systematic processing for a sample of subjects. At the outset of the experiment, participants who watched *Cider House Rules* were randomly assigned to one of two conditions. In the first, participants were asked to watch the movie as they would normally. In the second, subjects were told to watch the film closely, as they would be tested on factual recall after watching it. This is a standard dual-mode manipulation intended to increase motivation, and thus elaboration, in the *test* condition relative to the *watch normally* condition. We expect that those who engaged in higher order processing, the test condition, would be less likely to be influenced by the contents of the film than those who were told to watch the film normally. That is, those in the test condition should be more likely to perceive the film as fiction, and thus irrelevant to their political attitudes. Those in the low elaboration condition, however, should be less likely to differentiate fiction from reality.

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[4]Three of the six were worded so that a positive response indicated moral relativism and three were worded in the opposite direction. The six items were presented in random order. The items are fairly well correlated, and the scale has adequate reliability.

5   Results

We begin by discussing the consequences of viewing the film for attitudes toward abortion and moral values. We then look at whether the elaboration designed to invoke systematic processing explains the influence of fictional framing. We follow these models with additional regressions that explore possible mechanisms for fictional framing.

5.1   Consequences for Abortion Attitudes and Moral Values

We look first at the film's consequences for abortion attitudes. The most explicit tie to abortion concerns incest. Near the end of the movie, a series of emotional scenes framed the abortion of a young migrant worker as heart wrenching but necessary, compassionate, and just. This was perhaps the most explicit frame in the film. If fictional framing were to have any affect based on *Cider House Rules* it would be with respect to this issue. Our measure of support for legalized abortion in the case of incest is dichotomous, and thus we used a logit model. Column 1 of Table 1 presents the results of this model. The results show that fictional framing affected attitudes toward abortion in the case of incest. People exposed to the film were significantly more favorable to incest-related abortion than the participants in the control group. In fact, the mean response to abortion in the case of incest was 0.92 (where 0 equals disfavor abortion in the case of incest and 1 equals favor) for those who watched *Cider House Rules*, as opposed to 0.76 for those in the control group.[5]

[Insert Table 1 about here.]

We also test the effect of the film on general abortion attitudes. For the measure of support for legalized abortion across the 12 circumstances we used OLS. The results are presented in column 2. As noted, abortion more generally was not framed with as strong a pro-choice message as abortion in the case of incest. General abortion attitudes were not affected by viewing the film.

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[5]The standard deviation for those who watched *Cider House Rules* was 0.26, and for the control group, 0.43.

Columns 3 and 4 compare those in the high and low elaboration conditions to those in the control group. The elaboration manipulation, being told to watch the film closely for reasons of a subsequent test on content, was designed to invoke more systematic processing. Thus we expect that those in the low elaboration condition will be the most likely to be influenced by the film compared to the control group, and that those in high elaboration condition may or may not be influenced by fictional framing. For abortion in the case of incest, Column 3, *both* those in the low and high elaboration condition were influenced by the film. For general abortion attitudes displayed in Column 4, *neither* those in the low nor those in the high were influenced by the film. Thus we do not find evidence that the elaboration accounts for influence.

We now turn to the influence of the film on moral values. The film framed morality as a matter of following one's own conscience rather than adhering to a defined moral code, and we therefore expect to find the strongest effects of fictional framing on this item. We also looked at the film's influence on a scale of six items tapping general moral values and moral relativism.

[Insert Table 2 about here.]

Column 1 of Table 2 includes the effect of watching the film on following one's conscience. As with abortion in the case of incest, the results show that the film increases significantly participants' agreeableness to this point of view. The mean response for those who watched *Cider House Rules* was 0.57 – where 0 equals disagreement with the statement that one should follow his/her own conscience and 1 equals agree – as opposed to 0.47 for those in the control group.[6] Here again, the framing of the moral outlook of the film significantly affected beliefs of participants. Column 2 of the table, however, shows that general moral values were not influenced by the viewing of the film. The latter columns speak to the elaboration, and the results are consistent with what we found in the abortion models. Those in both the high and low elaboration conditions were influenced by the film's framing of following one's own conscience, but not by the framing of general moral values.

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[6]The standard deviation for *Cider House Rules* viewers was 0.27, and for the control, 0.23.

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Our findings demonstrate that fictional framing matters, albeit with a caveat. Viewing the film had implications for political attitudes framed explicitly in the film – abortion in the case of incest and choosing to follow one's conscience – but not to general abortion attitudes or attitudes about moral relativism.

5.2   Explaining Influence

We now move to explain possible mechanisms that account for fictional framing influence. We regressed a series of explanatory variables on our four dependent variables for those subjects who viewed *Cider House Rules*. These explanatory variables include the elaboration manipulation. We expect that this manipulation will be a significant predictor of framing effects in this experiment. A second mechanism speaks to absorption in the film. We measured absorption using a scale constructed based on items such as whether a subject was "bored" whether "time flew by" whether they were "glued to the screen." We constructed a scale of perceived realism using questions that concerned how similar the characters and situations were to the real world, and whether the plot was believable or far-fetched, and we hypothesized earlier that those who perceive the film as real will be more likely to be influenced by it. A fourth mechanism concerns subjects' enjoyment and trust of entertainment media. We asked our participants to provide open-ended comments that conveyed their likes and dislikes of the film, and we subsequently created a measure of each participant's ratio of likes to dislikes. We also asked a question concerning their trust of entertainment media. We posit that those who had a more positive response to the film and those more trusting of entertainment media would be more likely to be influenced by fictional framing. A final mechanism is recalled knowledge from the film. It is possible that those who were better able to recall details in the film would be more likely to be influenced by the film's message. We asked a set of factual questions that concerned the characters and plot of the film, and after coding the correct responses, developed a scale of each subjects' recalled knowledge.

We also included several other potential moderators and control variables. We measured subjects political knowledge, perceiving that those with higher levels of

political knowledge maybe less likely to be persuaded. Given that several of our questions concern attitudes towards abortion and moral values, we also included measures of subjects' political ideology and religious preferences, as well as an indicator of gender as controls.[7] Lastly, we included an indicator for those who had previously seen the film, 11 of 99 participants in total.

We revisit each of the earlier models with the same dependent variables and are our explanatory variables. Table 3 shows the results for the case of incest and general abortion attitudes.

[Insert Table 3 about here.]

The findings of the abortion models are mixed. In the *Incest* Model, only the controls of political ideology and religion proved statistically significant. Note that in this model, several independent variables were dropped due to the model being overly specified, as their was little variance in our dependant variable, and as a result, some regressors were prefect predictors of the outcome. Neither those in the elaboration condition nor those who were absorbed with the film or perceived it to be real were more likely to be influenced. However, in the case of general abortion attitudes, we see some movement from the elaboration condition and from absorption. It appears that those being told that they would take a test on the film's contents were more willing to allow for abortions across a variety of circumstances, which suggests that more systematic processing led to *greater* fictional framing influence. Absorption is statistically significant at the .1 level, although the sign of the coefficient is again not in the expected direction. Here those who were engrossed with the film were *less* pro-choice than those who were simply told to enjoy the film.

Table 4 shows the findings of our investigation into which subjects were especially influenced by the moral content of the film. Again we compare attitudes toward the "follow one's conscience" item with general moral values.

[Insert Table 4 about here.]

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[7]We coded variables *Christian* and *Catholic*, based on an opened ended question where subjects identified their religious affliction. All those considering themselves "Protestant" or "Other Christian" were coded as "Christian".

In both models, we see little evidence that elaboration, absorption, realism, or any of our other explanatory variables mattered for who was most likely to be influenced by fictional framing. Our R^2 terms suggest that our models capture little of the variance in our dependent variables.

6   Discussion

Our study has offered insight into an area of research that has been largely neglected by political science—whether fictional media can influence political attitudes. Large literatures have explored theories of media effects such as priming, agenda setting, and framing, but the vast majority of this work has focused on news. We presented a theory of fictional framing whereby entertainment media, like news, frame issues. We tested the theory in the context of the popular film *Cider House Rules*, which touched on abortion and moral values. The movie framed abortion in the context of incest as a necessary and compassion act of kindness, and morality in terms of doing the right thing, even if it means doing something illegal. Our experiment showed that viewers were responsive to both frames. Participants who watched the film were significantly more likely to favor legalized abortion in the case of incest and the principle of following one's conscience even when it means breaking the law. However, the film also had a more general pro-choice theme and a general favorableness toward the principle of moral relativism, but these frames did not influence participants' general abortion attitudes or moral values. Overall, then, our results showed that the movie influenced views on the strongest and most explicit frames but not the general ones.

Accounting for the mechanism of fictional framing influence proved a difficult endeavor. We could not account for the influence of fictional framing via dual-processing, as the significant effects were consistent across the manipulation designed to engage higher level processing and those watching the film normally. Nor did we find evidence that viewers who were more absorbed, viewers who perceived fiction as reality, or viewers who enjoyed the film and trusted entertainment media were affected differently by the fictional framing, despite some literature that suggests these

mechanisms should matter. For the most part our efforts address the moderators of fictional framing were unsuccessful. Even so, as one of the first studies of the effects of entertainment media on political attitudes, and the first test of fictional framing, the results of this study suggests that when entertainment media frame issues in very specific ways, viewers' real world opinions are affected.

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Tables

Table 1: Effect of *Cider House Rules* on Abortion Attitudes

	Incest (Film Only)	General (Film Only)	Incest (Film/Elaboration)	General (Film/Elaboration)
Watched *Cider*	1.43**	0.03		
	(0.46)	(0.51)		
High Elaboration			1.52*	0.05
			(0.64)	(0.04)
Low Elaboration			1.36*	0.02
			(0.57)	(0.04)
Constant	1.14**	0.51**	1.14**	0.51
	(0.24)	(0.02)	(0.24)	(0.02)
Adjusted/Pseudo R^2	.07	.00	.07	.00

N = 194, ** $p \leq .01$,* $p \leq .05$, Standard errors in parentheses.

Incest is attitude toward legalized abortion in cases of incest.

General is index of 12 abortion items scaled to range from 0 to 1.

Incest models are logit coefficients, *General* models are OLS estimates.

Table 2: Effect of *Cider House Rules* on Moral Values

	Follow Conscience (Film Only)	Moral Relativism (Film Only)	Follow Conscience (Film/Elaboration)	Moral Relativism (Film/Elaboration)
Watched *Cider*	0.11**	0.03		
	(0.04)	(0.02)		
High Elaboration			0.10**	0.04
			(0.04)	(0.02)
Low Elaboration			0.12**	0.02
			(0.04)	(0.02
Constant	0.47**	0.53**	0.47**	0.54**
	(0.03)	(0.01)	(0.03)	(0.01)
Adjusted/Pseudo R^2	.04	.01	.04	.00

N = 194, ** $p \leq$ .01,* $p \leq$ .05, Standard errors in parentheses.

Follow Conscience is 7-pt. Likert scale scaled to range from 0 to 1.

Moral Relativism is index of 6 items scaled to range from 0 to 1.

all entries are OLS estimates.

Table 3: Explaining Abortion Attitudes

	Incest	General
High Elaboration	.35	.08*
	(1.04)	(.04)
Absorption	1.41	-.24†
	(3.86)	(.13)
Perceived Realism	-.99	-.11
	(3.94)	(.15)
Recalled Knowledge	-.62	-.09
	(4.36)	(.15)
Ratio of Likes to Dislikes	-.41	.01
	(.28)	(.01)
Previously Viewed Film	.	-.09
	.	(.07)
Trust in Entertainment	.	.31*
	.	(.12)
Political Ideology	6.47*	.43*
	(2.53)	(.09)
Political Knowledge	.004	-.01
	(.43)	(.02)
Female	.06	.02
	(1.28)	(.05)
Christian	-2.17†	-.03
	(1.25)	(.05)
Catholic	.	-.13*
	.	(.06)
Constant	2.21	.49*
	(5.73)	(.21)
Adjusted/Pseudo R^2	.32	.27

N = 99, * p < .05, † p < .10, Standard errors in parentheses

Incest is attitude toward legalized abortion in cases of incest.

General is index of 12 abortion items scaled to range from 0 to 1.

Incest is logit coefficients, *General* is OLS estimates.

Table 4: Explaining Moral Values

	Follow Conscience	Moral Relativism
High Elaboration	.02	-.02
	(.06)	(.03)
Absorption	-.13	-.05
	(.19)	(.09)
Perceived Realism	-.15	.07
	(.21)	(.10)
Recalled Knowledge	-.005	.11
	(.21)	(.10)
Ratio of Likes to Dislikes	.006	-.002
	(.02)	(.01)
Previously Viewed Film	.01	.01
	(.09)	(.04)
Trust in Entertainment	.13	.05
	(.17)	(.08)
Political Ideology	-.03	.03
	(.13)	(.06)
Political Knowledge	.01	.01
	(.02)	(.01)
Female	.04	-.01
	(.06)	(.03)
Christian	-.05	-.07*
	(.07)	(.03)
Catholic	.02	-.06
	(.29)	(.04)
Constant	.67*	.41*
	(.29)	(.14)
Adjusted R^2	-.08	-.002

N = 99, * p < .05, Standard errors in parentheses

Follow Conscience is 7-pt. Likert scale scaled to range from 0 to 1.

Moral Relativism is index of 6 items scaled to range from 0 to 1.

Entries are OLS estimates