

Avoiding Dissonant Information

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Abstract

I examine whether prior exposure to dissonant information and people's beliefs drive information avoidance. More specifically, I focus on outlook towards abortion and two main beliefs on abortion: anti-abortion (opposes abortion rights) and pro-choice (advocates abortion rights). In experiments with US respondents, I first vary the prior exposure to information - whether the information participants receive is in line with or contrary to their beliefs. I then measure the avoidance of dissonant information. Overall, I find that 43 % of the participants are willing to avoid dissonant information at a material cost of 44 % of their money. Prior exposure to information is insignificant, however, what matters is the beliefs. Being anti-abortion or pro-choice explains the difference in willingness to pay to avoid dissonant information. My results suggest that anti-abortion participants are willing to spend a substantially higher proportion of their money (10 %) to avoid dissonant information than pro-choice participants, suggesting that no matter what prior information a person has been exposed to, the belief they currently hold explains the intensity of information avoidance.

Keywords: Information avoidance, attention avoidance, willingness to pay, dissonance, gender, experiment.

JEL codes: *C91, C99, D83, D91.*

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1 Introduction

A standard economic model predicts that a rational utility-maximiser agent would never deliberately avoid information based on the assumption that information can never have a negative instrumental value (Stigler 1961). However, belief-based utility models have established otherwise - people might consciously avoid information for hedonic reasons (Loewenstein 1987, Golman & Loewenstein 2018). If the value of information depends on its valence, then people would be willing to forgo monetary gains to acquire information that can confirm favourable beliefs and avoid information that can confirm unfavourable beliefs even when the information does not inform action (Charpentier et al. 2018). Additionally, growing empirical evidence suggests that people prefer following news from sources that are in line with their beliefs and avoiding the ones that might challenge their beliefs (Festinger 1954, Klapper 1960, Lazarsfeld et al. 1968, Smith et al. 2008, Hart et al. 2009). Being exposed to only confirmatory information tends to agglomerate individuals with similar prior beliefs into groups with more extreme views which in turn, leads to the occurrence of group polarisation i.e. echo-chambers (Sunstein 1999). On the other hand, there is mixed evidence in the literature on the effect of being exposed to contradictory information. One class of studies argue that it reduces the extremism of the belief as it challenges the existing stereotypes (Mutz 2002, Huckfeldt et al. 2004, Pettigrew & Tropp 2006, Grönlund et al. 2015), while other class of studies support that it creates a backfire effect as it challenges people's identity and creates dissonance (Lord et al. 1979, Nyhan & Reifler 2010, Taber & Lodge 2006, Bail et al. 2018).

A major identification problem when trying to quantify the effect of prior exposure to dissonant information is that theories based on prior exposure often make predictions based on the assumption that equal levels of attention is given to the dissonant and consonant stimuli. However, the wide literature on emotion regulation in psychology suggests human brains strategically choose to avoid paying attention to stimulus related to negative senses to regulate emotions (Gross 1998, Koole 2010, Cisler & Koster 2010). Therefore, theories based on information avoidance and the predictions based on prior exposure lack the discrimination between attention avoidance and information avoidance. This makes it challenging to quantify the true extent of information avoidance and the true importance of prior exposure to dissonant information with naturally occurring data where attention to dissonant stimuli is unobserved. Also, it is unclear how these changes in beliefs caused by exposure to consonant or dissonant information translate into further information avoidance behaviour.

To address the identification challenge and to quantify the effects of beliefs and prior exposure to dissonant information on further information avoidance, I design an experiment to vary prior exposure to information for different belief groups while controlling for attention

avoidance. I conduct a controlled experiment with 1,000 US participants using the online research platform Prolific. I focus on the topic of abortion rights and study two opposing belief groups on abortion rights as fundamental psychological differences are shown to exist between different partisan groups (Sweetser 2014). Before the experiment, to elicit subjects' prior beliefs, I use Prolific's pre-screen variable on the beliefs on abortion rights: "pro-choice" or "pro-life" to filter participants.^{1,2} The experiment consists of two sessions. The key difference between the two sessions is that Session 1 includes only pro-choice participants whereas Session 2 includes only pro-life participants. In the experiment, subjects are asked to complete an effort task which includes reading a short article followed by comprehension questions based on the contents of the article. Subjects are informed that they will receive 0.10 \$ per correct answer they give to these questions. Therefore, information has both instrumental and non-instrumental value in my experiment. It could not only be used as an incentive to create financial rewards, but also as a tool to create cognitive dissonance. For the effort task, half of the subjects are randomly allocated to a consonant group (i.e. the assigned article supports their beliefs on abortion rights) and the other half are randomly allocated to a dissonant group (i.e. the assigned article opposes their beliefs on abortion rights).³ This creates exogenous variation in prior exposure to information.

To gauge how this treatment affects information avoidance, I then assign each participant a dissonant article and offer them the chance to switch to a consonant article.⁴ Participants who want to switch to a consonant article are asked to indicate their willingness to pay for the switch.⁵ After they indicate their willingness to pay, a random number between 0 and 100 is drawn to determine which decision would be implemented. If their maximum willingness to pay to switch articles is greater than or equal to the random number drawn, then the dissonant article is replaced with the consonant article. If their maximum willingness to pay is less than the random number drawn, then participants continue the experiment with the

¹Prolific uses the terms "pro-choice" and "pro-life". Therefore, to keep a consistent terminology, I use these terms both in the experiment and in the paper. However, I would like to make readers sure that using any of these terms does not represent my ideology. For simplicity, the remainder of the paper does not use quotation marks around these two terms.

²I compare the information provided by Prolific on participants' beliefs on abortion rights with a question from my experiment to make sure that there are no inconsistencies. Any participant whose response does not match with Prolific's record is excluded from the analysis as pre-registered in the AEA RCT registry.

³Through a descriptive article title and a sentence-long summary of its content, participants are made aware of both the article's content and the side of the argument it supports.

⁴Both of the articles in this stage use arguments that are distinct from those in the articles given to the participants in the stage before. Both the content and the side of the argument the article supports are again communicated to the participants through its title and a sentence-long summary.

⁵A pot of money (100 cents) that is distributed to participants at the start of the experiment can be used to pay for the switch if they choose so. Any unused amount of money is added on top of their bonus payments.

initially allocated dissonant article.⁶ Participants then complete the second effort task in an article that is decided based on their individual mechanism result. The experiment finally concludes with a post-treatment questionnaire which includes questions on participants' posterior beliefs on abortion, political beliefs, media consumption, risk and information preferences and demographic information.

My results confirm that treatments generate a significant first stage effect on the exposure to information. In both sessions of the experiment, participants allocate significant amount of time while reading the article that is randomly assigned to them. Additionally, I ask participants to answer several multiple-choice questions based on the article they read. These questions define their bonus payment and serve as a comprehension check. On average, they answer 89.48 % of the questions correctly, further demonstrating that they actually read the articles. Furthermore, I find that when they are asked to provide their subjective evaluation on the article they read, they rate the article as being more reliable and accurate, and less untrustworthy and biased if the article is in line with their beliefs than if it is against their beliefs, suggesting belief-consistent but biased evaluations.

My main results on information avoidance show a strikingly high proportion of people avoid dissonant information at a monetary cost. On average, 42.60 % of the participants choose to avoid dissonant information at a monetary cost of 44.40 % of their additional budget. This suggests that people pay to avoid information that might further emphasise the validity of their undesirable beliefs as the value of information depends on its valence. These results do not significantly differ depending on whether participants are previously exposed to dissonant or consonant information ($p = 0.999$). However, while explaining the difference in willingness to pay to avoid dissonant information, prior belief is what significantly matters. Pro-life people are willing to spend 10.30 % more of their additional budget to avoid dissonant information than pro-choice people compared to the pro-choice group's mean of 39.90 % ($p = 0.002$). This result holds irrespective of the treatment group participants are randomly assigned to ($p < 0.050$), suggesting that no matter what prior information a person has been exposed to, their current belief explains the severity of information avoidance.

From my secondary analysis of the results, I find that there are certain demographic and behavioural factors that explain the variation in willingness to pay among people who choose to forfeit material utility to avoid dissonant information. I find that in addition to being opposed to abortion rights, older people, females and people who spent less time reading the

⁶Participants are given a clear description of this mechanism and are explicitly informed that the likelihood of the articles being switched increases with reported willingness to pay. In order to make sure that they fully comprehend the mechanism after reading the description, they are then given two comprehension questions on the mechanism. Subjects who respond incorrectly to both of the questions are dropped from the analysis as registered in the AEA RCT Registry.

news are willing to make greater monetary sacrifices to avoid dissonant information. Females are willing to forgo 6 % more money to avoid dissonant information than males on the topic of abortion ($p < 0.100$). Additionally, on average being one year older and spending one less hour reading the news in a day increases the willingness to pay by around 4 % ($p < 0.000$) and by almost 1 % ($p < 0.000$), respectively. Furthermore, I observe belief-confirming but biased evaluations of the articles. If an article supports one's belief on abortion rights rather than oppose it, people perceive it as more reliable and accurate, and less untrustworthy and biased ($p < 0.000$). This behaviour might stem from the motivation to reduce cognitive dissonance since rating a dissonant article as reliable and accurate might cause people to experience cognitive dissonance because of holding two conflicting beliefs. Overall, my results prove the existence of motivated information avoidance which can provide a behavioural account for the existence and the growth of group polarisation and political extremism.

To investigate how people explain their avoidance behaviour, I collect direct data on people's reasons for deciding to switch the dissonant article with the consonant one to complete an incentivised effort task. To uncover their true justification, participants are asked to answer an open-ended question on their motives for deciding to switch or not to switch to a consonant article. By using Natural Language Processing, I show that people who choose to avoid dissonant information experience higher level of negative emotions in the anticipation of exposure to dissonant information than people who choose not to avoid dissonant information. Additionally, they frequently use words related to moral side of the abortion discussion, associated with negative emotions such as "murder, innocent, religion" to justify their avoidance behaviour whereas people who choose not to avoid dissonant information frequently used words related to monetary terms such as "money, bonus, keep" to explain their non-avoidance behaviour. These results indicate that anticipation of negative emotions plays a significant role in information avoidance. Furthermore, results suggest a significant difference in the tone of language between pro-life and pro-choice people who choose to avoid dissonant information. I find that words that characterise the justifications by pro-life people are related to more negative and emotional words. Therefore, they are more likely than pro-choice people to experience negative emotions when anticipating dissonant information. These results explain the higher willingness to pay to avoid dissonant information by pro-life people as they suffer more from the anticipation of being exposed to dissonant information.

In order to rule out any potential alternative explanations for the results, I conduct further analyses on the mechanisms. Most importantly, I demonstrate that the avoidance behaviour observed in my study does not stem from attention avoidance but rather from information avoidance. I differentiate information avoidance from attention avoidance by eliminating potential concerns about differential levels of attention dedicated to dissonant

and consonant articles. Overall, my results once again emphasise the importance of both the instrumental and the hedonic value of information that should be taken into consideration by policymakers while evaluating policies related to information provision (Reisch et al. 2021). As Nordström et al. (2020) also underlined, if the goal of the policy is to maximise welfare, the underlying mechanisms driving strategic ignorance should not be overlooked.

My paper contributes to several strands of the literature. First of all, the paper is closely related to the literature on information avoidance (Sweeny et al. 2010, Jang 2014, Thunström et al. 2016, Hertwig & Engel 2016, Sharot & Sunstein 2020, Nordström et al. 2020, Ho et al. 2021), selective exposure (Klapper 1960, Lazarsfeld et al. 1968, Sunstein 1999, Knobloch-Westerwick & Meng 2009) and information demand (Zimmermann 2015, Ganguly & Tasoff 2016, Falk & Zimmermann 2016, Golman et al. 2017, Nielsen 2020, Faia et al. 2021a, Chopra et al. 2022b, Fuster et al. 2022). Previous studies have developed theories and empirical methods to identify information avoidance and selective exposure to information. They have assessed whether information has a non-instrumental (hedonic) value in addition to its instrumental value. They have also investigated the emergence of echo-chambers by comparing people’s demand for attitude-consistent sources of information with counter-attitudinal ones. My main contribution to this literature is to identify the importance of prior beliefs and prior exposure to dissonant information in driving dissonant information avoidance by varying the prior exposure to dissonant information while beliefs are assigned by the nature. I also differentiate attention avoidance from information avoidance while investigating the effects of beliefs and prior exposure. As of my knowledge, this paper is the first to clearly differentiate information avoidance from attention avoidance.

I contribute to the literature on theories of belief-based utility (Loewenstein 1987, Golman & Loewenstein 2018, Golman et al. 2017, Nordström et al. 2020) by assessing the psychological motives driving information avoidance. Previous studies in this literature have argued that risk aversion and loss aversion over beliefs (Bénabou & Tirole 2002, Köszegi 2006, 2010), uncertainty aversion (Golman & Loewenstein 2018), anticipatory feelings over information such as anxiety, sadness or any negative valence emotion (Sullivan et al. 2004, Ganguly & Tasoff 2016, Golman et al. 2017, Reisch et al. 2021) or psychological distress otherwise known as cognitive dissonance (Festinger 1954, Akerlof & Dickens 1982, Taylor & Brown 1988) might explain a part of the information avoidance behaviour. For example, Festinger (1954) discusses in his theory of cognitive dissonance that people frequently shun information that might be at contrast with their pre-existing beliefs due to the anticipation of negative emotions while actively searching out information that supports those beliefs to evoke positive emotions. Economists have recently identified this tendency of people seeking information that are congruent with their established beliefs as one of the most effective

strategies for motivated reasoning (Bénabou & Tirole 2016, Gino et al. 2016, Golman et al. 2017, Grossman & Van Der Wee 2017, Exley & Kessler 2021, Momsen & Ohndorf 2022). My main contribution to this literature is that by using first-hand text data, I show that anticipation of negative emotions drives the information avoidance as people are motivated to avoid experiencing dissonance.

I also add specifically to cognitive dissonance literature by quantifying the psychological cost of dissonant information by using a willingness to pay measure. Many researchers have shown that when confronted with attitude-challenging news, people might experience cognitive dissonance (Rabin 1994, 1995, Konow 2000). Dissonance could emerge when one supports a news source that promotes an opposite ideology or loses confidence in the validity of their beliefs (Metzger et al. 2020). The new information might require individuals to change their beliefs, or take an undesired action to reduce the dissonance (Sweeny et al. 2010). Therefore, to escape the feeling of psychological discomfort caused by holding two contradictory beliefs on a topic, people could opt to remain unaware of the nature of advantages related to gaining new information. As a result, in order to minimise cognitive dissonance, people seek information and information sources which support their beliefs (Smith et al. 2008, Hart et al. 2009, Golman et al. 2017, Sweeny et al. 2010, Edenbrandt et al. 2021, Brannon et al. 2007, Jonas et al. 2001, Knobloch-Westerwick & Meng 2009). Also as it is shown in (Nyborg 2011) theoretical work, people who experience negative utility because of cognitive dissonance caused by incongruent information are expected to pay positive amount of money to avoid such information. In this research, I quantify the psychological cost of dissonant information using my experimental data. Furthermore, even though the willingness to pay measure has been widely used in the recent literature to quantify the value of information (Eil & Rao 2011, Charpentier et al. 2018, Viscusi 2018, Sunstein 2019, Raio & Glimcher 2021), it has been argued that it has its benefits and drawbacks while measuring information demand. From the theoretical point of view, it is considered to be the best approach (Viscusi 2018) as it should capture everything that consumers stand to gain and lose from information on identifiable assumptions. However, the willingness to pay measure could be unreliable if the value of the information is unknown to the purchaser before actually purchasing it or if the willingness to pay, stated in advance, fails to capture the actual welfare effects of information (Arrow 1962, Sunstein 2019). Nonetheless, these disadvantages do not create any problem for my study due to following reasons. In my experiment, participants are given a practice task and the first-stage essay task before they are asked to state their willingness to pay. In these tasks, they learn explicitly how the information would affect their payoffs. Therefore, they know the exact value of the information and its actual welfare implications before they decide to make the purchase. I contribute to this literature by using the willingness to pay

measure to quantify the cost of anticipated negative emotions when the value of information and its welfare effects are known to purchasers before their purchasing decision.

Finally, my results also contribute to a growing literature on preference for belief confirmation and accuracy concerns on the demand for news (Mullainathan & Shleifer 2005, Gentzkow & Shapiro 2006, Prat & Strömberg 2013, Di Tella et al. 2015, Gentzkow et al. 2018, Druckman & McGrath 2019, Metzger et al. 2020, Faia et al. 2021*b*, Chopra et al. 2019, 2022*a,b*). Previous work in this literature has assessed whether people tend to read like-minded news because they trust them more or because they want to confirm their existing beliefs. I add to this literature by discussing that people are motivated with belief-confirming motives as they are more inclined to rate an ideologically aligned article as being more reliable and accurate than an ideologically non-aligned article even though the articles contain equally reliable and accurate ideas.

The remainder of the paper proceeds as follows. Section 3 describes the experimental design. Section 4 presents the main results and discusses the main mechanism that drives the results and discusses the alternative mechanisms. Section 5 concludes. Appendices provide additional empirical results and the full instructions of the experiment.

2 Testable Hypotheses

In this section, I state the main and supplementary hypotheses I test in this study.⁷ First of all, a standard rational economic theory assumes that information has no hedonic value, therefore it predicts that no subjects pay to avoid dissonant information. However, as the belief-based utility models suggest, I expect this prediction to fail. Furthermore, it has not yet been studied to what extent people avoid dissonant information, in particular when that information relates to a contentious social issue such as abortion rights. I provide an estimate of the proportion of people who avoid dissonant information at a material cost on the topic of abortion rights.

Hypothesis 1: No subjects pay to avoid dissonant information.

The remaining hypotheses are only applicable if some subjects pay to avoid dissonant information. Assuming that there are people who pay to avoid dissonant information, I provide an estimate of the extent of information avoidance by analysing the average amount of money people are willing to sacrifice to avoid dissonant information.

The next hypothesis addresses the main treatment effect. I seek to identify the effect of

⁷These hypotheses are also referenced in my pre-registered RCT entry and analysis plan.

prior exposure to dissonant information on the propensity to avoid dissonant information, and on the willingness to pay to avoid dissonant information. In the light of previous literature, I expect that being exposed to only consonant information might exaggerate the group polarisation while being exposed to only dissonant information has no clear effect. To understand how prior exposure to dissonant or consonant information translates into information avoidance behaviour, I compare two study groups in my experiment : the dissonant treatment in which participants are randomly assigned to a dissonant article and the consonant treatment in which participants are randomly assigned to a consonant article.

Hypothesis 2 (A): Prior exposure to dissonant information does not affect the propensity to avoid dissonant information.

Hypothesis 2 (B): Prior exposure to dissonant information does not affect the willingness to pay to avoid dissonant information.

Next, I explore if having different beliefs on abortion rights is associated with the propensity to avoid dissonant information and the willingness to pay to avoid dissonant information on the topic of abortion rights. I compare two main belief groups : pro-choice people who support abortion rights and pro-life people who oppose abortion rights. I anticipate to observe different avoidance behaviour as there are fundamental psychological differences between various partisan groups ([Sweetser 2014](#)).

Hypothesis 3 (A): There is no difference in the propensity to avoid dissonant information between the two opposing belief groups on the topic of abortion rights.

Hypothesis 3 (B): There is no difference in the willingness to pay to avoid dissonant information between the two opposing belief groups on the topic of abortion rights.

Lastly, the availability of text data from the open-ended questions on participants' reasoning for choosing to avoid or not to avoid dissonant information enables me to carry out a text analysis in an attempt to explain the motives underlying the avoidance behaviour. Therefore, I expect that anticipated negative emotions would be a significant element driving the information avoidance behaviour. People who choose to avoid dissonant information might be expecting to incur negative emotions as their beliefs conflict with the information ([Sweeny et al. 2010](#)). As people are motivated to reduce cognitive dissonance, they might choose to avoid dissonant information to escape from enduring dissonance.

Hypothesis 4: Anticipated emotions do not play a role while deciding to avoid dissonant information.

I also eliminate alternative mechanisms that could explain the results discussed in this paper. One of the main mechanisms other than anticipated emotions that could explain the results is attention avoidance stemming from the conflict between one’s beliefs and dissonant information they are exposed to. I run several auxiliary analyses on attention avoidance to differentiate attention avoidance from information avoidance.

Aforementioned three hypotheses conclude my primary analysis. Consequently, I test additional supplementary hypotheses to gauge the information avoidance behaviour in depth. First of all, because of the nature of the topic, I expect females to be more inclined to avoid dissonant information and to pay more to avoid dissonant information on the topic of abortion rights as a consequence of suffering higher level of cognitive dissonance in anticipation of dissonant information than males. Therefore I test the null hypothesis that the propensity to avoid dissonant information (the willingness to pay to avoid dissonant information) is associated with being female in the context of abortion rights.

As a final supplementary analysis, I investigate if people rate dissonant contents as less reliable and accurate and more untrustworthy and biased as compared to consonant contents. In light of cognitive dissonance discussions, one could expect that assessing a dissonant article as reliable and accurate creates cognitive dissonance as the article supports a belief that is against to their own. To avoid experiencing cognitive dissonance, I expect people to evaluate the articles in a belief-confirming but a biased way. Therefore, I test if people rate the dissonant articles and the consonant articles, equivalently in four dimensions: reliable, untrustworthy, accurate and biased.

3 Experimental Design

The data for the experiment was collected in September, 2022 using Prolific which is a leading market research company widely used in social science research. The experiment features two main sessions that examine how varying beliefs about abortion rights and prior exposure to dissonant information affect information avoidance. Session 1 includes only participants with pro-choice beliefs (in favour of abortion rights), while Session 2 includes only participants with pro-life beliefs (against abortion rights). Session 1 consists of 619 participants and Sessions 2 consists of 650 participants ^{8,9} The study sample includes only

⁸Even though I hire participants based on their pre-recorded response on abortion rights by Prolific, there were 20 pro-life participants in Session 1 and 137 pro-choice participants in Session 2. These participants were excluded from the main analysis as pre-registered in the AEA RCT Registry.

⁹I employed two simple attention checks throughout the experiment to eliminate inattentive participants from the sample as pre-registered in my AEA RCT Registry. Over 96 % of the participants passed both of the attention checks. Only 1 participant is dropped from the analysis as they failed both of the attention checks.

US respondents and is gender-balanced. In both sessions, the study groups do not majorly differ in terms of observable characteristics (see Table A3 and Table A4).¹⁰

Session 1 and Session 2

One of the most important reasons I chose Prolific to collect data (in addition to its high quality responses (Eyal et al. 2021)) is that it is possible to pre-screen participants based on their beliefs on abortion rights. Prolific subjects were asked the following question when they signed up for the platform for the first time: “When it comes to others having the right to terminate their pregnancy, are you pro-life or pro-choice?” I balance my experimental sample based on participants’ responses to this question about their opinions on abortion rights.¹¹ People who responded to this question “pro-choice” are hired for the first session of the experiment while people who responded to this question “pro-life” are hired for the second session of the experiment. Subjects could only participate in one of the two sessions.

Pre-treatment beliefs

The experiment begins with a question to determine the participant’s opinion on abortion rights, i.e. whether they are: pro-choice or pro-life. The answers to this question are compared with Prolific’s pre-screen variable on abortion rights to make sure that the Prolific’s categorisation is correct and up-to-date. Participants with inconsistencies between their Prolific pre-screening variable and the answer they provide in my experiment are excluded from the main analysis as pre-registered in AEA RCT Registry. I also ask participants to indicate to what extent they oppose or support the right to an abortion.

Main task

Subjects are then asked to complete an effort task which includes reading a short article followed by several comprehension questions based on the content of the article. Subjects are informed that they receive 0.10 \$ per correct answer they give to these questions (excluding the practice round). In order to familiarise participants with the format of the main task, they are given first a practice article titled “*The Orchid Mantis and its Characteristics*”. Participants are represented with the title of the article and its sentence-long description before they see the article itself. They are then asked to answer several questions based on the article they read. I once again remind them that they should only answer the questions based on the text they read and should not interpret the text or use their own opinions.

¹⁰Demographic variables are included later in the regression analyses to account for any imbalances.

¹¹Prolific has about 6.3 times more registered pro-choice participants than pro-life participants.

Various types of questions employed in the main task are also introduced in the practice round. Once the practice round is completed, participants move on to the main tasks where treatment randomization occurs.

Treatments

To generate exogenous variation in prior exposure to dissonant information, subjects are divided into two groups with half of the subjects being randomly allocated to a consonant group and the other half are randomly allocated to a dissonant group. If subjects are randomly allocated to a consonant group, they receive an article which is in line with their beliefs on abortion rights to complete the effort task, whereas if they are randomly allocated to a dissonant group, they receive an article which is against their beliefs on abortion rights to complete the effort task. As in the practice task, both the content and the side of the argument that the article supports are made clear to the participants through a descriptive article title and through a sentence-long summary of its content. For example, if the article supports abortion rights, participants are provided with the following information before seeing the full article: “On the next page, you will be presented with an article titled “*Endangering Women – Health Cost of Banning Abortion*” which includes the speech of some anonymous members of Congress against banning abortions (pro-choice).” If the article opposes abortion rights, participants are shown: “On the next page, you will be presented with an article titled “*It is not a Blob of Tissue, but a Human Being – Science and Abortion*” which includes speech of some anonymous members of Congress in favor of banning abortions (pro-life).” These articles consist of collection of some anonymous Congress people’s speech on abortion rights, supported by relevant research.¹² Participants are then asked to answer several questions based on the article that is randomly assigned to them. They are reminded that they should only answer the questions based on the text they read and should not interpret the text or use their own opinions. This comprises the first stage of the experiment.

Main outcome variable

In the following stage, all subjects receive a dissonant article as a second article, regardless of their treatment group. As before, subjects are first presented with the article title and its sentence-long description to convey the content of the article (support/oppose abortion rights) before having to read it. Regardless of the treatment group participants are assigned to in the first stage, in Session 1 (which only includes Pro-choice participants), they are given an article opposing abortion rights, titled “*Fight for Defenseless - Stop Abortion!*” whereas

¹²Detailed information about how these articles were formed can be found in Appendix.??

in Session 2 (which only includes pro-life participants), participants are given an article supporting abortion rights, titled “*Abortion: Women Should Decide for Themselves!*”. Both of these articles include completely different arguments than the ones that participants have already seen in the previous stage. The articles used in the first stage of the experiment include arguments from health effects side of the discussion while the ones used in the second stage include argument from moral side of the discussion.¹³ Subjects are then given an opportunity to switch the dissonant article that is assigned to them in this stage (against their beliefs on abortion rights) with a consonant one (in line with their beliefs on abortion rights). In order to switch, they can use a pot of money (100 cents) given to them at the beginning of the experiment to use for the switch. Any unused amount of money is added on top of their bonus payments. This makes the choice of willingness to pay measure instrumental as it affects the result of the bonus directly. Once they have indicated their preference to switch articles and have quantified their willingness to pay, a random number is drawn between 0 and 100. If their maximum willingness to pay to switch articles is greater than or equal to the random number, the dissonant article that is assigned to them is replaced with the one that is in line with their beliefs on abortion rights. If their maximum willingness to pay is less than the random number, the initial article which opposes their beliefs on abortion rights is not replaced with the consonant one. Participants are given a clear description of this mechanism and are explicitly informed that a greater reported willingness to pay results in a greater likelihood of the articles being switched.^{14,15}

Subsequently, the subjects are shown the result of the lottery (i.e. whether their willingness to pay is greater or less than the random number that is drawn) and as a result whether or not the article had been switched. Following the reveal of the result of the lottery, subjects are provided with the new article and then asked to answer several questions based on the article. In all treatment groups, assuming information does not have any hedonic value, participants should not use any of their money to switch articles.

Post-treatment questionnaire

Participants are then asked to respond post-treatment questions about their posterior beliefs on abortion rights, political beliefs, media consumption, demographic information, risk pref-

¹³Articles are around the same length - consist of around 308 words and are created to be identical except the main idea. I run a cosine similarity analysis on the articles to make sure that they both carry similar emotional message and implications. For detailed comparison of articles, see [Appendix D](#).

¹⁴In order to ensure that participants understand the mechanism, I also ask them to respond to two comprehension questions about it. Only 13 people respond both of the comprehension questions on the mechanism incorrectly, therefore are excluded from the main analysis as pre-registered in AEA RCT Registry.

¹⁵This mechanism has been widely used in the literature (see [Eil & Rao \(2011\)](#), [Charpentier et al. \(2018\)](#), [Raio & Glimcher \(2021\)](#)).

erence, and information preference (IPS) (Ho et al. 2021).¹⁶ They are also asked to explain why they chose to switch articles (if they chose to switch earlier) or why they chose not to switch articles (if they chose not to switch earlier). This open-ended text question helps to understand their real motivation to avoid (not to avoid) dissonant information. They are also asked to rate both of the articles -in which they completed the tasks- on four dimensions: reliable, untrustworthy, accurate and biased.

4 Results

This section presents my main results. I first demonstrate evidence on information avoidance, and then investigate the main treatment effects on dissonant information avoidance. I conclude with discussions on psychological mechanism driving the information avoidance and alternative mechanisms.

4.1 Avoiding Dissonant Information

Table 1 presents the main treatment effects on i) the propensity to avoid dissonant information and ii) the willingness to pay to avoid dissonant information. Overall, 42.60 % of the participants chose to avoid dissonant information (Panel A) and demonstrate demand for consonant information. On average, people are willing to forego 18.90 % of their money to pay to avoid dissonant information (Panel B) whereas conditional on being willing to pay, they are willing to forego 44.40 % of their money to pay to avoid dissonant information (Panel C). It demonstrates that substantially high proportion of people are willing to forfeit material utility to avoid dissonant information.

Result 1: People pay to avoid dissonant information. On average, 43 % of the sample choose to avoid dissonant information at a material cost of 44 % of their money.

On average, people who are previously exposed to consonant information in the experiment are 1.6 percentage points more likely to avoid dissonant information ($p = 0.617$, Table 2, Column 3) and are willing to pay 0.7 % less ($p = 0.737$, Table 2, Column 3) to avoid dissonant information than people who were previously exposed to dissonant information. Conditional on being willing to pay to avoid dissonant information, the difference between the consonant and the dissonant group increases to 3.2 % in willingness to pay to avoid

¹⁶The IPS consists of 13 hypothetical scenarios on three domains: finance, health and personal characteristics which elicits an individual's desire to obtain or avoid information that may be unpleasant by using 4-point Likert scale.

dissonant information. However, these results are statistically insignificant.¹⁷ Therefore, it could be concluded that the average effect of prior exposure to dissonant information on the propensity to avoid dissonant information or on the willingness to pay to avoid dissonant information are of no economic importance.

It is possible that the treatment effect might be different for distinct belief groups. Table 3 represents the results of the main treatment effect for pro-life (Panel A) and pro-choice groups (Panel B), separately. Results show that pro-life people are more likely to avoid dissonant information if they are previously exposed to a dissonant article than a consonant article ($p = 0.703$) while pro-choice people are less likely to avoid dissonant information if they are previously exposed to a dissonant article than a consonant article ($p = 0.315$). However, the differences among these groups are statistically non-significant, henceforth, no heterogeneity is observed. Also, conditional on wanting to avoid dissonant information, both pro-life and pro-choice groups are willing to spend a non-significantly higher proportion of money to avoid dissonant information if they are exposed to the dissonant information rather than the consonant information ($p = 0.532$ and $p = 0.543$, respectively).

Table 4 displays the difference in main outcome variables between two belief groups: pro-choice and pro-life. People from both beliefs groups are equally likely to avoid dissonant information ($p = 0.999$). However, the results suggest that both unconditional and conditional on being willing to pay to avoid dissonant information, pro-life people are willing to spend a substantially higher proportion of their money to avoid reading a dissonant article than pro-choice people. They are willing to pay 4.40 % more ($p = 0.029$) and this amount increases to 10.40 % when only people who have a positive willingness to pay are considered ($p = 0.002$).

It is also possible that being previously exposed to dissonant or consonant information might affect pro-choice and pro-life groups differently. Panel C of Table 3 compares pro-life and pro-choice people under Consonant Treatment (Column 1) and Dissonant Treatment (Column 2), separately. The results from Table 2 are confirmed. Both groups of people have statistically identical propensity to avoid dissonant information regardless of the treatment group they are assigned to ($p = 0.508$ and $p = 0.495$, respectively). Also, in both of the treatment groups, pro-life people are willing to pay around 10 % more to avoid dissonant information than pro-choice people ($p < 0.050$), confirming the results in Table 4, which suggest that the intensity of information avoidance is independent of the exposure to prior

¹⁷Ex-post power calculations at 80 % with around 1,000 observations on the main variables of interest give a minimum detectable effect size of around 7.4 to 8.8 percentage points. This study satisfies the ex-ante power calculations reported in the AER RCT registry. However, as this study is to first to investigate the effect of prior exposure to dissonant information on abortion rights in a controlled experiment, my predicted effect sizes are above the relatively small effect sizes observed in the data.

information and is mainly explained by one’s beliefs.

Result 2: Anti-abortion people are willing to spend a substantially higher proportion of their money to avoid dissonant information than pro-choice people. Regardless of the prior information they were exposed to, anti-abortion people spend 10 % more to avoid dissonant information than pro-choice people, showing that prior beliefs are the key determining factor.

Table 5 represents the probit regression results on the propensity to avoid dissonant information. Column 1 includes only the main experimental variables and a variable that represents the interaction between being pro-choice and being exposed to dissonant information. In line with the previous findings, I find no significant impact of beliefs or prior exposure to dissonant information on the propensity to avoid dissonant information. Column 2 adds basic demographic variables to the previous probit regression. I find that being female increases the likelihood of avoiding dissonant information on the topic of abortion ($p = 0.001$). Also, age is an important factor while predicting the likelihood of which group of people avoid dissonant information: being one year older increases the propensity to avoid dissonant information ($p = 0.035$). Column 3 adds additional interaction variables of female to the regression. Including an interaction term of female is reasonable considering that the abortion is a gender-specific issue and I expect that the effect of being exposed to dissonant information or being pro-choice might not be the same for females and males. Results do not detect any significant difference on being female on the propensity to avoid dissonant information for these groups. The last column of Table 5 adds further behavioural control variables to the analysis.¹⁸ Results confirm no significant effect of prior exposure and beliefs on the propensity to avoid dissonant information. Being older and being female are still important predictors of the propensity to avoid dissonant information on the topic of abortion rights ($p = 0.091$ and $p = 0.054$, respectively). However, considering the multiple hypotheses testing, one should be careful while interpreting these significant results.

Next, Table 6 represents the OLS regression results on the amount of money people are willing to pay to avoid dissonant information. Column 1 represents the effects of main experimental variables on the willingness to pay. Consistent with Table 4 pro-choice participants are willing to forego 10.05 cents (10.05 % of their additional budget) less than pro-life participants to avoid dissonant information ($p = 0.028$). Column 2 adds main demographic variables to the regression. In addition to confirming the results in Column 1, I find that females are willing to spend 6.40 cents (6.40 % of their additional budget) more to avoid

¹⁸The list of behavioural control variables include average daily time spent reading the news, risk preference and information preference.

dissonant information on the topic of abortion rights than males ($p = 0.061$). Also, being one year older increases the willingness to pay by 0.38 cents ($p = 0.002$). These results are consistent throughout Table 6. Column 3 adds additional interaction variables of female to the regression. As mentioned before, including an interaction term for the female variable makes sense considering the gender-specific dimension of the topic. I expect that the effect of being exposed to dissonant information or being pro-choice might be different for females and males. The interaction variables between being female and being pro-choice, being female and being exposed to dissonant information and the interaction of these three variables are all statistically significant. First of all, it implies a differential effect of being pro-choice for females and males ($p = 0.044$). Pro-choice females spend relatively lower amount of money than pro-life females, whereas pro-choice males spend substantially lower amount of money than pro-life males to avoid dissonant information ($p = 0.000$). Additionally, results suggest a differential effect of being exposed to dissonant information for females and males ($p = 0.019$). The predictive margin results confirm that females spend higher amount of money to avoid dissonant information after being exposed to dissonant information than after being exposed to consonant information, whereas males spend lower amount of money after being exposed to dissonant information than after being exposed to consonant information ($p = 0.000$). As in line with the results reported in the previous columns, overall effect of being female is positive ($p < 0.05$), indicating that females spend higher amount of money to avoid dissonant information than males and overall effect of being pro-choice is negative ($p < 0.05$), showing that pro-life people spend higher amount of money to avoid dissonant information than pro-choice people. In Column 4, a set of behavioural control variables are added to the previous analysis. I confirm the results reported in Column 3. In addition, I found that more time spent reading the news on a daily basis decreases people's willingness to pay to avoid dissonant information by almost 1 % ($p = 0.060$). These results are in line with the findings reported in Table 5. Overall, results from various regression analysis reported in Table 6 conclude that several behavioural and demographic variables are important while predicting intensity of dissonant information avoidance. Conditional on being willing to pay to avoid dissonant information, pro-life people, older people, females or people who spent less time reading the news spend more money to avoid dissonant information.

Result 3: Conditional on being willing to pay to avoid dissonant information, pro-life people, older people, females or people who spent less time reading the news on average spend more money to avoid dissonant information.

I also investigate if people display belief confirming motives when it comes to rating the content of articles. In the last stage of the experiment, participants are asked to rate the content of the articles they read on four main dimensions: reliable, untrustworthy, accurate and biased. Figure 1 and Figure 2 represent participants' subjective evaluations of articles content for the articles they read in the first and second stages of the experiment, respectively.¹⁹ Table 7 reports the exact mean values and the results from a two-sided mean comparison test. Results suggest that the pro-life article is considered to be 3.27 units (equivalently 30.27 %) more reliable than the pro-choice article by pro-life people. On the other hand, the pro-choice article is considered to be around 5.17 units more reliable than the pro-life article by pro-choice people ($p < 0.000$). The trends are reversed when I examine participants' rating on untrustworthiness. Pro-life people evaluate the pro-life article to be 1.61 units less untrustworthy than the pro-choice article, whereas pro-choice people evaluate the pro-choice article to be 3.28 units less untrustworthy than the pro-life article ($p < 0.000$). Furthermore, pro-life people consider the pro-life article as being 3.21 units more accurate and 2.06 units less biased than the pro-choice article whereas pro-choice people consider the pro-choice article as being 5.30 units more accurate and 3.46 units less biased than the pro-life article ($p < 0.000$). Results from the second stage article reinforce these findings as Figure 2 and Table 7 represent. Overall, I conclude that people assess contents as being more reliable and accurate and less untrustworthy and biased if the content is in line with their beliefs than if it is against their beliefs even though articles do not differ in terms of these dimensions.

These results support belief confirming motives in which people significantly favour the article that is in-line with their beliefs and criticise the article that contradicts their beliefs. These behaviours might stem from the motivation to reduce cognitive dissonance as rating a dissonant article as reliable and accurate might cause people to experience cognitive dissonance since the arguments discussed in the dissonant article contradict with their beliefs. In addition, pro-choice people's ratings on four dimensions are seen to be more extreme than pro-life people. As the difference in mean values suggest in Table 7, they praise the consonant articles more favourably than pro-life people do and they criticise the dissonant articles more harshly than pro-life people do.

Result 4: People rate contents as being more reliable and accurate and less untrustworthy and biased if the content is in line with their beliefs than if it is opposed to their beliefs, suggesting that they are motivated by belief-confirming motives.

¹⁹⁰ being the lowest ranking and 10 being the highest ranking.

4.2 Motives for (not) Avoiding Dissonant Information

My experimental findings suggest that both pro-life and pro-choice people have a preference for reading harmonious news articles. To explore how people justify their preference for like-minded articles, I gather first-hand data on their motives for choosing to avoid reading a dissonant article at a monetary cost. To get a true response, I asked participants to answer an open-ended question on their motives for choosing to switch or not to switch from reading a dissonant article to a consonant one. This data provides a clear glimpse into people’s reasoning about the motives underlying their avoidance decision. People who are willing to spend any positive amount to switch articles is classified as “avoiders” whereas people do not want to switch articles at a monetary cost classified as “non-avoiders”.

I use Natural Language Processing Sentiment Analysis to identify the dominant emotional tone of the responses to the open-ended question by avoiders and non-avoiders. Sentiment analysis is a method of analysing text data to determine the overall emotional tone of the text, whether it is positive, negative, or neutral. It takes into account the quantity and the type of emotions expressed, the strength of those emotions, and the context in which they are used. Figure ?? represents the average negative (Panel A) and average positive (Panel B) arousal score of the text written by non-avoiders and avoiders. People who choose to switch the dissonant article with the consonant one use language which is more negative and less positive than people who choose not to switch the articles. There is a 0.06 units difference in the negative valence in the text between avoiders and non-avoiders, corresponding to a 55.55 % increase in the negative emotion score of the text written by avoiders as compared to the mean value of 0.108 by non-avoiders ($p = 0.020$). The compound score from the sentiment analysis takes a value between -1 (which represents the most extreme negative valence) and 1 (which represents the most extreme positive valence). The overall compound score of the text written by avoiders is equal to -0.999 which is very close to the extreme negative whereas overall compound score of the text written by non-avoiders is equal to 0.999.

Furthermore, I use Python’s Natural Language Toolkit to identify phrases that characterise the participant’s responses.²⁰ Figure 4 represents the 50 most commonly used words by non-avoiders and Figure 5 represents the same analysis on avoiders. Out of fifty most commonly used words by both group 34 of them intersect. Words that are more characteristic of justifications provided by non-avoiders are “money, opinion, bonus, keep, point, spend, mind, change, say, viewpoint, differ, need, inform, understand, way” and “worth”. These words are highly related to monetary terms. The pattern indicates that people who choose not to pay to avoid dissonant information are mostly motivated by monetary gains as

²⁰I exclude stop words, reduce all words to their stem using the Porter stemmer and group the words with all of their variant and inflected forms using Word net lemmatizer.

the participants could keep the money as an additional bonus payment if they chose not to spend on paying to switch the articles. On the other hand, words that are more characteristic of justifications provided by avoiders are “choose, support, child, anti, baby, something, take, get, murder, human, unborn, decide, manipulation/manifest, another, body, kill” and “religion”. These words are mostly associated with negative connotations associated with abortion. Given the emotional tone of these texts results concludes that anticipation of negative emotions drives the decision to avoid dissonant behaviour.

Even though both pro-life and pro-choice people are equally likely to avoid dissonant information, their willingness to pay to avoid dissonant information significantly differs. In order to investigate whether pro-life people suffer more than pro-choice people in the anticipation of dissonant information, I run the same analyses separately for pro-life and pro-choice people who choose to avoid dissonant information. First of all, I compare the sentiment scores of the text written by them to justify their avoidance behaviour. There is a 4.49 units difference in the negative valence in the text written by pro-life and pro-choice people, corresponding to a 33.02 % increase in the negative emotion score of the text written by pro-life avoiders as compared to the mean value of 13.60 by pro-choice avoiders ($p = 0.331$). Then, I compare the most commonly used words by pro-life and pro-choice people who choose to avoid dissonant information. Words that are more characteristic of justifications provided by pro-life avoiders are “baby, murder, unborn, kill, human, good, another, fight, interest, manipulation, innocent, wrong, pay, mind, response, fact” and “defenseless” whereas the words that are more characteristic of justifications provided by pro-choice avoiders are “anti, body, care, religion, give, away, decide, enough, govern, belief, need, decision, legal, real, try, decision” and “rhetorical”. The emotional compound of words used by pro-life avoiders is clearly more negative than the one used by pro-choice avoiders. The sentiment analysis confirms the prediction. The words that are characteristics of pro-life people and used to justify their avoidance carry 50 % negative emotional value, which is 40 % higher than the ones that characterise the justifications by pro-choice people. These analyses suggests that pro-life people experience higher negative emotions than pro-choice people when anticipating dissonant information. This finding explains their higher willingness to pay to avoid dissonant information as discussed in Section 4.1 and validate anticipated negative emotions as the main mechanism driving information avoidance.

Result 5: Anticipation of negative emotions drives the decision to avoid dissonant information, and explains higher willingness to pay by anti-abortion people.

4.3 Alternative Mechanisms

In this section, I discuss potential alternative mechanisms driving my treatment effects, including attention avoidance, strength of beliefs, cognitive constraints, and experimenter demand effects.

Attention Avoidance

It is important to understand if participants dedicate similar levels of attention to the dissonant and consonant information to be able to differentiate information avoidance from attention avoidance. It has been widely argued that attention avoidance is a strategic process in which human beings use to regulate their emotions (Gross 1998, Koole 2010, Cisler & Koster 2010). Participants might have devoted significantly less attention to the dissonant information since they might expect to experience negative emotions if they pay attention to the dissonant stimuli. If this is the case in my experiment, it would not be possible to distinguish whether the resulting behaviour is the consequence of information avoidance or lack of attention.

A key advantage of running a pre-registered controlled experiment is that I can control for attention given to the experimental tasks by participants in different treatment groups to eliminate the concern of attention avoidance. To start with, all results mentioned in Section 4.1 include participants who passed at least one of the two attention checks employed throughout the experiment. This criteria was registered along with others in the AEA RCT Registry platform before data collection²¹. However, in order to make sure that the participants pay identical levels of attention to the articles in both dissonant and consonant treatments, I run various analyses.

First of all, I analyse the average time participants spent while reading the articles in the first stage of the experiment.^{22,23} It has been shown that for English silent reading, average reader reads 238 words per minute in non-fiction (Brysbaert 2019). The articles used in the experiment consist of 327 words on average with standard deviation of 12.04. Therefore, participants are expected to spend at least 82 seconds to satisfy the minimum required time. On average, they spend 110 seconds reading the articles that are randomly assigned to them. It is above the estimated average. Therefore, it could be concluded that participants devote

²¹For more details on the exclusion criteria and analysis plan, see [Appendix E](#).

²²In the first stage of the experiment, participants are randomly assigned to a dissonant or a consonant article. In the second stage, the type of article they read depends on their willingness to pay and the result of a random process. Since there could be other factors affecting the time spent reading the article in the second stage of the experiment, I only focus on the first stage articles.

²³Average time spent while reading the first article is included as an attention control variable in the regression analyses reported in Column 4 of Tables 5 and 6.

adequate amount of time, hence, attention to these articles. I also compare the average time spent reading the articles in the consonant and dissonant treatments to eliminate potential concerns regarding allocating significantly less attention to a dissonant stimuli. Table A5 represents the average time taken by the participants while reading the articles in both treatment groups. They spend an indistinguishable amount of time while reading a consonant article and a dissonant article ($p = 0.999$). The result is still valid once the comparison is carried over for the pro-life article ($p = 0.119$) and the pro-choice article ($p = 0.154$), separately.

Secondly, I analyse the average performance on the incentivised multiple-choice questions. In the experiment, participants are asked to answer several questions based on the article they read. The more questions they answer correctly, the higher bonus payment they earn. As these questions are required to be answered based on the article, it could be used as an additional measure of comprehension to test their understanding of the article and check if they actually paid attention to it. On average, participants respond 89.48 % of the questions correctly in the first stage of the experiment (Table A3), which indicates a high success rate. Also, participants correctly answer 0.08 more questions out of 4 questions, corresponding to a 2.08 % difference when they are randomly assigned to a consonant article than a dissonant article in the first stage of the experiment ($p = 0.035$, Panel A, Table A6). Even though this difference is significant, there could be other factors that explain the difference in performance. For example, participants might have already known or correctly guessed the answers to the questions in the consonant article as they could be more familiar with the arguments supported in the consonant article. On the other hand, Panel B of Table A6 represents an opposite relationship between performance and an article type. In the second stage of the experiment, participants correctly answer 0.058 more questions out of 5 questions, corresponding to a 1.16 % difference when they complete the task in a dissonant article than in a consonant article ($p = 0.262$). Therefore, results reported in Panel A and Panel B of Table A6 do not provide a clear conclusion on the argument that different levels of attention are given to the dissonant and consonant articles. However, it can be concluded that as participants' scores in multiple-choice questions are around 90 % in both treatments, adequate level of attention is dedicated to both types of the articles.

Lastly, another important indicator of whether identical levels of attention are dedicated to the dissonant and consonant articles is the subjective ratings of the articles. I ask participants to rate the articles they read in the first and second stages of the experiment in terms of being reliable, untrustworthy, accurate and biased. Figure 1 represents participants' ratings for the article they are randomly assigned to in the first stage of the experiment to complete the incentivised tasks. As mentioned before, people rate the articles as more reliable and

accurate if the article is in line with their beliefs while they rate the articles as more untrustworthy and biased if the article is against their beliefs ($p = 0.000$, Table 7). Pro-life articles are rated more positively and less negatively by pro-life people than pro-choice people, while pro-choice articles are rated more positively and less negatively by pro-choice people than pro-life people. Given that significant amount of time is spent while reading the articles and the time did not differ between dissonant and consonant articles, the result on subjective ratings of articles once again confirms that people devote adequate and equivalent levels of attention to the dissonant and consonant articles. Therefore, the main results discussed in Section 4 are not driven by attention avoidance.

Cognitive Constraint

I investigate if reading a consonant or a dissonant article require identical levels of mental power. Participants in the dissonant treatment might find reading a dissonant article to be more cognitively demanding as it might be harder to pay attention and process it (Cisler & Koster 2010). If it is the case, I would expect participants to spend more time reading the dissonant article than the consonant article. As it can be seen in Table A5, participants spend almost identical amount of time reading a dissonant article and reading a consonant article. This suggests that the dissonant article is as mentally costly as the consonant article in terms of the time spent and attention dedicated. Additionally, none of the participants mentioned cognitive constraints when explaining their reasoning to switch articles in the open-ended questions.²⁴

On the other hand, it is possible that participants in the dissonant treatment might find the dissonant article more entertaining than the consonant article just because of the fact that they are less logical (more ridiculous) to their opinion. The open-ended responses that identifies the reasoning behind people’s avoidance behaviour demonstrate that entertainment is not a key factor when deciding to switch articles. Only 1 person out of 1000 people mentions that they enjoy reading about the other side of the argument because it is more entertaining.²⁵

Strength of Beliefs

It is worth mentioning that pro-life people in my study sample have less stronger beliefs on abortion than pro-choice people (see Figure 7). If the strength of the beliefs were to explain the difference in willingness to pay between pro-life and pro-choice people, then I

²⁴No participants used the word “complex”, or any synonym of the word complex to justify their avoidance of dissonant information.

²⁵The words “enjoy, entertaining, ridiculous, funny” and their synonyms are used to search for this motive.

would expect to observe higher willingness to pay by pro-choice people. However, I find that pro-life spend more money to avoid dissonant information than pro-choice people. Also, the correlation coefficient between the willingness to pay and the strength of the beliefs is not statistically significant.²⁶ Therefore, the strength of the beliefs does not explain the results on the willingness to pay.

Experimenter Demand Effect

It's likely that participants in different treatment groups have different opinions on what the experimenter expects them to do even though my study employs a between-subject design. In order to guard against any possible experimenter demand effect concerns, my experiment includes series of measures. Firstly, I ask participants to write about their opinion on the purpose of the study at the end of the experiment. In both treatment groups, majority of the participants thought that the study is about abortion rights. However, no one was able to correctly guess the main research question in either of the treatment groups.

Moreover, I compare participants' beliefs on researchers' stand on abortion rights discussions to eliminate the possibility of holding different beliefs' about researchers' expectations. Figure 6 represents the distribution of participants' beliefs on researchers' bias. Around 50 % of the participants in both treatment groups think that researchers are neither pro-life nor pro-choice. Kolmogorov–Smirnov equality-of-distributions test confirms that the participants' beliefs about researchers' bias in both of the treatment groups are drawn from the same probability distribution ($p = 0.707$). In addition, two-sample t-test of mean comparison shows an equality of average beliefs about researchers' bias among the treatment groups ($p = 0.614$).

In addition to the results from the measures I employed, recent research suggests that experimental subjects only minimally react to clear signals regarding the experimenter's demand, indicating a limited quantitative importance of experimenter demand effects (De Quidt et al. 2018, Mummolo & Peterson 2019). The results from the experimental measures along with the evidence supported in the literature provide a consistent message suggesting that my experiment did not suffer from an experimental demand effect which allows me greater confidence in applying this paper's findings to real-world settings.

²⁶P-values are for overall sample 0.739, for pro-life people only 0.472 and for pro-choice people only 0.293.

5 Concluding Remarks

In this research, I conducted a large-scale online experiment with US respondents to quantify the effect of prior beliefs and exposure to dissonant information in driving the information avoidance behaviour. For this purpose, I designed an experiment in which I balanced the sample on two main belief groups on the topic of abortion rights, and varied the prior exposure to dissonant information. This allowed me to investigate possible differential effect of prior exposure to dissonant information for distinct belief groups. I first study people's avoidance of dissonant information, or in other words demand for consonant information. I find that almost half of the participants are willing to sacrifice a material utility to avoid reading the opposite side of the story. Also, the amount they are willing to sacrifice reaches almost half of their budget. These results show the extensive prevalence of dissonant information avoidance. I then examine this behaviour for different belief and treatment groups. My main finding is that prior beliefs serve as the key factor while explaining the intensity of information avoidance. Even though both anti-abortion and pro-choice people show muted reactions to prior exposure to dissonant information, when the further avoidance from dissonant information is considered, they have significantly different willingness to pay to avoid dissonant information. Results suggest that anti-abortion people are willing pay more to avoid dissonant information than pro-choice people conditional on being willing to pay to avoid dissonant information. Furthermore, looking into people's true reasoning through first-hand text data, anticipated negative emotions are established as a main psychological mechanism explaining the avoidance behaviour.

These findings provide empirical support for belief-based utility models, arguing that anticipation of negative emotions affect the information avoidance behaviour. As the individuals value information as a function of valence, they forgo monetary rewards to avoid information that can confirm unfavourable beliefs even when information cannot guide action. These findings have relevance for theories of group polarisation and political extremism. In particular, my study provides the first step to understand how prior exposure to dissonant information and beliefs drive information avoidance while differentiating information avoidance from attention avoidance. Furthermore, readers should be careful to generalise my findings to a different domain, considering the nature of the topic of abortion rights. Along with that, readers should also be mindful about the heterogeneous effect of prior exposure to dissonant information on different belief groups driving the further information avoidance behaviour.

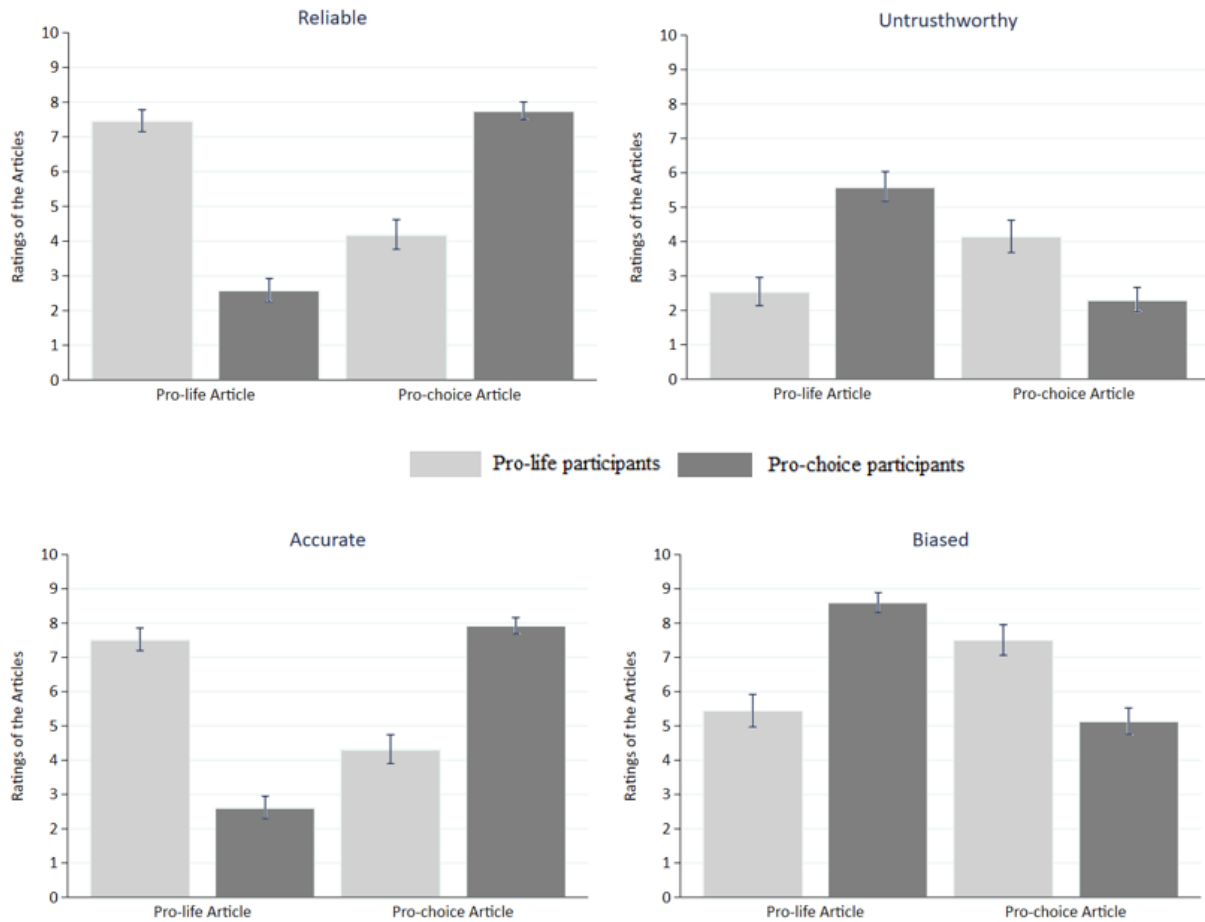
This paper studies avoidance from dissonant information as it is shown to be one of the main channels contributing to group polarisation, ideology and political extremism ([Sunstein](#)

1999). In this paper, I study one possible intervention to reduce the avoidance behaviour which is found to have no significant effect. Even though adequate level of attention is given to the dissonant information, people's beliefs on the topic do not change after being exposed to dissonant information. My results indicate that beliefs on topics such as abortion rights define individual's identity, therefore, short-term exposure to dissonant information does not seem to alter dissonant information avoidance.

Future research should explore alternative interventions and ways to tackle this societal problem as avoiding opposing viewpoints poses a special challenge to the discursive democracy. Also, a deliberative public sphere requires exchange of ideas with a broad range of individuals. The limited breadth of knowledge in like-minded communities, however, could exacerbate public polarisation and division if avoiding diverse points of view becomes ingrained as a habit (Garrett 2009, Neuman et al. 2011, Jang 2014). In order to produce valuable lessons for policy makers, future research should also focus on identifying the significance of prior exposure to dissonant information across a variety of diverse themes and study samples.

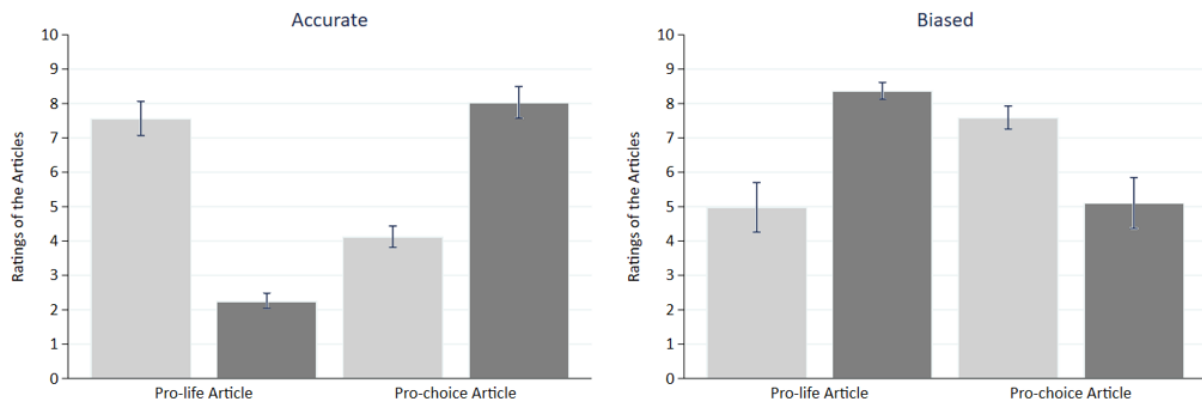
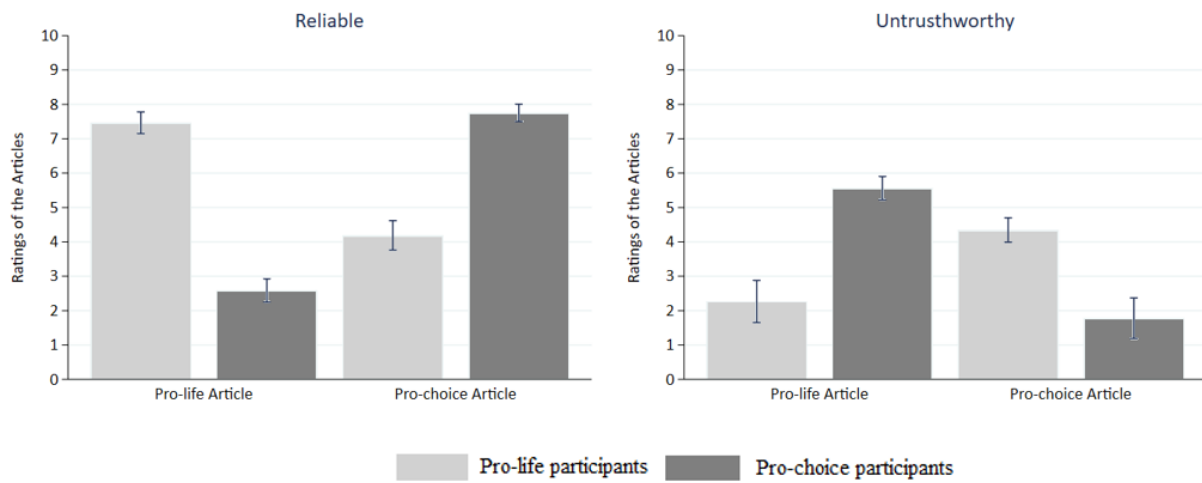
6 Figures

FIGURE 1: Ratings of Articles - Stage 1



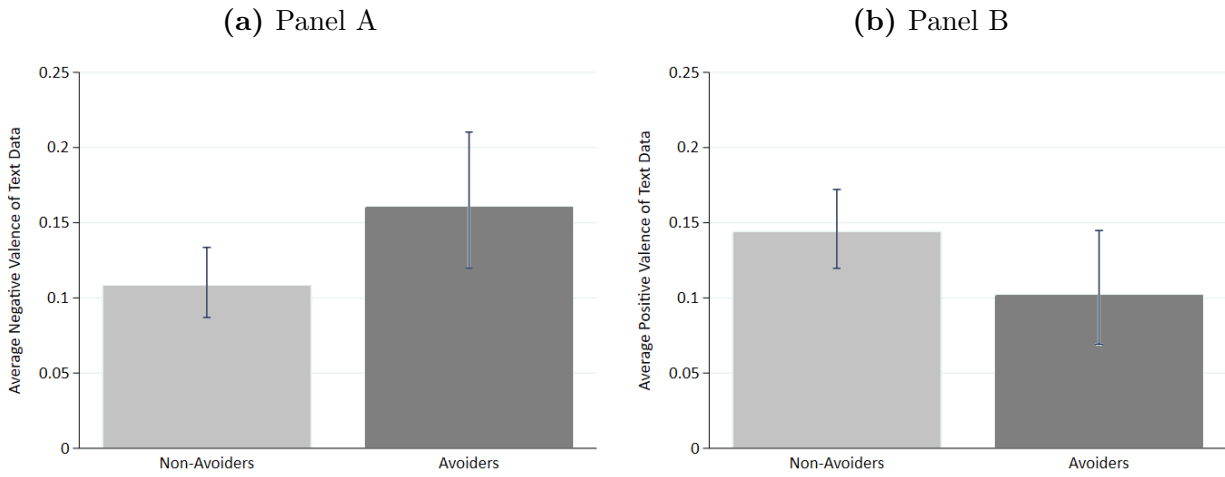
Notes: Ratings are out of 10. 0 represents the lowest and 10 represents the highest rankings. 95 % confidence intervals for the mean are shown.

FIGURE 2: Ratings of Articles - Stage 2



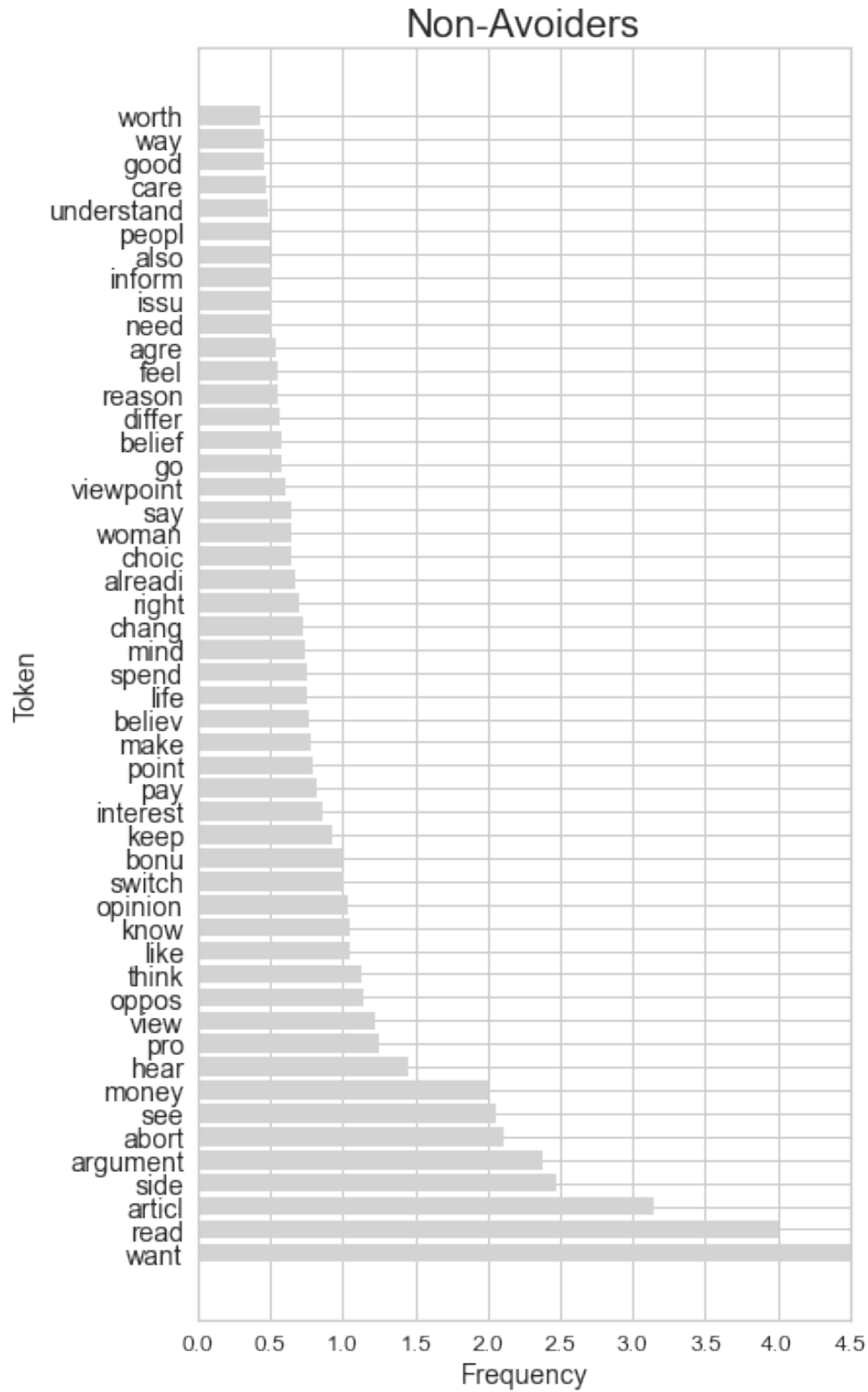
Notes: Ratings are out of 10. 0 represents the lowest and 10 represents the highest rankings. 95 % confidence intervals for the mean are shown.

FIGURE 3: Sentiment Analysis Results on the Motives for Information Avoidance



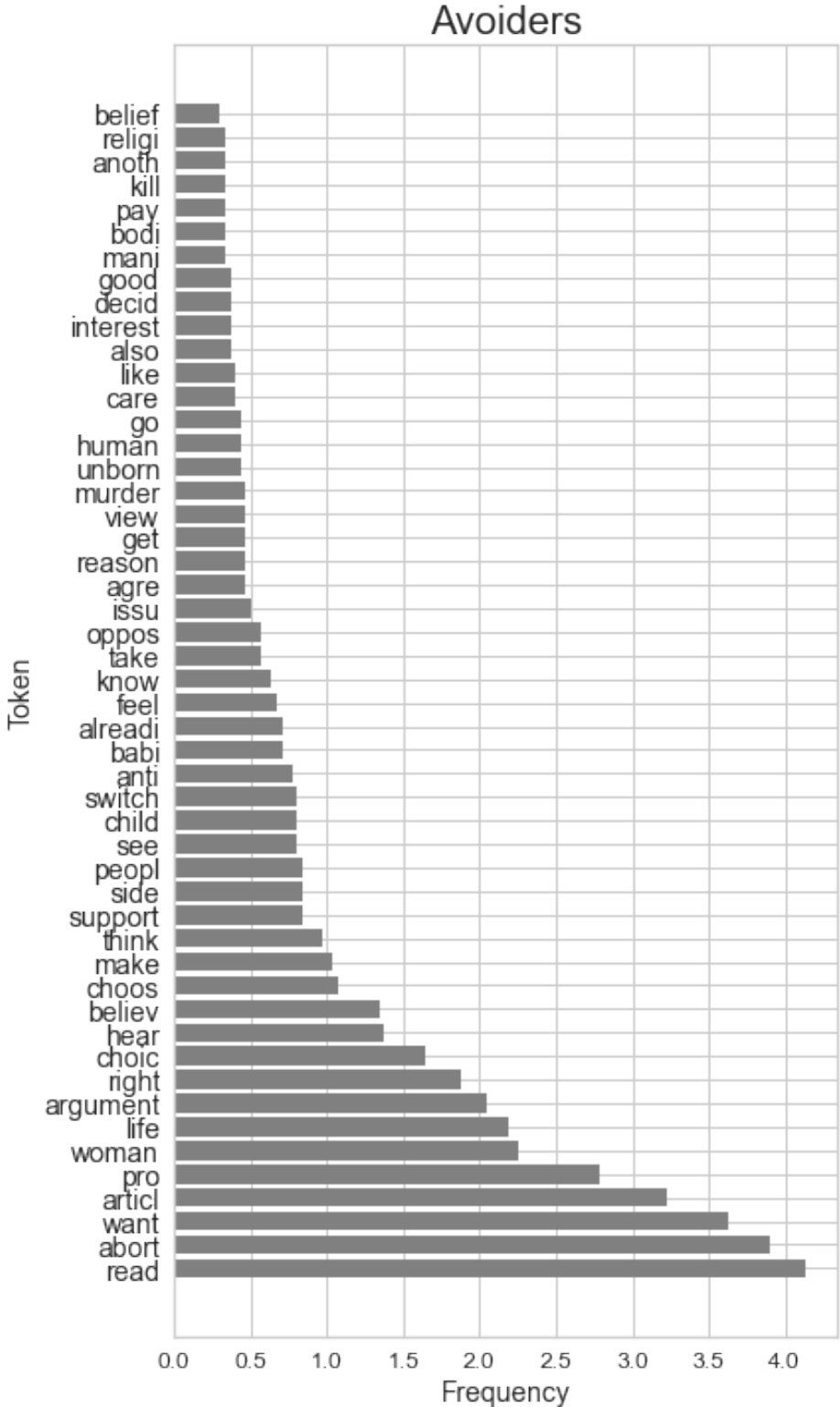
Notes: Panel A represents average negative valence of the text written by the participants while explaining their reasoning to switch the dissonant article with the consonant one. Valence can take a value between 0 and 1. 0 represents the lowest score and 1 represents the highest score. 95 % confidence intervals for the mean are shown.

FIGURE 4: Frequency of Most Common Words - Non-Avoiders



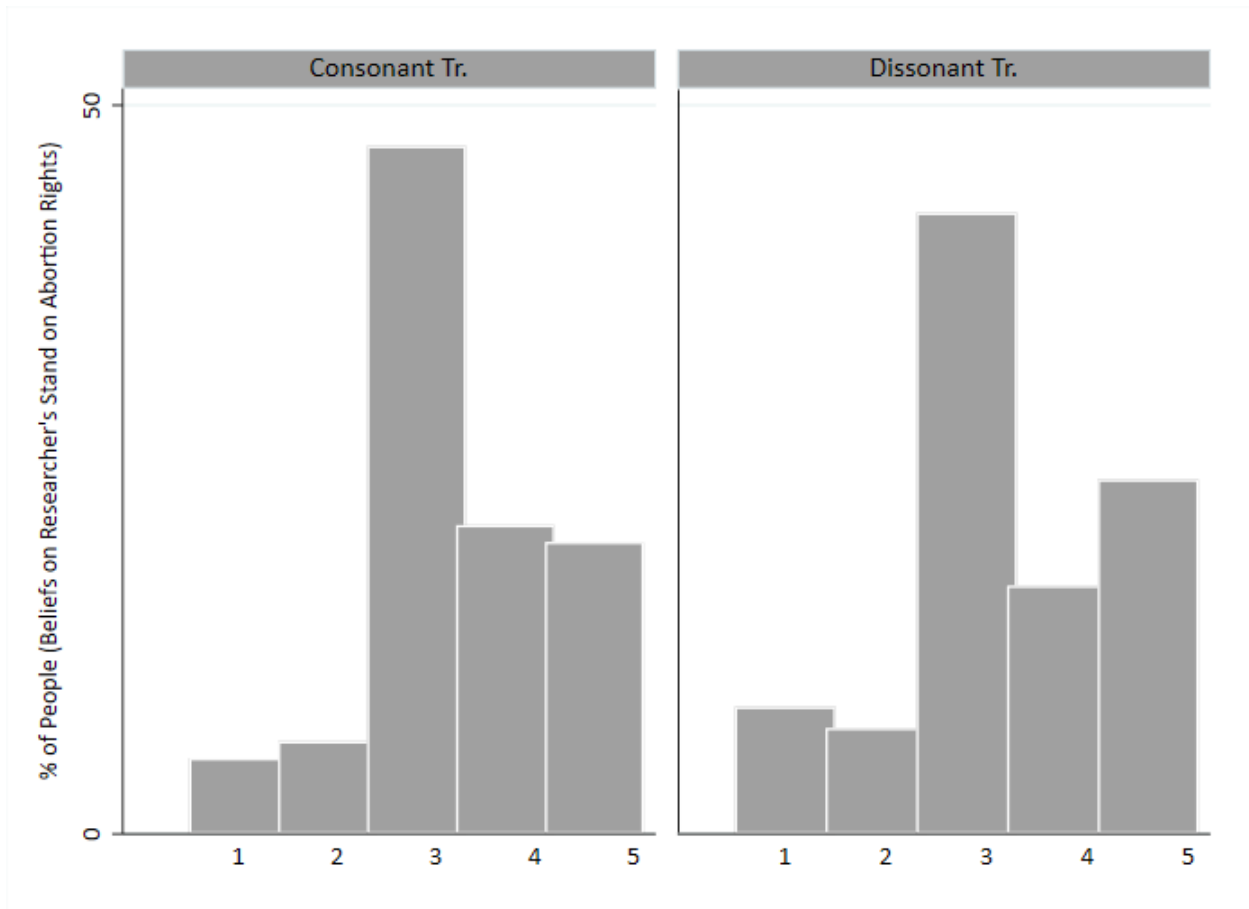
Notes: The figure represents the frequency of 50 most commonly used words in the text written by people who chose to switch the dissonant article with the consonant one. I use Python's Natural Language Processing to identify phrases that characterise the participant's responses. I exclude stop words, reduce all words to their stem by using Porter stemmer and group the words with all of their variant and inflected forms by using Word net lemmatiser.

FIGURE 5: Frequency of Most Common Words - Avoiders



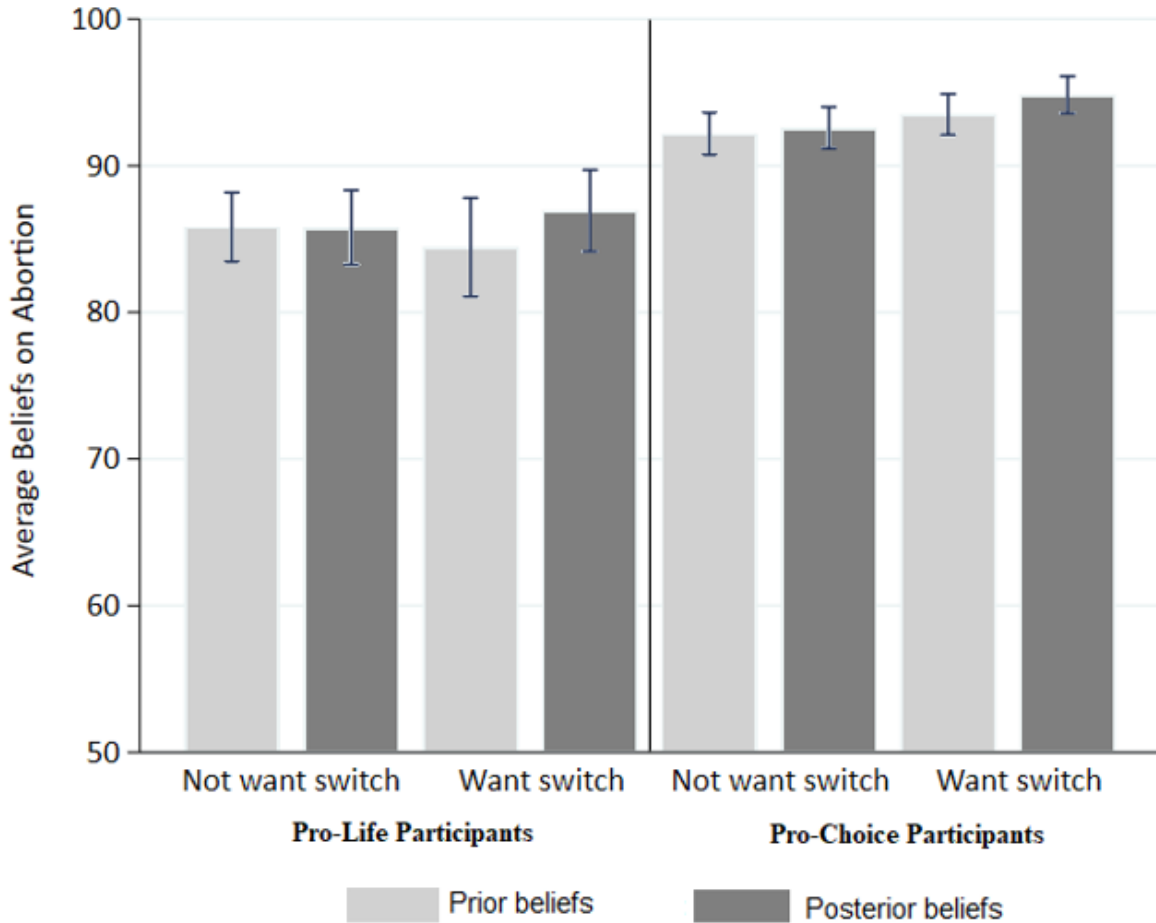
Notes: The figure represents the frequency of 50 most commonly used words in the text written by people who chose to switch the dissonant article with the consonant one. I use Python's Natural Language Processing to identify phrases that characterise the participant's responses. I exclude stop words, reduce all words to their stem by using Porter stemmer and group the words with all of their variant and inflected forms by using Word net lemmatiser.

FIGURE 6: Beliefs on Researcher's Stand on Abortion Rights by Treatment



Notes: The figure represents the distribution of participants' beliefs about researchers standpoint on abortion right discussions by treatment group. 1: Extremely pro-life, 2: Somewhat pro-life, 3: Neither, 4: Somewhat pro-choice, 5: Extremely pro-choice

FIGURE 7: Prior vs Posterior Beliefs



Notes: The figure represents the intensity of participants' beliefs on abortion rights at the beginning and at the end of the experiment. The first four bars represent the beliefs for pro-life participants while the last four bars represent the beliefs for pro-choice participants. The first two bars of each panel include participants who did not want to switch the dissonant article with the consonant one, whereas the last two bars of each panel include participants who wanted to switch the dissonant article with the consonant one. The scores are out of 100. 0 represents the lowest intensity, 100 represents the highest intensity. 95 % confidence intervals for the mean are shown.

7 Tables

TABLE 1: People pay to avoid dissonant information.

	Belief		
	Pro-Life	Pro-Choice	Overall
Panel A : Avoid Dissonant Info (%)			
Consonant Tr.	0.417	0.446	0.434
Dissonant Tr.	0.435	0.404	0.418
Overall	0.426	0.426	0.426
Panel B: Willingness to Pay			
Consonant Tr.	0.203	0.172	0.186
Dissonant Tr.	0.226	0.167	0.193
Overall	0.214	0.170	0.189
Panel C: Willingness to Pay¹			
Consonant Tr.	0.487	0.386	0.429
Dissonant Tr.	0.519	0.413	0.461
Overall	0.502	0.399	0.444

Notes: Mean values are shown in the table. Panel A represents mean proportion of people who wanted to switch the dissonant article with the consonant one in each study group. Panel B represents the mean amount of money (in terms of US dollars) participants were willing to pay to switch the articles in each treatment group. ¹ Panel C represents the mean amount of money (in terms of US dollars) participants were willing to pay to switch the articles in each treatment group for only those who were willing to pay any positive amount. Participants were given an additional 100 cents to use if they want to pay for switching the articles. Any unused amount was added on top of their bonus payment.

TABLE 2: Prior Exposure to Dissonant Information

	Treatment		Diff. in Proportions (p-value)
	Consonant	Dissonant	
Avoid Dissonant Info (%)	0.434	0.418	0.016 (0.617)
WTP	0.186	0.193	-0.007 (0.737)
WTP ¹	0.429	0.461	-0.032 0.346

Notes: The table represents results from a two-sided t-test to test the null hypothesis that prior exposure to dissonant information does not affect the propensity to avoid dissonant information (willingness to pay to avoid dissonant information). Column 1 and Column 2 show the mean values for the consonant and dissonant treatment groups, respectively. Column 3 shows the difference in proportions with p-values in parentheses. “Avoid dissonant info” takes the value of 1 if participants wanted to pay to switch the dissonant article with the consonant one, 0 otherwise. “WTP” represents the willingness to pay to switch the articles in terms of US dollars. ¹ Second willingness to pay measure only includes participants who were willing to pay any positive amount of money to switch the articles. Participants were given an additional 100 cents to use if they want to pay for switching the articles. Any unused amount was added on top of their bonus payment. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 3: Prior Exposure to Dissonant Information and Beliefs

	Treatment		Diff. in Proportions (p-value)
	Consonant	Dissonant	
Panel A: Pro-Life People			
Avoid Dissonant Info (%)	0.417	0.435	-0.018 (0.703)
WTP	0.203	0.226	-0.023 (0.480)
WTP ¹	0.487	0.519	-0.033 (0.532)
Panel B: Pro-Choice People			
Avoid Dissonant Info (%)	0.446	0.404	0.042 (0.315)
WTP	0.172	0.167	0.005 (0.837)
WTP ¹	0.386	0.413	-0.027 (0.543)
Difference in Proportions (A=B)			
Avoid Dissonant Info (%)	-0.029 (0.508)	0.031 (0.495)	-
WTP	0.031 (0.261)	0.059 (0.050)	-
WTP ¹	0.101 (0.029)	0.106 (0.039)	-

Notes: The table represents the mean values by treatment and belief groups. “Avoid dissonant info” takes the value of 1 if participants wanted to pay to switch the dissonant article with the consonant one, 0 otherwise. “WTP” represents the willingness to pay to switch the articles in terms of US dollars. ¹ Second willingness to pay measure only includes participants who were willing to pay any positive amount of money to switch the articles. Participants were given an additional 100 cents to use if they want to pay for switching the articles. Any unused amount was added on top of their bonus payment. Column 1 and Column 2 show the mean values for the consonant and dissonant treatment groups, respectively. Column 3 represents results from a two-sided proportion test to test the null hypothesis that prior exposure to dissonant information does not affect the propensity to avoid dissonant information for the given group. Panel A includes only pro-life participants while Panel B includes only pro-choice participants. Panel C represents results from a two-sided proportion test to test the null hypothesis that there is no difference in the propensity to avoid dissonant information (willingness to pay to avoid dissonant information) between the two opposing belief groups on the topic of abortion rights for each treatment group, separately. “Avoid dissonant info” takes the value of 1 if participants wanted to pay to switch the dissonant article with the consonant one, 0 otherwise. “WTP” represents the willingness to pay to switch the articles in terms of US dollars. ¹ Second willingness to pay measure only includes participants who were willing to pay any positive amount of money to switch the articles. Participants were given an additional 100 cents to use if they want to pay for switching the articles. Any unused amount was added on top of their bonus payment. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 4: Participants' Beliefs

	Belief		Diff. in Proportions (p-value)
	Pro-Life	Pro-Choice	
Avoid Dissonant Info (%)	0.426	0.426	-0.00006 (0.999)
WTP	0.214	0.170	0.044** (0.029)
WTP ¹	0.502	0.399	0.104*** (0.002)

Notes: The table represents results from a two-sided t-test to test the null hypothesis that Panel C represents results from a two-sided proportion test to test the null hypothesis that there is no difference in the propensity to avoid dissonant information (willingness to pay to avoid dissonant information) between the two opposing belief groups on the topic of abortion rights. Column 1 and Column 2 show the mean values for pro-life and pro-choice belief groups, respectively. Column 3 shows the difference in proportions with p-values in parentheses. “Avoid dissonant info” takes the value of 1 if participants wanted to pay to switch the dissonant article with the consonant one, 0 otherwise. “WTP” represents the willingness to pay to switch the articles in terms of US dollars. ¹ Second willingness to pay measure only includes participants who were willing to pay any positive amount of money to switch the articles. Participants were given an additional 100 cents to use if they want to pay for switching the articles. Any unused amount was added on top of their bonus payment. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 5: Determinants of Paying to Avoid Dissonant Information

$y = \mathbb{I}(\text{paid to avoid})$	(1)	(2)	(3)	(4)
Pro-choice	0.0737 [0.111]	0.106 [0.114]	0.130 [0.165]	0.147 [0.165]
Dissonant Tr.	0.0459 [0.121]	0.0589 [0.121]	-0.117 [0.177]	-0.108 [0.177]
Pro-choice X Dissonant	-0.153 [0.161]	-0.173 [0.164]	0.0590 [0.237]	0.0520 [0.238]
Female		0.285*** [0.0822]	0.269 [0.168]	0.330* [0.171]
Age		0.00642** [0.00306]	0.00562* [0.00308]	0.00537* [0.00318]
White		-0.0907 [0.0996]	-0.0746 [0.100]	-0.0404 [0.101]
Income		-0.00976 [0.0118]	-0.00918 [0.0118]	-0.00942 [0.0119]
College		-0.0298 [0.0869]	-0.0236 [0.0870]	-0.0277 [0.0876]
Pro-choice X Female			-0.0545 [0.226]	-0.118 [0.227]
Dissonant X Female			0.359 [0.247]	0.340 [0.247]
Pro-choice X Dissonant X Female			-0.464 [0.330]	-0.426 [0.332]
Av. time reading news				0.0742*** [0.0197]
Risk pref. (std)				0.0469 [0.0434]
IPS (std)				0.0243 [0.0418]
Time Spent Article 1				0.000037 [0.000565]
Constant	-0.209** [0.0833]	-0.488*** [0.182]	-0.464** [0.199]	-0.636*** [0.210]
Observations	1,000	979	979	979
Demographics	×	✓	✓	✓
Female Interactions	×	×	✓	✓
Behavioural controls	×	×	×	✓

Notes: The table represents the results from probit analyses. The dependent variable is equal to 0 if a participant chose not to pay to switch articles, and is equal to 1 if a participant chose to pay to switch articles. “Pro-choice” takes the value of 0 if a participant is against abortion rights and takes the value of 1 if a participant is in favour of abortion rights. “Dissonant treatment” is also a dummy variable which is equal to 0 if a participant is randomly allocated to the consonant treatment and 1 if a participant is randomly allocated to the dissonant treatment. The notation “X” represents an interaction variable between the variables. Demographic controls include female (a dummy variable which takes 1 if the participant classified themselves as female, 0 otherwise), age, white (a dummy variable that takes 1 if the participant classified their race as white, 0 otherwise), income, college (a dummy variable that takes 1 if the participant has a college degree, 0 otherwise). “Av. time reading news” shows the number of hours spent reading the news per day. “Risk pref. (std)” represents the standardised score from the following question: How do you see yourself: Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks?” on a scale from 0 to 10 (“unwilling to take risks” to “fully prepared to take risks”). “IPS (std)” represents the standardised score from Information Preference Scale by [Ho et al. \(2021\)](#): lower the score, higher the willingness to avoid information. “Time Spent Article 1” shows the time spent reading the first stage article in seconds. 21 participants were dropped after Column 1 since they did not identify themselves as a female or a male. Behavioural control variables include average daily time spent reading the news, risk preference and information preference. Column 4 also includes time spent reading the article that was randomly assigned to the participants in the first stage of the experiment to account for attention differentiation. Robust standard errors in brackets. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

TABLE 6: Determinants of Amount of Money Spent to Avoid Dissonant Information

	(1)	(2)	(3)	(4)
Pro-choice	-10.05** [4.548]	-8.443* [4.646]	-26.17*** [6.448]	-26.99*** [6.483]
Dissonant Tr.	3.255 [5.215]	2.565 [5.188]	-12.02 [7.885]	-11.93 [7.916]
Pro-choice X Dissonant	-0.534 [6.869]	-0.328 [6.845]	16.07 [9.874]	17.04* [9.838]
Female		6.401* [3.402]	-15.03** [6.664]	-12.97* [6.984]
Age		0.381*** [0.122]	0.368*** [0.122]	0.411*** [0.127]
White		1.525 [3.978]	1.646 [3.959]	1.780 [4.088]
Income		-0.835* [0.494]	-0.802 [0.496]	-0.893* [0.504]
College		4.226 [3.641]	3.445 [3.616]	2.838 [3.613]
Pro-choice X Female			30.46*** [8.898]	30.91*** [9.070]
Dissonant X Female			24.54** [10.38]	24.71** [10.41]
Pro-choice X Dissonant X Female			-29.02** [13.67]	-27.77** [13.66]
Av. time reading news				-0.954** [0.505]
Risk pref. (std)				3.026 [1.913]
IPS (std)				-0.302 [1.907]
Time Spent Article 1				-0.013 [0.024]
Constant	48.65*** [3.387]	30.34*** [6.892]	43.69*** [8.024]	45.28*** [8.653]
Observations	426	416	416	416
R-squared	0.023	0.068	0.096	0.107
Demographics	×	✓	✓	✓
Female Interactions	×	×	✓	✓
Behavioural controls	×	×	×	✓

Notes: The table represents the results from OLS regressions. The dependent variable is the amount of money participants are willing to pay to switch articles from the pot of 100 cents. “Pro-choice” takes the value of 0 if a participant is against abortion rights and takes the value of 1 if a participant is in favour of abortion rights. “Dissonant treatment” is also a dummy variable which is equal to 0 if a participant is randomly allocated to the consonant treatment and 1 if a participant is randomly allocated to the dissonant treatment. The notation “X” represents an interaction variable between the two variables. Demographic controls include female (a dummy variable which takes 1 if the participant classified themselves as female, 0 otherwise), age, white (a dummy variable that takes 1 if the participants classified their race as white, 0 otherwise), income, college (a dummy variable that takes 1 if the participant has a college degree, 0 otherwise). “Av. time reading news” shows the number of hours spent reading the news per day. “Risk pref. (std)” represents the standardised score from the following question: How do you see yourself: Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks?” on a scale from 0 to 10 (“unwilling to take risks” to “fully prepared to take risks”). “IPS (std)” represents the standardised score from Information Preference Scale by [Ho et al. \(2021\)](#): lower the score, higher the willingness to avoid information. “Time Spent Article 1” shows the time spent reading the first stage article in seconds. 21 participants were dropped after Column 1 since they did not identify themselves as a female or a male. Behavioural control variables include average daily time spent reading the news, risk preference and information preference. Column 4 also includes time spent reading the article that was randomly assigned to the participants in the first stage of the experiment to account for attention differentiation. Robust standard errors in brackets. * p<0.1; ** p<0.05; *** p<0.01.

TABLE 7: Ratings of Articles by Participants' Beliefs

	Article		Difference in Means
	Pro-life	Pro-choice	
Panel A: Pro-life People			
Article 1: Reliable	7.465	4.191	3.274*** (0.000)
Article 1: Untrustworthy	2.548	4.153	-1.605*** (0.000)
Article 1: Accurate	7.526	4.321	3.206*** (0.000)
Article 1: Biased	5.443	7.507	-2.064*** (0.000)
Article 2: Reliable	7.532	4.123	3.408*** (0.000)
Article 2: Untrustworthy	2.327	4.346	-2.020*** (0.000)
Article 2: Accurate	7.551	4.126	3.425*** (0.000)
Article 2: Biased	5.020	7.592	-2.572*** (0.000)
Panel B: Pro-choice People			
Article 1: Reliable	2.585	7.754	-5.170*** (0.000)
Article 1: Untrustworthy	5.599	2.315	3.284*** (0.000)
Article 1: Accurate	2.621	7.924	-5.303*** (0.000)
Article 1: Biased	8.599	5.135	3.464*** (0.000)
Article 2: Reliable	2.206	7.711	-5.505*** (0.000)
Article 2: Untrustworthy	5.561	1.789	3.772*** (0.000)
Article 2: Accurate	2.257	7.944	-5.688*** (0.000)
Article 2: Biased	7.592	5.078	3.292*** (0.000)

Notes: The table represents the average subjective ratings of articles participants read throughout the experiment in four main dimensions : reliable, untrustworthy, accurate and biased. Ratings are out of 10. 0 represents the lowest and 10 represents the highest rankings. 95 % confidence intervals for the mean are shown. Column 1 shows the ratings of pro-life articles, whereas Column 2 shows the ratings of pro-choice articles. Column 3 reports the difference in means with p-values in parentheses from a two-sided t-test which compares the ratings of pro-life and pro-choice articles in each dimension. Panel A includes ratings by pro-life people whereas Panel B includes ratings by pro-choice people. Article 1 represents the article participants read in the first stage of the experiment in which randomisation occurred. Article 2 represents the article participants read in the second stage of the experiment. * p<0.1; ** p<0.05; *** p<0.01.

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Appendix A: First Stage Treatment Manipulation

Results presented in Section 4.3 in addition to the attention avoidance discussion help me to validate an important aspect of the experimental manipulation. I discussed that participants spent 110 seconds on average to read the article that consists of about 327 words which is above the average time estimated to be spent to read these articles. They also answered almost 90 % of the incentivised comprehension questions correctly that indicates a high success rate. Furthermore, as mentioned before, participants' subjective ratings of the articles match with their beliefs. When an article confirms their beliefs, people rate it as more reliable and accurate than when it contradicts their beliefs. It shows that participants are well-informed about the content of the article after they read it, therefore, they consistently classify them as more reliable and accurate if they agree with the article, and as more untrustworthy and biased if they do not agree with the article. These results indicate that participant took the experimental tasks seriously as adequate level of attention is devoted to the experimental tasks, supporting the validity of the treatment manipulation.

Appendix B: Secondary Results

As a supplementary analysis, I test whether people perform better in an effort task when the task is based on a consonant article than a dissonant article. This hypothesis builds upon discussions that argue unfamiliarity to arguments discussed in a dissonant article and cognitive constraints stemming from the difficulty of paying attention to a dissonant stimuli might lead lower performance scores in dissonant articles. In the experiment, participants are asked to respond several incentivised questions based on the article they read. The more questions they answer correctly, the higher bonus payment they earn. I compare the average number of correct answers between a consonant article and a dissonant article to investigate if the performance in the tasks correlates with the prior beliefs on the topic.

Table A6 represents the mean performance in first and second stage articles in the experiment. In the first stage of the experiment, both pro-life and pro-choice people perform worse in a dissonant article than in a consonant article, (Panel A: $p = 0.005$ and $p = 0.973$, respectively). In the second stage of the experiment, pro-life people correctly answer 0.50 more questions out of 5 questions when they complete the task in a dissonant article than a consonant article ($p = 0.000$), corresponding to a 10.06 % difference while pro-choice people correctly answer 0.37 more questions out of 5 questions when they complete the task in a consonant article than a dissonant article ($p = 0.000$), corresponding to a 7.38 % difference. These results do not detect any clear association between the performance and the beliefs.

Additionally, I explore if people harden their beliefs on abortion after being exposed to consonant or dissonant information. I ask them to rate how strongly they identify themselves as being “pro-choice” or “pro-life” before they are exposed to any information and after they complete two effort tasks on different articles related to abortion. First of all, pro-choice participants on average have stronger beliefs on abortion than pro-life participants in my study sample ($p = 0.000$). Prior to the treatments, pro-choice participants identify themselves as 92.79 % pro-choice, whereas pro-life participants identify themselves as 85 % pro-life.²⁷ Table A7 represents the mean value of their beliefs before and after the treatment based on the number of times they were exposed to dissonant information. Results show that people’s beliefs on abortion intensify when they are only exposed to consonant information, supporting the echo-chamber discussion (Sunstein 1999). On average, after being exposed to two consonant articles, pro-life people’s beliefs on abortion enhanced by 4.92 % ($p = 0.137$), whereas pro-choice people’s beliefs on abortion enhanced by 1.86 % ($p = 0.027$). Being exposed to one consonant and one dissonant article boosts pro-life people’s beliefs by non-significant 1.82 % ($p = 0.0152$) whereas it boosts pro-choice people’s beliefs by a significant 1.21 % ($p = 0.000$). On the other hand, both groups of people did not update their beliefs on abortion after being exposed to two dissonant articles, resulting in a non-significant 0.97 % drop in pro-life people’s beliefs ($p = 0.460$) and a non-significant 0.04 % increase in pro-choice people’s beliefs (0.906). Overall, pro-choice participants identify themselves as 93.58 % pro-choice posterior to information treatments, 0.79 % higher than their prior beliefs ($p = 0.001$) whereas pro-life people identify themselves as 86.29 % pro-life posterior to information treatments, 1.15 % higher than their prior beliefs ($p = 0.201$). These results

²⁷It does make sense considering that Prolific is considered to be more left-leaning. For example, while screening the participants for my experiment, there were around 80.000 eligible participants to take part in Session 1 of the experiment (which consists of only pro-choice people) and there were only around 10.000 eligible participants to take part in Session 2 (which consists of only pro-life participants). Also, even though the data collection for Session 1 and Session 2 started at the same time, Session 1 was completed within the next twenty-four hours whereas Session 2 took three days to be completed.

might indicate that informational interventions on the beliefs on abortion are likely to fail as it seems that these beliefs are a strong part of individuals' identity.

It is important to remember that this paper does not find any effect of exposure to dissonant information on people's information avoidance behaviour. The fact that no significant belief updating is observed after being exposed to dissonant information might explain the null result.

Appendix C: Experimental Instructions

SESSION 1

Redacted transcript: online only. [Bold text in square brackets was not seen by subjects.]

Participation Agreement

You have been invited to take part in a research study run by academic researchers at the University of Warwick. The project will require you to answer a number of tasks and make decisions under uncertainty. There will also be some personality and demographic questions. Please read the following statements carefully and answer the question below.

Our commitments and privacy policy

We never deceive participants. For example, if we inform you that another participant made a choice on which you can then react, this is indeed the case. We keep our promises made to participants. For example, if we promise a certain payment, participants will indeed receive it. In the event that we are responsible for a mistake that is to the disadvantage of participants, we will inform and compensate the respective participants. We design, conduct, and report our research in accordance with recognized scientific standards and ethical principles. This study has been reviewed and given a favorable opinion by the University of Warwick's Department of Economics Ethics Committee.

We adhere to the terms of our privacy policy as stated below:

The data in the participants' database will only be used for the purpose of the study. There is no link between the personal data in the participants' database and the data collected during a study. The generated anonymous data will be used for analysis. The end product will be publicly available. Your participation in this study is purely voluntary, and you may withdraw your participation at any time without any penalty to you. Please note that the software (Qualtrics) automatically notes the time you spent on each question and this data will be made available to researchers for analysis. Please refer to the University of Warwick Research Privacy Notice which is available [here](#) or by contacting the Legal Compliance Team at GDPR@warwick.ac.uk

Data will be securely stored on the University of Warwick computers and will be processed only for scientific analysis. Summaries may be presented at conferences and included in scientific publications. Data will be reviewed after a period of 10 years, in line with the University of Warwick data retention policy.

Who should I contact if I wish to make a complaint?

If you would like to make a complaint about the way you have been dealt with during the study or any possible harm you might have suffered please address your complaint to the person below, who is a senior University of Warwick official entirely independent of this study:

Head of Research Governance, Research & Impact Services, University House, University of Warwick, Coventry CV4 8UW
Tel: +44 (0)24 765 75733 ; Email: researchgovernance@warwick.ac.uk

If you wish to raise a complaint on how we have handled your personal data, you can contact our Data Protection Officer and Information and Data Director who will investigate the matter: DPO@warwick.ac.uk

If you are happy to proceed please tick the "I agree" button below to continue.

I agree

Your Understanding and Attention

It is important for our research that you understand what you are doing in the experiment. To check this, we will ask you questions on your understanding and attention at certain points.

Also, you are likely to earn a better bonus with a better understanding of the tasks and choices. As such, we ask you to please read the instructions carefully.

- I understand
-

Bonus Payments

You will have the chance to win a bonus payment. The nature of the bonus payment will be made clear on the page when there is an opportunity.

We quote payments in US dollars. The Prolific platform operates in British pounds. Although we will send bonus payments to match the US dollar amounts we quote, the final amount you receive may be very slightly different due to exchange rate fluctuations.

All participants -including you- are given **100 cents** separate from your potential bonus payment. There will be **possibilities** for you **to use** this money later in the experiment. Any amount unused from this pot will be added on top of your bonus payment.

- I understand
-

Your Understanding

Is the following statement correct according to the information given to you on the last page?

You are given an additional 100 cents and you will be given a possibility to use this money later in the experiment.

- True
 False
-

What is your Prolific ID? (please copy and paste it to avoid typos)

Attention Check

If we later ask you what the favorite number of "person X" is, please choose "10".

Questions about your beliefs:

When it comes to others having the right to terminate their pregnancy, do you oppose or support abortion?

- Oppose abortion
 Support abortion

Please indicate the extent to which you oppose or support the abortion right by moving the slider. (0 being strongly oppose, 100 being strongly support)

[A slider from 0 to 100 is given.]

Task 1/5: Short Articles with Questions

Your next task includes reading a short article about various topics and opinions and answering some questions based on the article.

If you are happy with your answer, click the button at the bottom of the screen to continue. Once you have moved on to the next page, you cannot go back.

Bonus Payment

Your bonus payment will be decided based on **the number of correct answers** you give to these questions. You will earn 10 cents for every correct answer.

Remember, you should only answer the questions based on the information given to you in the article.

Next, you have a practice task. This will allow you to get a feel for the format. It does not count for the bonus.

- I understand these instructions.
-

Practice Article

On the next page, you will be presented with an article titled "**The Orchid Mantis and its Characteristics**" which summarizes some descriptive features of the insect.

Please read the article **carefully** as you will be asked to answer some questions based on the article.

Remember, you should only answer the questions based on the information given to you in the article.

- Continue with the article titled "The Orchid Mantis and its Characteristics"
-

PRACTICE ARTICLE

"The Orchid Mantis and its Characteristics"

Hymenopus coronatus, the orchid mantis, is a remarkable creature. Against any opponent but a careful entomologist with a cardboard box, the mantis is a lethal hunter and master of camouflage. Its four front legs, head and thorax are covered in delicate structures resembling colorful flower petals.

As for its behavior, like any good mantis, it is an ambush predator. It takes full advantage of its unique appearance, settling amongst the petals of orchids and awaiting visiting insects. It favors butterflies and moths for its meals, but will happily take any insect on offer. Indeed, it need not even

be an insect: particularly voracious orchid mantises have been known to feed on small lizards, frogs, mice and even birds.

Question 1:

Could you please list as much information as possible about the orchid mantis **mentioned in the text?** Please use a separate text box for each argument. (You do not need to use the exact numbers or phrases mentioned in the text for your answer to be considered correct.)

[Five essay boxes are given.]

Next, we would like you to answer some questions about the article you have just read which is also reproduced below.

[The same article is shown again.]

Please respond to the following questions based on the information given to you in the article.

Question 2:

How many front legs does an orchid mantis have?

1 2 3 4

Question 3:

What does orchid mantis eat? (Choose all that apply.)

Grass Butterflies Moths Frogs Mice Birds

The real tasks start **immediately** on the next page, please make sure you are ready.

[EITHER: TREATMENT GROUP 1– PRO-CHOICE ARTICLE]

Task 1/5: Short Articles with Questions

On the next page, you will be presented with an article titled "**Endangering Women – Health Cost of Banning Abortion**" which includes speeches of some anonymous members of Congress against banning abortions (pro-choice).

Please read the article **carefully** as you will be asked to answer some questions based on the article.

Your bonus payment will be decided based on **the number of correct answers** you give to these questions. You will earn 10 cents for every correct answer.

Remember, you should only answer the questions based on the information given to you in the article.

- Continue with the article titled "Endangering Women – Health Cost of Banning Abortion"
-

ARTICLE 1

"Endangering Women – Health Cost of Banning Abortion"

Over in the House, Members are expected to consider legislation that would strip away women's right to access abortion care without government interference. Republican legislatures across the country are continuing to pass bills that control women's bodies. Women across this country face the most devastating blow to their rights and freedom in decades. There is no question that these bills have an incredibly discriminatory impact and will disproportionately harm those who are already facing far more obstacles when it comes to accessing healthcare.

This whole argument is not really about whether or not there will be abortions in this country, for there have always been, and there will always be abortions in this country and around the world. The only question is: Will those abortions be safe and legal?

Today, because of new abortion care restrictions, 90 percent of counties in the United States do not have an abortion provider. Women are faced with impossible decisions and, as a result, might be forced to have babies under life-threatening conditions. And, tragically, women may also die because they lack the access or resources to safely end a pregnancy. Abortion bans are a matter of life and death.

In addition to physical health concerns, maternal mental health depreciated significantly among women who had an unwanted pregnancy and were denied an abortion. According to a study conducted in 2008, women whose unwanted pregnancy was just days past the abortion clinic's gestational limit, therefore denied an abortion, experienced more anxiety and depression symptoms and reported lower life satisfaction as compared to women who also had unwanted pregnancies and whose pregnancy was just days before the abortion clinic's gestational limit.

When people have access to a full range of healthcare services, including the full spectrum of reproductive health and maternity care, they are healthier, and their families thrive. It is the government's job to rightfully keep abortion safe, legal, and accessible.

Question 1:

Could you please list as many arguments as possible in favor of abortion **mentioned in the text?** Please use a separate text box for each argument. (You do not need to use the exact numbers or phrases mentioned in the text for your answer to be considered correct.)

[10 essay boxes are given.]

Question 2:

Is the article in favor of or against women's abortion rights?

- In favor of women's abortion rights
 - Against women's abortion rights
-

Next, we would like you to answer some questions about the article you have just read which is also reproduced below.

[The same article is shown again.]

Please respond to the following questions based on the information given to you in the article.

Question 3:

Do Republican lawmakers pass bills that discriminate against women, control their bodies, and make it harder for them to access healthcare?

- Yes
- No

Question 4:

What percentage of counties in the US do have an abortion provider?

0% 10% 50% 90% 100%

Question 5:

Restricting access to abortion care might ... (Choose all that apply.)

- Detoriate women's physical health
- Cause maternal deaths
- Lead to experience more anxiety and depression symptoms
- Lower life satisfaction

[OR: TREATMENT GROUP 2– PRO-LIFE ARTICLE]

Task 1/5: Short Articles with Questions

On the next page, you will be presented with an article titled "**It is not a Blob of Tissue, but a Human Being – Science and Abortion**" which includes speeches of some anonymous members of Congress in favor of banning abortions (pro-life).

Please read the article **carefully** as you will be asked to answer some questions based on the article.

Your bonus payment will be decided based on **the number of correct answers** you give to these questions. You will earn 10 cents for every correct answer.

Remember, you should only answer the questions based on the information given to you in the article.

- Continue with the article titled "It is not a Blob of Tissue, but a Human Being – Science and Abortion"
-

ARTICLE 1

"It is not a Blob of Tissue, but a Human Being – Science and Abortion"

Over in the House, Members are expected to consider legislation that would pre-empt virtually all State restrictions on abortion. Democrats are calling the bill the Women's Health Protection Act. A more accurate name would be the most anti-life legislation ever to be considered in the U.S. Congress. This bill would eliminate pretty much any abortion restriction in every State across the country: no matter how unsafe the method of abortion is.

Thanks to ultrasounds and scientific advances and plain old common sense, Americans know just how ridiculous it is to claim that unborn children are just blobs of tissue. Scientific evidence suggests that the beginning of the third week after conception marks the start of the embryonic period, a time when the mass of cells becomes distinct as a human. Around the fourth week, the head begins to form, quickly followed by the eyes, nose, ears, and mouth. Most people are well aware that an unborn baby with its own heartbeat and fingers and toes and DNA is, in fact, not a blob of tissue but a human being. A study reported that on average 91 percent of abortions occur between 4 to 13 weeks of pregnancy. It is mostly when the baby has already formed its human form and is recognized as a fetus, not a tissue.

Even though there are abortion restrictions in this country, these restrictions do not include the cases where the mother's life is in danger. Regarding maternal mental health concerns, according to a study conducted in 2008, women who had unwanted pregnancies and whose pregnancy was just days past the abortion clinic's gestational limit, therefore denied an abortion, did not differ in terms of anxiety symptoms or life satisfaction four years after seeking an abortion from women who also had unwanted pregnancies and whose pregnancy was just days before the abortion clinic's gestational limit.

There is no limit to human love for one another, and when in doubt, it is the government's job to rightfully protect the lives of its current citizens as well as its unborn citizens.

Question 1:

Could you please list as many arguments as possible in favor of banning abortion **mentioned in the text**? Please use a separate text box for each argument. (You do not need to use the exact numbers or phrases mentioned in the text for your answer to be considered correct.)

[10 essay boxes are given.]

Question 2:

Is the article in favor of or against women's abortion rights?

- In favor of women's abortion rights
 - Against women's abortion rights
-

Next, we would like you to answer some questions about the article you have just read which is also reproduced below.

[The same article is shown again.]

Please respond to the following questions based on the information given to you in the article.

Question 3:

Are Democrat lawmakers trying to pass a bill that prevents imposing any restrictions on abortion no matter how unsafe the method is?

- Yes
- No

Question 4:

What percentage of abortions occur between 4 to 13 weeks of pregnancy, when the baby has its own heartbeat, fingers and toes?

0% 9% 50% 91% 100%

Question 5:

Restricting access to abortion care might ...

- Cause maternal deaths
- Lead to experiencing more anxiety
- Lower life satisfaction
- All of the above
- None of the above

Attention Check

Based on the text you read before starting the tasks, what is the favorite number of "person X"?

1 2 3 4 5 6 7 8 9 10

On the next page, you will be asked to repeat the same task with a **new** article titled "**Fight for the Defenseless – Stop Abortion!**" (pro-life) which includes speeches of another group of anonymous members of Congress in favor of banning abortions.

Changing the Article:

Before moving on to the next article, this time, you are given a chance to switch the article assigned to you with a different one.

If you would like to, you can change the article "**Fight for the Defenseless – Stop Abortion!**" (pro-life) with the article "**Abortion: Women Should Decide for Themselves!**" (pro-choice).

If you decide to switch the articles, you can use the **pot of 100 cents** given to you at the beginning of the experiment **to pay for it**.

We will draw a random number between 0 and 100.

If the random number is **smaller than or equal** to the maximum amount you are willing to pay to switch the articles, we will **switch** the articles for you and you will be given "**Abortion: Women**

Should Decide for Themselves!" to complete the task.

If the random number is **bigger** than the maximum amount you are willing to pay to switch the articles, we will **not switch** the articles i.e. you will be given the original article assigned to you on the previous page: "**Fight for the Defenseless – Stop Abortion!**" to complete the task.

This procedure is designed to make it better for you to be honest about your true preferences. The **higher** the number is the **higher** the chance of switching articles.

- I understand these instructions
-

Your Understanding

When will the articles be switched?

- When my maximum willingness to pay to switch is greater than or equal to the randomly drawn number
- When my maximum willingness to pay to switch is less than the randomly drawn number

Your Understanding

Is the following statement false or true?

"I can use the pot of 100 cents given to me at the beginning of the experiment to pay to switch the articles."

- False
- True
-

Do you want to switch the article "**Fight for the Defenseless – Stop Abortion!**" (pro-life) with the article "**Abortion: Women Should Decide for Themselves!**" (pro-choice)?

- Yes
- No
-

You can **remove** the article titled "**Fight for the Defenseless – Stop Abortion!**" (pro-life) from the task list and **add** the article titled "**Abortion: Women Should Decide for Themselves!**" (pro-choice).

Please indicate **the maximum amount of money (cents) you are willing to pay** from the separate pot of 100 cents given to you at the beginning of the experiment to **switch** the articles mentioned **above**.

(Choosing 0 means that you do not want to switch and choosing 100 means that you want to switch for sure.)

[Slider from 0 to 100 is given.]

[If the willingness to pay reported in the previous question is greater than or equal to the random number drawn.]

You chose to pay X cents {*amount chosen in the previous question*} to switch the articles.

The randomly chosen number was Y {*random number drawn*}.

As X is greater than or equal to Y, we switched the articles for you.

- Continue with the article
-

Task 2/5: Short Articles with Questions

On the next page, you will be presented with an article titled "**Abortion: Women Should Decide for Themselves!**" which includes speeches of some anonymous members of Congress against banning abortions (pro-choice).

Please read the article **carefully** as you will be asked to answer some questions based on the article.

Your bonus payment will be decided based on **the number of correct answers** you give to these questions. You will earn 10 cents for every correct answer.

Remember, you should only answer the questions based on the information given to you in the article.

- Continue with the article titled "Abortion: Women Should Decide for Themselves!"
-

ARTICLE 2

"Abortion: Women Should Decide for Themselves!"

The US Supreme Court Justices had been holding arguments in *Roe v. Wade*, which ensured women in the US have the right to choose whether to have abortions in the first three months of pregnancy without government restrictions.

Choosing whether to become a parent is one of the most important decisions a person will make in their lifetime. It is a decision the child-bearer should be able to make for themselves. Our laws should protect our rights, like the right to abortion, not control and dehumanize us. We aren't truly free unless we can control our own bodies, lives, and future. Women of the United States are ready to fight for their freedom and liberty. They deserve to have their decisions protected and respected.

Over the past decade, extremist anti-abortion politicians have passed more than 450 laws that undermine the freedom to make that decision. We have already seen what Republicans are capable of when it comes to women's personal liberties. This is about politicians controlling women's bodies and decisions.

The legislation that the current administration wants to pass will protect access to healthcare and reproductive rights for all Americans. It will ensure that going forward, we all have the freedom to control our own bodies, safely care for our families, and live with dignity. The evidence from Planned Parenthood shows that Black, indigenous people, LGBTQI-plus communities, and people struggling

to make ends meet are the ones who are hurt the most by harmful abortion bans.

A recent poll from this May found that 85 percent of Americans believe that abortion should be legal in some or all circumstances.

The government has a responsibility to protect human rights, especially for the women who have been the subject of discrimination for decades. This is a fight worth fighting. We should not give up on this country, give up on democracy, and certainly not give up on a woman's right to make her own healthcare decisions.

Question 1:

Could you please list as many arguments as possible in favor of abortion **mentioned in the text**? Please use a separate text box for each argument. (You do not need to use the exact numbers or phrases mentioned in the text for your answer to be considered correct.)

[10 essay boxes are given.]

Question 2:

Is the article in favor of or against women's abortion rights?

- In favor of women's abortion rights
 - Against women's abortion rights
-

Next, we would like you to answer some questions about the article you have just read which is also reproduced below.

[The same article is shown again.]

Please respond to the following questions based on the information given to you in the article.

Question 3:

Who should be able to make a decision to become a parent or not?

- The politicians
- The government
- The child-bearer
- The man

Question 4:

In the last 10 years, how many laws have been passed by anti-abortion politicians that undermine women's freedom to decide about their own bodies and lives?

- None
- 0-200
- 200-400
- 400+

Question 5:

Which group of people are the ones who are harmed the most by the deleterious laws that prevent people from making their own decision about abortion?

- Indigenous people
- People who have trouble covering their financial cost
- Black people
- All of the above
- None of the above

Question 6:

What percentage of people living in the USA believe that abortion should be legal in some or all circumstances according to the recent survey result?

0% 45% 65% 85% 100%

[If the willingness to pay reported in the previous question is less than the random number drawn.]

You chose to pay X cents {*amount chosen in the previous question*} to switch the articles.

The randomly chosen number was Y {*random number drawn*}.

As X is less than Y, we did not switch the articles for you.

- Continue with the article
-

Task 2/5: Short Articles with Questions

On the next page, you will be presented with an article titled "**Fight for the Defenseless – Stop Abortion!**" which includes speeches of some anonymous members of Congress in favor of banning abortions (pro-life).

Please read the article **carefully** as you will be asked to answer some questions based on the article.

Your bonus payment will be decided based on **the number of correct answers** you give to these questions. You will earn 10 cents for every correct answer.

Remember, you should only answer the questions based on the information given to you in the article.

- Continue with the article titled "Fight for the Defenseless - Stop Abortion!"
-

ARTICLE 2

"Fight for the Defenseless – Stop Abortion!"

The US Supreme Court Justices had been holding arguments in Roe v. Wade, which ensured women in the US have the right to choose whether to have abortions in the first three months of pregnancy without government restrictions.

Sadly, abortion reveals society's inability to love, protect, and care for the most innocent and helpless among us. When we devalue life, our society suffers. When we deem some to be nonessential, we devalue their lives. Our laws should prevent our legislators from enacting the will of the people and instead should pass laws to protect the unborn. Taking the life of an unborn child is simply unconscionable.

The current administration suspended basic healthcare regulations so doctors could pass out abortion pills like candy. We have already seen what Democrats are capable of when it comes to unborn babies. They know the ability to murder unborn children is not one of our fundamental rights.

The abortion bill will not only harm society but violate the religious freedoms of thousands of Americans. It will make it impossible to impose any meaningful restrictions at all on abortion at any stage of pregnancy including after the point of fetal viability when the baby can survive outside the mother's uterus. The bill would also jeopardize doctors' and nurses' right to refuse to participate in abortions and specifically prevent them from having recourse under the Religious Freedom Restoration Act to protect their conscience rights.

A recent poll from this May found that 65 percent of Americans believe that abortion should not be legal in any circumstances.

The government has a responsibility to protect life at every stage, especially that of the defenseless unborn who are unable to advocate for themselves. This is a fight worth fighting. We should not give up on this country, give up on democracy, and certainly not give up on an unborn child's right to live, an unborn child whose heartbeat can be felt and heard.

Question 1:

Could you please list as many arguments as possible in favor of banning abortion **mentioned in the text?** Please use a separate text box for each argument. (You do not need to use the exact numbers or phrases mentioned in the text for your answer to be considered correct.)

[10 essay boxes are given.]

Question 2:

Is the article in favor of or against women's abortion rights?

- In favor of women's abortion rights
 - Against women's abortion rights
-

Next, we would like you to answer some questions about the article you have just read which is also reproduced below.

[The same article is shown again.]

Please respond to the following questions based on the information given to you in the article.

Question 3:

Why does abortion reveal society's inability to love?

- Because it shows that we devalue the lives of the most innocent and helpless human beings
- Because it shows that we consider the most innocent and helpless human beings to be nonessential
- All of the above
- None of the above

Question 4:

Did the current government implement changes in basic healthcare regulations that help doctors to prescribe abortion pills to patients as easy as candy?

- Yes
- No

Question 5:

Why will the abortion bill breach people's religious freedom? (Choose all apply)

- It will not breach people's religious freedom.
- Healthcare workers will not have a choice to refuse to participate in abortion.
- According to the Religious Freedom Restoration Act, the baby has a right to live right after it fell into its mother's uterus.
- It will not allow for the necessary restrictions on abortion even when the baby is able to live outside of the mother's uterus.

Question 6:

What percentage of people living in the USA believe that abortion should not be legal in any circumstances according to the recent survey result?

0% 45% 65% 85% 100%

Task 4/5: Your Opinion

Question 1:

If you had to guess, what would you say was the purpose of this study?

[If earlier responded "Yes" to the following question: Do you want to switch the article "Abortion: Women Should Decide for Themselves!" (pro-choice) with the article "Fight for the Defenseless – Stop Abortion!" (pro-life)?]

Question 2:

Could you please explain briefly why you chose **to switch** the article "Abortion: Women Should Decide for Themselves!" with the article "Fight for the Defenseless – Stop Abortion!"?

[If earlier responded "No" to the following question: Do you want to switch the article "Abortion: Women Should Decide for Themselves!" (pro-choice) with the article "Fight for the Defenseless – Stop Abortion!" (pro-life)?]

Question 2:

Could you please explain briefly why you chose **not to switch** the article "Abortion: Women Should Decide for Themselves!" with the article "Fight for the Defenseless – Stop Abortion!"?

Question 3:

Do you think that the researchers behind this study are pro-life or pro-choice?

- Strongly support banning abortion (extremely pro-life)
- Somewhat support banning abortion (pro-life)
- Neither
- Somewhat oppose banning abortion (pro-choice)
- Strongly oppose banning abortion (extremely pro-choice)

Please rate the articles you just read in terms of the dimensions below. (0 being the lowest rating and 10 being the highest rating)

[The respective titles of the articles are shown based on the treatment group participants were assigned and the result of the lottery for switching the articles.]

Article 1

[A slider from 0 to 10 is given for each dimension.]

Reliable
Untrustworthy
Accurate
Biased

Article 2

[A slider from 0 to 10 is given for each dimension.]

Reliable
Untrustworthy
Accurate
Biased

Task 5/5 : Final Questions

1/4 : About you

Please indicate the extent to which you oppose or support the abortion right. (0 being strongly oppose, 100 being strongly support)

[A slider from 0 to 100 is given.]

Final Questions 2/4: About you

Generally speaking, which point on this scale best describes your political views?

[A slider from 0 to 100 is given with the following titles. 0: Liberal, 100: Conservative]

In politics, as of today, do you consider yourself a Republican, a Democrat or an Independent?

- Republican
- Democrat
- Independent

Who did you vote for in the 2020 presidential election?

- Donal Trump
- Joe Biden
- Other
- Did not vote

How engaged are you with politics?

[A slider from 0 to 100 is given with the following titles. 0: Not at all, 100: Very much]

How many hours on average do you spend reading or listening to the news each day? (including news websites, social media, television, radio and print newspapers)

[A slider from 0 to 24 is given.]

Which of these platforms are you most likely to use as your main news source?

- News websites
- Social media
- Television
- Radio
- Print newspapers

How many hours on average do you spend on social media each day? (social media channels include: Facebook, Twitter, Instagram, TikTok, Snapchat, Youtube etc...)

[A slider from 0 to 24 is given.]

Final Questions 3/4: About you

What is your gender?

- Female
- Male
- Non-binary
- Prefer not to say
- Other

What is your age?

What is your race?

- White
- Black or African American
- Hispanic or Latino
- American Indian or Alaska Native
- Asian American
- Native Hawaiian or Pacific Islander
- Other

What is your household income? (US dollars, before tax)

- 0-9,999
- 10,000 - 19,999
- 20,000 - 29,999
- 30,000 - 39,999
- 40,000 - 49,999
- 50,000 - 59,999
- 60,000 - 69,999
- 70,000 - 79,999
- 80,000 - 89,999
- 90,000 - 99,999
- 100,000 - 124,999
- 125,000 - 149,999
- 150,000 +

What is the highest grade of school you have completed, or the highest degree you have received?

- No schooling (or less than 1 year)
- Nursery, kindergarten, and elementary (grades 1-8)
- High school (grades 9-12, no degree)
- High school graduate (or equivalent)
- Some college (1-4 years, no degree)
- Bachelor's degree (BA, BS, AB, etc)
- Master's degree (MA, MS, MENG, MSW, etc)
- Professional school degree (MD, DDC, JD, etc)
- Doctorate degree (PhD, EdD, etc)

In which state do you currently reside?

[A dropdown list with all states is given.]

How do you see yourself: Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks?" on a scale from 0 to 10 ("unwilling to take risks" to "fully prepared to take risks")

[A slider from 0 to 10 is given.]

[Information Preference Scale]

Final Questions 4/4: About you

Please respond to the statements below using the scales provided:

[A 4-point Likert scale is given for all the questions.]

Question 1:

As part of a semiannual medical check-up, your doctor asks you a series of questions. The answers to these questions can be used to estimate your life expectancy (the age you are predicted to live to). Do you want to know how long you can expect to live?

Question 2:

You provide some genetic material to a testing service to learn more about your ancestors. You are then told that the same test can, at no additional cost, tell you whether you have an elevated risk of developing Alzheimer's. Do you want to know whether you have a high risk of developing Alzheimer's?

Question 3:

At your annual check-up, you are given the option to see the results of a diagnostic test, which can identify, among other things, the extent to which your body has suffered long-term effects from stress. Do you want to know how much lasting damage your body has suffered from stress?

Question 4:

Ten years ago, you had the opportunity to invest in two retirement funds: Fund A and Fund B. For the past 10 years, you have invested all your retirement savings in Fund A. Do you want to know the balance you would have if you had invested in Fund B instead?

Question 5:

You decide to go to the theatre for your birthday and give your close friend (or partner) your credit card so they can purchase tickets for the two of you, which they do. You aren't sure but suspect that the tickets may have been expensive. Do you want to know how much the tickets cost?

Question 6:

You bought an electronic appliance at a store at what seemed like a reasonable, though not particularly low, price. A month has passed, and the item is no longer returnable. You see the same appliance displayed in another store with a sign announcing "SALE." Do you want to know the price you could have bought it for?

Question 7:

You gave a close friend one of your favorite books for her birthday. Visiting her apartment a couple of months later, you notice the book on her shelf. She never said anything about it; do you want to know if she liked the book?

Question 8:

To check you are reading, please select "Probably don't want to know" for this statement.

Question 9:

Someone has described you as quirky, which could be interpreted in a positive or negative sense. Do you want to know which interpretation they intended?

Question 10:

You gave a toast at your best friend's wedding. Your best friend says you did a good job, but you aren't sure if he or she meant it. Later, you over hear people discussing the toasts. Do you want to know what people really thought of your toast?

Question 11:

As part of a fundraising event, you agree to post a picture of yourself and have people guess your age (the closer they get, the more they win). At the end of the event, you have the option to see people's guesses. Do you want to learn how old people guessed that you are?

Question 12:

You have just participated in a psychological study in which all of the participants rate others' attractiveness. The experimenter gives you an option to see the results for how people rated you. Do you want to know how attractive other people think you are?

Question 13:

Some people seek out information even when it might be painful. Others avoid getting information that they suspect might be painful, even if it could be useful. How would you describe yourself?

Question 14:

If people know bad things about my life that I don't know, I would prefer not to be told.

[End of the experiment]

SESSION 2

Redacted transcript: online only. [Bold text in square brackets was not seen by subjects.]

Participation Agreement

You have been invited to take part in a research study run by academic researchers at the University of Warwick. The project will require you to answer a number of tasks and make decisions under uncertainty. There will also be some personality and demographic questions. Please read the following statements carefully and answer the question below.

Our commitments and privacy policy

We never deceive participants. For example, if we inform you that another participant made a choice on which you can then react, this is indeed the case. We keep our promises made to participants. For example, if we promise a certain payment, participants will indeed receive it. In the event that we are responsible for a mistake that is to the disadvantage of participants, we will inform and compensate the respective participants. We design, conduct, and report our research in accordance with recognized scientific standards and ethical principles. This study has been reviewed and given a favorable opinion by the University of Warwick's Department of Economics Ethics Committee.

We adhere to the terms of our privacy policy as stated below:

The data in the participants' database will only be used for the purpose of the study. There is no link between the personal data in the participants' database and the data collected during a study. The generated anonymous data will be used for analysis. The end product will be publicly available. Your participation in this study is purely voluntary, and you may withdraw your participation at any time without any penalty to you. Please note that the software (Qualtrics) automatically notes the time you spent on each question and this data will be made available to researchers for analysis. Please refer to the University of Warwick Research Privacy Notice which is available [here](#) or by contacting the Legal Compliance Team at GDPR@warwick.ac.uk

Data will be securely stored on the University of Warwick computers and will be processed only for scientific analysis. Summaries may be presented at conferences and included in scientific publications. Data will be reviewed after a period of 10 years, in line with the University of Warwick data retention policy.

Who should I contact if I wish to make a complaint?

If you would like to make a complaint about the way you have been dealt with during the study or any possible harm you might have suffered please address your complaint to the person below, who is a senior University of Warwick official entirely independent of this study:

Head of Research Governance, Research & Impact Services, University House, University of Warwick, Coventry CV4 8UW
Tel: +44 (0)24 765 75733 ; Email: researchgovernance@warwick.ac.uk

If you wish to raise a complaint on how we have handled your personal data, you can contact our Data Protection Officer and Information and Data Director who will investigate the matter: DPO@warwick.ac.uk

If you are happy to proceed please tick the "I agree" button below to continue.

I agree

Your Understanding and Attention

It is important for our research that you understand what you are doing in the experiment. To check this, we will ask you questions on your understanding and attention at certain points.

Also, you are likely to earn a better bonus with a better understanding of the tasks and choices. As such, we ask you to please read the instructions carefully.

- I understand
-

Bonus Payments

You will have the chance to win a bonus payment. The nature of the bonus payment will be made clear on the page when there is an opportunity.

We quote payments in US dollars. The Prolific platform operates in British pounds. Although we will send bonus payments to match the US dollar amounts we quote, the final amount you receive may be very slightly different due to exchange rate fluctuations.

All participants -including you- are given **100 cents** separate from your potential bonus payment. There will be **possibilities** for you **to use** this money later in the experiment. Any amount unused from this pot will be added on top of your bonus payment.

- I understand
-

Your Understanding

Is the following statement correct according to the information given to you on the last page?

You are given an additional 100 cents and you will be given a possibility to use this money later in the experiment.

- True
 False
-

What is your Prolific ID? (please copy and paste it to avoid typos)

Attention Check

If we later ask you what the favorite number of "person X" is, please choose "10".

Questions about your beliefs:

When it comes to others having the right to terminate their pregnancy, do you oppose or support abortion?

- Oppose abortion
 Support abortion

Please indicate the extent to which you oppose or support the abortion right by moving the slider. (0 being strongly oppose, 100 being strongly support)

[A slider from 0 to 100 is given.]

Task 1/5: Short Articles with Questions

Your next task includes reading a short article about various topics and opinions and answering some questions based on the article.

If you are happy with your answer, click the button at the bottom of the screen to continue. Once you have moved on to the next page, you cannot go back.

Bonus Payment

Your bonus payment will be decided based on **the number of correct answers** you give to these questions. You will earn 10 cents for every correct answer.

Remember, you should only answer the questions based on the information given to you in the article.

Next, you have a practice task. This will allow you to get a feel for the format. It does not count for the bonus.

- I understand these instructions.
-

Practice Article

On the next page, you will be presented with an article titled "**The Orchid Mantis and its Characteristics**" which summarizes some descriptive features of the insect.

Please read the article **carefully** as you will be asked to answer some questions based on the article.

Remember, you should only answer the questions based on the information given to you in the article.

- Continue with the article titled "The Orchid Mantis and its Characteristics"
-

PRACTICE ARTICLE

"The Orchid Mantis and its Characteristics"

Hymenopus coronatus, the orchid mantis, is a remarkable creature. Against any opponent but a careful entomologist with a cardboard box, the mantis is a lethal hunter and master of camouflage. Its four front legs, head and thorax are covered in delicate structures resembling colorful flower petals.

As for its behavior, like any good mantis, it is an ambush predator. It takes full advantage of its unique appearance, settling amongst the petals of orchids and awaiting visiting insects. It favors butterflies and moths for its meals, but will happily take any insect on offer. Indeed, it need not even

be an insect: particularly voracious orchid mantises have been known to feed on small lizards, frogs, mice and even birds.

Question 1:

Could you please list as much information as possible about the orchid mantis **mentioned in the text?** Please use a separate text box for each argument. (You do not need to use the exact numbers or phrases mentioned in the text for your answer to be considered correct.)

[Five essay boxes are given.]

Next, we would like you to answer some questions about the article you have just read which is also reproduced below.

[The same article is shown again.]

Please respond to the following questions based on the information given to you in the article.

Question 2:

How many front legs does an orchid mantis have?

1 2 3 4

Question 3:

What does orchid mantis eat? (Choose all that apply.)

Grass Butterflies Moths Frogs Mice Birds

The real tasks start **immediately** on the next page, please make sure you are ready.

[EITHER: TREATMENT GROUP 1– PRO-CHOICE ARTICLE]

Task 1/5: Short Articles with Questions

On the next page, you will be presented with an article titled "**Endangering Women – Health Cost of Banning Abortion**" which includes speeches of some anonymous members of Congress against banning abortions (pro-choice).

Please read the article **carefully** as you will be asked to answer some questions based on the article.

Your bonus payment will be decided based on **the number of correct answers** you give to these questions. You will earn 10 cents for every correct answer.

Remember, you should only answer the questions based on the information given to you in the article.

- Continue with the article titled "Endangering Women – Health Cost of Banning Abortion"
-

ARTICLE 1

"Endangering Women – Health Cost of Banning Abortion"

Over in the House, Members are expected to consider legislation that would strip away women's right to access abortion care without government interference. Republican legislatures across the country are continuing to pass bills that control women's bodies. Women across this country face the most devastating blow to their rights and freedom in decades. There is no question that these bills have an incredibly discriminatory impact and will disproportionately harm those who are already facing far more obstacles when it comes to accessing healthcare.

This whole argument is not really about whether or not there will be abortions in this country, for there have always been, and there will always be abortions in this country and around the world. The only question is: Will those abortions be safe and legal?

Today, because of new abortion care restrictions, 90 percent of counties in the United States do not have an abortion provider. Women are faced with impossible decisions and, as a result, might be forced to have babies under life-threatening conditions. And, tragically, women may also die because they lack the access or resources to safely end a pregnancy. Abortion bans are a matter of life and death.

In addition to physical health concerns, maternal mental health depreciated significantly among women who had an unwanted pregnancy and were denied an abortion. According to a study conducted in 2008, women whose unwanted pregnancy was just days past the abortion clinic's gestational limit, therefore denied an abortion, experienced more anxiety and depression symptoms and reported lower life satisfaction as compared to women who also had unwanted pregnancies and whose pregnancy was just days before the abortion clinic's gestational limit.

When people have access to a full range of healthcare services, including the full spectrum of reproductive health and maternity care, they are healthier, and their families thrive. It is the government's job to rightfully keep abortion safe, legal, and accessible.

Question 1:

Could you please list as many arguments as possible in favor of abortion **mentioned in the text**? Please use a separate text box for each argument. (You do not need to use the exact numbers or phrases mentioned in the text for your answer to be considered correct.)

[10 essay boxes are given.]

Question 2:

Is the article in favor of or against women's abortion rights?

- In favor of women's abortion rights
 - Against women's abortion rights
-

Next, we would like you to answer some questions about the article you have just read which is also reproduced below.

[The same article is shown again.]

Please respond to the following questions based on the information given to you in the article.

Question 3:

Do Republican lawmakers pass bills that discriminate against women, control their bodies, and make it harder for them to access healthcare?

- Yes
- No

Question 4:

What percentage of counties in the US do have an abortion provider?

0% 10% 50% 90% 100%

Question 5:

Restricting access to abortion care might ... (Choose all that apply.)

- Detoriate women's physical health
- Cause maternal deaths
- Lead to experience more anxiety and depression symptoms
- Lower life satisfaction

[OR: TREATMENT GROUP 2– PRO-LIFE ARTICLE]

Task 1/5: Short Articles with Questions

On the next page, you will be presented with an article titled "**It is not a Blob of Tissue, but a Human Being – Science and Abortion**" which includes speeches of some anonymous members of Congress in favor of banning abortions (pro-life).

Please read the article **carefully** as you will be asked to answer some questions based on the article.

Your bonus payment will be decided based on **the number of correct answers** you give to these questions. You will earn 10 cents for every correct answer.

Remember, you should only answer the questions based on the information given to you in the article.

- Continue with the article titled "It is not a Blob of Tissue, but a Human Being – Science and Abortion"
-

ARTICLE 1

"It is not a Blob of Tissue, but a Human Being – Science and Abortion"

Over in the House, Members are expected to consider legislation that would pre-empt virtually all State restrictions on abortion. Democrats are calling the bill the Women's Health Protection Act. A more accurate name would be the most anti-life legislation ever to be considered in the U.S. Congress. This bill would eliminate pretty much any abortion restriction in every State across the country: no matter how unsafe the method of abortion is.

Thanks to ultrasounds and scientific advances and plain old common sense, Americans know just how ridiculous it is to claim that unborn children are just blobs of tissue. Scientific evidence suggests that the beginning of the third week after conception marks the start of the embryonic period, a time when the mass of cells becomes distinct as a human. Around the fourth week, the head begins to form, quickly followed by the eyes, nose, ears, and mouth. Most people are well aware that an unborn baby with its own heartbeat and fingers and toes and DNA is, in fact, not a blob of tissue but a human being. A study reported that on average 91 percent of abortions occur between 4 to 13 weeks of pregnancy. It is mostly when the baby has already formed its human form and is recognized as a fetus, not a tissue.

Even though there are abortion restrictions in this country, these restrictions do not include the cases where the mother's life is in danger. Regarding maternal mental health concerns, according to a study conducted in 2008, women who had unwanted pregnancies and whose pregnancy was just days past the abortion clinic's gestational limit, therefore denied an abortion, did not differ in terms of anxiety symptoms or life satisfaction four years after seeking an abortion from women who also had unwanted pregnancies and whose pregnancy was just days before the abortion clinic's gestational limit.

There is no limit to human love for one another, and when in doubt, it is the government's job to rightfully protect the lives of its current citizens as well as its unborn citizens.

Question 1:

Could you please list as many arguments as possible in favor of banning abortion **mentioned in the text**? Please use a separate text box for each argument. (You do not need to use the exact numbers or phrases mentioned in the text for your answer to be considered correct.)

[10 essay boxes are given.]

Question 2:

Is the article in favor of or against women's abortion rights?

- In favor of women's abortion rights
 - Against women's abortion rights
-

Next, we would like you to answer some questions about the article you have just read which is also reproduced below.

[The same article is shown again.]

Please respond to the following questions based on the information given to you in the article.

Question 3:

Are Democrat lawmakers trying to pass a bill that prevents imposing any restrictions on abortion no matter how unsafe the method is?

- Yes
- No

Question 4:

What percentage of abortions occur between 4 to 13 weeks of pregnancy, when the baby has its own heartbeat, fingers and toes?

0% 9% 50% 91% 100%

Question 5:

Restricting access to abortion care might ...

- Cause maternal deaths
- Lead to experiencing more anxiety
- Lower life satisfaction
- All of the above
- None of the above

Attention Check

Based on the text you read before starting the tasks, what is the favorite number of "person X"?

1 2 3 4 5 6 7 8 9 10

On the next page, you will be asked to repeat the same task with a **new** article titled "**Abortion: Women Should Decide for Themselves!**" (pro-choice) which includes speeches of another group of anonymous members of Congress against banning abortion.

Changing the Article:

Before moving on to the next article, this time, you are given a chance to switch the article assigned to you with a different one.

If you would like to, you can change the article "**Abortion: Women Should Decide for Themselves!**" (pro-choice) with the article "**Fight for the Defenseless – Stop Abortion!**" (pro-life).

If you decide to switch the articles, you can use the **pot of 100 cents** given to you at the beginning of the experiment **to pay for it**.

We will draw a random number between 0 and 100.

If the random number is **smaller than or equal** to the maximum amount you are willing to pay to switch the articles, we will **switch** the articles for you and you will be given "**Fight for the**

Defenseless – Stop Abortion!" to complete the task.

If the random number is **bigger** than the maximum amount you are willing to pay to switch the articles, we will **not switch** the articles i.e. you will be given the original article assigned to you on the previous page: "**Abortion: Women Should Decide for Themselves!**" to complete the task.

This procedure is designed to make it better for you to be honest about your true preferences. The **higher** the number is the **higher** the chance of switching articles.

- I understand these instructions
-

Your Understanding

When will the articles be switched?

- When my maximum willingness to pay to switch is greater than or equal to the randomly drawn number
- When my maximum willingness to pay to switch is less than the randomly drawn number

Your Understanding

Is the following statement false or true?

"I can use the pot of 100 cents given to me at the beginning of the experiment to pay to switch the articles."

- False
- True
-

Do you want to switch the article "**Abortion: Women Should Decide for Themselves!**" (pro-choice) with the article "**Fight for the Defenseless – Stop Abortion!**" (pro-life)?

- Yes
- No
-

You can **remove** the article titled "**Abortion: Women Should Decide for Themselves!**" (pro-choice) from the task list and **add** the article titled "**Fight for the Defenseless – Stop Abortion!**" (pro-life).

Please indicate **the maximum amount of money (cents) you are willing to pay** from the separate pot of 100 cents given to you at the beginning of the experiment to **switch** the articles mentioned **above**.

(Choosing 0 means that you do not want to switch and choosing 100 means that you want to switch for sure.)

[Slider from 0 to 100 is given.]

[If the willingness to pay reported in the previous question is greater than or equal to the random number drawn.]

You chose to pay X cents {*amount chosen in the previous question*} to switch the articles.

The randomly chosen number was Y {*random number drawn*}.

As X is greater than or equal to Y, we switched the articles for you.

- Continue with the article
-

Task 2/5: Short Articles with Questions

On the next page, you will be presented with an article titled "**Fight for the Defenseless – Stop Abortion!**" which includes speeches of some anonymous members of Congress in favor of banning abortions (pro-life).

Please read the article **carefully** as you will be asked to answer some questions based on the article.

Your bonus payment will be decided based on **the number of correct answers** you give to these questions. You will earn 10 cents for every correct answer.

Remember, you should only answer the questions based on the information given to you in the article.

- Continue with the article titled "Fight for the Defenseless - Stop Abortion!"
-

ARTICLE 2

"Fight for the Defenseless – Stop Abortion!"

The US Supreme Court Justices had been holding arguments in *Roe v. Wade*, which ensured women in the US have the right to choose whether to have abortions in the first three months of pregnancy without government restrictions.

Sadly, abortion reveals society's inability to love, protect, and care for the most innocent and helpless among us. When we devalue life, our society suffers. When we deem some to be nonessential, we devalue their lives. Our laws should prevent our legislators from enacting the will of the people and instead should pass laws to protect the unborn. Taking the life of an unborn child is simply unconscionable.

The current administration suspended basic healthcare regulations so doctors could pass out abortion pills like candy. We have already seen what Democrats are capable of when it comes to unborn babies. They know the ability to murder unborn children is not one of our fundamental rights.

The abortion bill will not only harm society but violate the religious freedoms of thousands of Americans. It will make it impossible to impose any meaningful restrictions at all on abortion at any stage of pregnancy including after the point of fetal viability when the baby can survive outside the mother's uterus. The bill would also jeopardize doctors' and nurses' right to refuse to participate in

abortions and specifically prevent them from having recourse under the Religious Freedom Restoration Act to protect their conscience rights.

A recent poll from this May found that 65 percent of Americans believe that abortion should not be legal in any circumstances.

The government has a responsibility to protect life at every stage, especially that of the defenseless unborn who are unable to advocate for themselves. This is a fight worth fighting. We should not give up on this country, give up on democracy, and certainly not give up on an unborn child's right to live, an unborn child whose heartbeat can be felt and heard.

Question 1:

Could you please list as many arguments as possible in favor of banning abortion **mentioned in the text?** Please use a separate text box for each argument. (You do not need to use the exact numbers or phrases mentioned in the text for your answer to be considered correct.)

[10 essay boxes are given.]

Question 2:

Is the article in favor of or against women's abortion rights?

- In favor of women's abortion rights
 - Against women's abortion rights
-

Next, we would like you to answer some questions about the article you have just read which is also reproduced below.

[The same article is shown again.]

Please respond to the following questions based on the information given to you in the article.

Question 3:

Why does abortion reveal society's inability to love?

- Because it shows that we devalue the lives of the most innocent and helpless human beings
- Because it shows that we consider the most innocent and helpless human beings to be nonessential
- All of the above
- None of the above

Question 4:

Did the current government implement changes in basic healthcare regulations that help doctors to prescribe abortion pills to patients as easy as candy?

- Yes
- No

Question 5:

Why will the abortion bill breach people's religious freedom? (Choose all apply)

- It will not breach people's religious freedom.
- Healthcare workers will not have a choice to refuse to participate in abortion.
- According to the Religious Freedom Restoration Act, the baby has a right to live right after it fell into its mother's uterus.
- It will not allow for the necessary restrictions on abortion even when the baby is able to live outside of the mother's uterus.

Question 6:

What percentage of people living in the USA believe that abortion should not be legal in any circumstances according to the recent survey result?

0% 45% 65% 85% 100%

[If the willingness to pay reported in the previous question is less than the random number drawn.]

You chose to pay X cents {*amount chosen in the previous question*} to switch the articles.

The randomly chosen number was Y {*random number drawn*}.

As X is less than Y, we did not switch the articles for you.

- Continue with the articles
-

Task 2/5: Short Articles with Questions

On the next page, you will be presented with an article titled "**Abortion: Women Should Decide for Themselves!**" which includes speeches of some anonymous members of Congress against banning abortions (pro-choice).

Please read the article **carefully** as you will be asked to answer some questions based on the article.

Your bonus payment will be decided based on **the number of correct answers** you give to these questions. You will earn 10 cents for every correct answer.

Remember, you should only answer the questions based on the information given to you in the article.

- Continue with the article titled "Abortion: Women Should Decide for Themselves!"
-

ARTICLE 2

"Abortion: Women Should Decide for Themselves!"

The US Supreme Court Justices had been holding arguments in Roe v. Wade, which ensured women in the US have the right to choose whether to have abortions in the first three months of pregnancy without government restrictions.

Choosing whether to become a parent is one of the most important decisions a person will make in their lifetime. It is a decision the child-bearer should be able to make for themselves. Our laws should protect our rights, like the right to abortion, not control and dehumanize us. We aren't truly free unless we can control our own bodies, lives, and future. Women of the United States are ready to fight for their freedom and liberty. They deserve to have their decisions protected and respected.

Over the past decade, extremist anti-abortion politicians have passed more than 450 laws that undermine the freedom to make that decision. We have already seen what Republicans are capable of when it comes to women's personal liberties. This is about politicians controlling women's bodies and decisions.

The legislation that the current administration wants to pass will protect access to healthcare and reproductive rights for all Americans. It will ensure that going forward, we all have the freedom to control our own bodies, safely care for our families, and live with dignity. The evidence from Planned Parenthood shows that Black, indigenous people, LGBTQI-plus communities, and people struggling to make ends meet are the ones who are hurt the most by harmful abortion bans.

A recent poll from this May found that 85 percent of Americans believe that abortion should be legal in some or all circumstances.

The government has a responsibility to protect human rights, especially for the women who have been the subject of discrimination for decades. This is a fight worth fighting. We should not give up on this country, give up on democracy, and certainly not give up on a woman's right to make her own healthcare decisions.

Question 1:

Could you please list as many arguments as possible in favor of abortion **mentioned in the text**? Please use a separate text box for each argument. (You do not need to use the exact numbers or phrases mentioned in the text for your answer to be considered correct.)

[10 essay boxes are given.]

Question 2:

Is the article in favor of or against women's abortion rights?

- In favor of women's abortion rights
- Against women's abortion rights

Next, we would like you to answer some questions about the article you have just read which is also reproduced below.

[The same article is shown again.]

Please respond to the following questions based on the information given to you in the article.

Question 3:

Who should be able to make a decision to become a parent or not?

- The politicians
- The government
- The child-bearer
- The man

Question 4:

In the last 10 years, how many laws have been passed by anti-abortion politicians that undermine women's freedom to decide about their own bodies and lives?

- None
- 0-200
- 200-400
- 400+

Question 5:

Which group of people are the ones who are harmed the most by the deleterious laws that prevent people from making their own decision about abortion?

- Indigenous people
- People who have trouble covering their financial cost
- Black people
- All of the above
- None of the above

Question 6:

What percentage of people living in the USA believe that abortion should be legal in some or all circumstances according to the recent survey result?

0% 45% 65% 85% 100%

Task 4/5: Your Opinion

Question 1:

If you had to guess, what would you say was the purpose of this study?

[If earlier responded "Yes" to the following question: Do you want to switch the article "Abortion: Women Should Decide for Themselves!" (pro-choice) with the article "Fight for the Defenseless – Stop Abortion!" (pro-life)?]

Question 2:

Could you please explain briefly why you chose **to switch** the article "Abortion: Women Should Decide for Themselves!" with the article "Fight for the Defenseless – Stop Abortion!"?

[If earlier responded "No" to the following question: Do you want to switch the article "Abortion: Women Should Decide for Themselves!" (pro-choice) with the article "Fight for the Defenseless – Stop Abortion!" (pro-life)?]

Question 2:

Could you please explain briefly why you chose **not to switch** the article "Abortion: Women Should Decide for Themselves!" with the article "Fight for the Defenseless – Stop Abortion!"?

Question 3:

Do you think that the researchers behind this study are pro-life or pro-choice?

- Strongly support banning abortion (extremely pro-life)
- Somewhat support banning abortion (pro-life)
- Neither
- Somewhat oppose banning abortion (pro-choice)
- Strongly oppose banning abortion (extremely pro-choice)

Please rate the articles you just read in terms of the dimensions below. (0 being the lowest rating and 10 being the highest rating)

[The respective titles of the articles are shown based on the treatment group participants were assigned and the result of the lottery for switching the articles.]

Article 1

[A slider from 0 to 10 is given for each dimension.]

Reliable
Untrustworthy
Accurate
Biased

Article 2

[A slider from 0 to 10 is given for each dimension.]

Reliable
Untrustworthy
Accurate
Biased

Task 5/5 : Final Questions

1/4 : About you

Please indicate the extent to which you oppose or support the abortion right. (0 being strongly oppose, 100 being strongly support)

[A slider from 0 to 100 is given.]

Final Questions 2/4: About you

Generally speaking, which point on this scale best describes your political views?

[A slider from 0 to 100 is given with the following titles. 0: Liberal, 100: Conservative]

In politics, as of today, do you consider yourself a Republican, a Democrat or an Independent?

- Republican
- Democrat
- Independent

Who did you vote for in the 2020 presidential election?

- Donal Trump
- Joe Biden
- Other
- Did not vote

How engaged are you with politics?

[A slider from 0 to 100 is given with the following titles. 0: Not at all, 100: Very much]

How many hours on average do you spend reading or listening to the news each day? (including news websites, social media, television, radio and print newspapers)

[A slider from 0 to 24 is given.]

Which of these platforms are you most likely to use as your main news source?

- News websites
- Social media
- Television
- Radio
- Print newspapers

How many hours on average do you spend on social media each day? (social media channels include: Facebook, Twitter, Instagram, TikTok, Snapchat, Youtube etc...)

[A slider from 0 to 24 is given.]

Final Questions 3/4: About you

What is your gender?

- Female
- Male
- Non-binary
- Prefer not to say
- Other

What is your age?

What is your race?

- White
- Black or African American
- Hispanic or Latino
- American Indian or Alaska Native
- Asian American
- Native Hawaiian or Pacific Islander
- Other

What is your household income? (US dollars, before tax)

- 0-9,999
- 10,000 - 19,999
- 20,000 - 29,999
- 30,000 - 39,999
- 40,000 - 49,999
- 50,000 - 59,999
- 60,000 - 69,999
- 70,000 - 79,999
- 80,000 - 89,999
- 90,000 - 99,999
- 100,000 - 124,999
- 125,000 - 149,999
- 150,000 +

What is the highest grade of school you have completed, or the highest degree you have received?

- No schooling (or less than 1 year)
- Nursery, kindergarten, and elementary (grades 1-8)
- High school (grades 9-12, no degree)
- High school graduate (or equivalent)
- Some college (1-4 years, no degree)
- Bachelor's degree (BA, BS, AB, etc)
- Master's degree (MA, MS, MENG, MSW, etc)
- Professional school degree (MD, DDC, JD, etc)
- Doctorate degree (PhD, EdD, etc)

In which state do you currently reside?

[A dropdown list with all states is given.]

How do you see yourself: Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks?" on a scale from 0 to 10 ("unwilling to take risks" to "fully prepared to take risks")

[A slider from 0 to 10 is given.]

[Information Preference Scale]

Final Questions 4/4: About you

Please respond to the statements below using the scales provided:

[A 4-point Likert scale is given for all the questions.]

Question 1:

As part of a semiannual medical check-up, your doctor asks you a series of questions. The answers to these questions can be used to estimate your life expectancy (the age you are predicted to live to). Do you want to know how long you can expect to live?

Question 2:

You provide some genetic material to a testing service to learn more about your ancestors. You are then told that the same test can, at no additional cost, tell you whether you have an elevated risk of developing Alzheimer's. Do you want to know whether you have a high risk of developing Alzheimer's?

Question 3:

At your annual check-up, you are given the option to see the results of a diagnostic test, which can identify, among other things, the extent to which your body has suffered long-term effects from stress. Do you want to know how much lasting damage your body has suffered from stress?

Question 4:

Ten years ago, you had the opportunity to invest in two retirement funds: Fund A and Fund B. For the past 10 years, you have invested all your retirement savings in Fund A. Do you want to know the balance you would have if you had invested in Fund B instead?

Question 5:

You decide to go to the theatre for your birthday and give your close friend (or partner) your credit card so they can purchase tickets for the two of you, which they do. You aren't sure but suspect that the tickets may have been expensive. Do you want to know how much the tickets cost?

Question 6:

You bought an electronic appliance at a store at what seemed like a reasonable, though not particularly low, price. A month has passed, and the item is no longer returnable. You see the same appliance displayed in another store with a sign announcing "SALE." Do you want to know the price you could have bought it for?

Question 7:

You gave a close friend one of your favorite books for her birthday. Visiting her apartment a couple of months later, you notice the book on her shelf. She never said anything about it; do you want to know if she liked the book?

Question 8:

To check you are reading, please select "Probably don't want to know" for this statement.

Question 9:

Someone has described you as quirky, which could be interpreted in a positive or negative sense. Do you want to know which interpretation they intended?

Question 10:

You gave a toast at your best friend's wedding. Your best friend says you did a good job, but you aren't sure if he or she meant it. Later, you over hear people discussing the toasts. Do you want to know what people really thought of your toast?

Question 11:

As part of a fundraising event, you agree to post a picture of yourself and have people guess your age (the closer they get, the more they win). At the end of the event, you have the option to see people's guesses. Do you want to learn how old people guessed that you are?

Question 12:

You have just participated in a psychological study in which all of the participants rate others' attractiveness. The experimenter gives you an option to see the results for how people rated you. Do you want to know how attractive other people think you are?

Question 13:

Some people seek out information even when it might be painful. Others avoid getting information that they suspect might be painful, even if it could be useful. How would you describe yourself?

Question 14:

If people know bad things about my life that I don't know, I would prefer not to be told.

[End of the experiment]

Appendix D: Formation of Articles

Practice Article

In order to introduce the task to the participants, I first give them a short essay that follows the structure and format of the real task but is unrelated to the topic of abortion rights. I first searched for apolitical objective essay topics and found technical essays on animal species to be suitable. I then googled descriptive essay examples and opened the first non-advertised website. The first objective descriptive article was about the orchid mantis. Subsequently, I composed a short article using the information provided on the website.²⁸

Articles on Abortion Rights

To run the experiment, I need four articles on abortion: two of which support abortion rights (pro-choice) and the other two to oppose abortion rights (pro-life). To create these articles, I decided to use Congress people’s speeches. On the website www.congress.gov.uk, I added “abortion” as a keyword and searched for the results. I included search results from September 2021 to May 2022. While reading the speech from Congress people, I decided to form the articles on two main dimensions: moral and scientific/health. In the end, I had one pro-choice and one pro-life article from the moral side of the discussion as well as one pro-choice and one pro-life article from the scientific side of the discussion. In order to strengthen the arguments in the articles, I used results from some research studies and articles such as the Turnaway Study (Miller et al. 2020), WHO’s fact sheet on abortion²⁹ and BBC’s news article on abortion.³⁰

In order to make sure that the final articles that are used to create treatment variation convey the same emotional arousal and message, I run cosine similarity analysis on the abortion rights articles .

Cosine Similarity Analysis

Cosine similarity is a metric that is used to measure the text-similarity between two documents irrespective of their size in NLP (Natural Language Processing). Cosine similarity captures the orientation of the words not just the magnitudes. I have 4 articles used in this research : pro-choice moral, pro-life moral, pro-choice scientific, pro-life scientific. The word counts are 324, 323, 322 and 326, respectively. The cosine similarity between pro-choice and

²⁸<https://examples.yourdictionary.com/descriptive-essay-examples.html>

²⁹<https://www.who.int/news-room/fact-sheets/detail/abortion>

³⁰<https://www.bbc.co.uk/news/election-us-2020-54003808>

pro-life moral articles is 0.826. The cosine similarity between pro-choice and pro-life scientific articles is 0.730. The closer the cosine value to 1, the smaller the angle between these two texts (multi-dimensional vectors) and the greater the match between texts. Usually a cosine value which is greater than 0.5 indicates that texts show strong similarities. Both of the values I obtained from these analyses are greater than 0.5. Therefore, one can conclude that pro-life and pro-choice articles in both moral and scientific dimensions are significantly similar.

Appendix E: AEA RCT Registry Analysis Plan

Design Overview

I seek to determine firstly whether individuals pay to avoid dissonant information and secondly if the amount they are willing to pay varies based on their prior exposure to dissonant information and their beliefs. The experiment begins with a question to determine the participant's opinion on abortion rights, i.e. whether they are: Pro-choice or Pro-life.³¹ Subjects are then asked to complete an effort task which includes reading a short article followed by comprehension questions based on the content of the article. Subjects are informed that they will receive 0.10 \$ per correct answer they give to these questions. The subjects are then divided into two groups with half of the subjects being randomly allocated to a consonant group (i.e. the assigned article is in line with their beliefs on abortion rights) and the other half were randomly allocated to a dissonant group (i.e. the assigned article opposes their beliefs on abortion rights) to complete the effort task. Both the content and the side of the argument that the article supports are made clear to the participants through a descriptive article title and through a sentence-long summary of its content.³² Participants are reminded that they should only answer the questions based on the text they read and should not interpret the text or use their own opinions. This comprises the first stage of the experiment.

³¹The answers to this question are compared with Prolific's pre-screen variable on abortion rights which I used to filter my sample. Session 1 of the experiment includes only Pro-choice participants (filtered based on Prolific's pre-screen variable) and Session 2 includes only Pro-life participants (based on Prolific's pre-screen variable). Participants with inconsistencies between their prolific pre-screening variable and the answer they provide here are excluded from the main analysis as registered under exclusion criterion.

³²For example, if the article is pro-choice, participants are provided with the following information before seeing the full article: "On the next page, you will be presented with an article titled "Endangering Women – Health Cost of Banning Abortion" which includes the speech of some anonymous members of Congress against banning abortions (pro-choice)." If the article is pro-life, participants are shown: "On the next page, you will be presented with an article titled "It is not a Blob of Tissue, but a Human Being – Science and Abortion" which includes speech of some anonymous members of Congress in favor of banning abortions (pro-life)."

Subsequently, in the following stage, subjects are presented with a second article in the same way as before, i.e. participants are first presented with the title of the article and a sentence-long summary. The article title and short summary provide subjects with information on the side of the argument and the content of the article (pro-life/pro-choice) before having to read it. Regardless of the treatment group participants were assigned to in the first stage, in Session 1, (which only includes Pro-choice participants) participants are given a pro-life article titled “*Fight for Defenseless - Stop Abortion!*” whereas participants in Session 2 (which only includes Pro-life participants) are given a pro-choice article titled “*Abortion: Women Should Decide for Themselves!*”. Both articles in this stage include different arguments from the articles the participants were provided in the previous stage.³³ Subjects are then given an opportunity to switch the article that is assigned to them in this stage (against their beliefs on abortion rights) with a different one that is in line with their beliefs on abortion rights. If they want to switch, they can use a pot of money (100 cents) given to them at the beginning of the experiment to use for the switch. Any unused amount of money is added on top of their bonus payments. Once they have indicated their preference to switch articles and have quantified their willingness to pay, a random number was drawn between 0 and 100. If their maximum willingness to pay to switch articles is greater than or equal to the random number drawn then the article that was initially assigned to them (an article that opposes their beliefs on abortion) is replaced with an article in agreement with their beliefs on abortion. If their maximum willingness to pay is less than the random number drawn, then the initial article, which opposes their beliefs, is not replaced with an article in agreement with their beliefs. Participants are given a clear description of this mechanism and are explicitly informed that a greater reported willingness to pay results in a greater likelihood of the articles being switched.³⁴ Subsequently, the subjects are shown the result of the lottery (i.e. whether their willingness to pay was greater or less than the random number that was drawn) and as a result whether or not the article had been switched. Following the reveal of the result of the lottery, subjects are provided with the new article (depending on the result of the lottery) and then asked to answer questions based on the article. In all treatments, assuming information does not have any hedonic value, participants should not use any of the money to switch articles.

Participants were then asked post-treatment questions about their posterior beliefs on

³³Articles are around the same length - consist of around 308 words and are created to be identical with only the main argument differing between them. I run cosine similarity and sentiment analyses on the articles in each stage to make sure that they both have the same emotional effect and carry similar implications.

³⁴The subjects are also asked two comprehension questions on the mechanism following its description to ensure that it was clear and correctly understood. Subjects that respond to both of the questions incorrectly are registered to be dropped from the main analysis.

abortion rights, political beliefs, media consumption, demographic information, risk preference, and information preference (IPS) (Ho et al. 2021).

Treatments

To generate exogenous variation in prior exposure to dissonant information, subjects are randomly allocated into two groups: dissonant and consonant groups. If a subject is randomly allocated to a dissonant group, they receive an article that opposed their beliefs on abortion rights. If a subject is randomly assigned to a consonant group, they receive an article in agreement with their belief on abortion rights. In Session 1, pro-choice participants are assigned to a pro-life article, if they are in the dissonant group, and they are assigned to a pro-choice article if they are in the consonant group. On the other hand, in Session 2, pro-life participants are assigned to a pro-choice article if they are in the dissonant group and they are assigned to a pro-life article if they are in the consonant group. Before seeing the article, participants are first presented with the title of the article and a short sentence summarising the article. These articles consist of a collection of anonymous Congress people’s speeches related to abortion, supplemented with facts from related research studies. Participants are then asked to answer some questions based on the article they read.

As mentioned above, Session 1 includes only Pro-choice participants and Session 2 includes only Pro-life participants. Therefore, the experiment is a 2x2 between subject (Beliefs x Opinion of the Article) (see Table A1). The first batch of data collection will provide the data for Pro-choice participants who are randomly allocated to either a Pro-choice article (consonant group) or a Pro-life article (dissonant group) to complete the task. They will then be allocated to a different Pro-life article and will be given an option to switch to a Pro-choice article by using money from a pot of money provided to them at the beginning of the experiment to pay for the switch. The second batch of data collection will provide data for Pro-life participants who are randomly allocated to either a Pro-life article (consonant group) or a Pro-choice article (dissonant group) to complete the task. Once they are done with the first task, they will then be allocated to a different Pro-choice article and will be given an option to switch to a Pro-life article by using money from a pot of money given to them at the start of the experiment. Full transcripts from both Session 1 and Session 2 can be found in the Documents and Materials section of this registry.

Subjects

Subjects will be recruited from the Prolific platform. The restrictions on participation are:

1. Subjects located in USA

TABLE A1: Study Groups

	Belief	Opinion of the Article 1
Treatment 1	Pro-Choice	Pro-Choice
Treatment 2	Pro-Choice	Pro-Life
Treatment 3	Pro-Life	Pro-Choice
Treatment 4	Pro-Life	Pro-Life

2. Subjects with minimum 95 % approval rate
3. Subjects with minimum 30 previous submissions
4. Gender balanced sample
5. Only Pro-choice participants for Session 1 and only Pro-life participants for Session 2 (filtered out by using Prolific’s pre-screen variable)
6. Maximum completion time for the experiment 47 minutes (This restriction is put by Prolific. Our predicted completion time for the experiment is 11 minutes. Prolific calculates the maximum allowed time as 47 minutes.)
7. No prior participation in my study

Inattention-Based Exclusion Criteria

I will apply four exclusion criteria ex-post:

1. Failing both of the attention check questions
2. Failing at least two out of three comprehension questions
3. Participants who declared in Prolific before that they are Pro-choice but then answer my prior belief question as Pro-life in Session 1
4. Participants who declared in Prolific before that they are Pro-life but then answer my prior belief question as Pro-choice in Session 2

Note: Items 3 and 4 will be excluded from the main analysis. However, I will use their data for a robustness check.

Hypotheses

Primary Hypotheses:

A standard rational benchmark predicts no subjects pay to avoid dissonant information, assuming the information has no hedonic value. I expect this prediction to fail (as the belief-based utility models suggest), however, it is unclear to what extent, in particular when related to a topic that polarises society such as abortion rights. My research will provide an estimate of that.

The remaining hypotheses are only applicable if some subjects pay to avoid dissonant information. Given that a proportion of people pay to avoid dissonant information, I will provide an estimate of the size of the effect by quantifying the amount of money participants are willing to give up to avoid dissonant information. The propensity of paying to switch articles (and the amount of money used to pay to switch articles) depends on i) participants' beliefs on abortion rights, ii) prior exposure to dissonant information in the earlier stage of the experiment.

Secondary Hypotheses:

The decision to pay to avoid dissonant information (and the amount of money used to avoid dissonant information) is associated with a subject's political opinion, state of residence, age, gender, risk and information preferences, and media consumption. Moreover, attention avoidance that stems from holding conflicting beliefs is a driving factor for information avoidance. Anticipated emotions (hedonics) are also a significant element when deciding to switch articles and therefore will contribute to information avoidance. Additionally, the instrumental benefit of information avoidance is associated with the subjects' beliefs on abortion. Finally, people are inclined to rate articles that are in line with their beliefs more positively than the ones that are opposed to their beliefs.

Analysis

Data will be summarized where possible by using histograms. I will also conduct statistical analyses, including those listed below.

- To test for treatment effects, difference-in-proportion tests will assess whether there are differences among treatment groups in the propensity to avoid dissonant information.
- To test for treatment effects, mean comparison test will assess if there are differences in the amount of money participants are willing to give up to switch articles. I will also quantify psychic cost of completing an effort task on an article which is against one's belief or in line with one's belief.

- I will run probit regressions to investigate the determinants of avoiding conflicting information, with the binary variable (whether dissonant information was avoided) on the left-hand side and my secondary measures on the right-hand side.
- I will run OLS regressions to investigate the determinant of willingness to pay to avoid conflicting information, with the continuous variable (amount spent to switch articles) on the left hand side and my secondary measures on the right hand side.
- In order to disentangle attention avoidance from information avoidance (and to identify attention avoidance as a possible mechanism), I will use the data from the following question: “Please list as many arguments as possible in favour of (or against) abortion rights”. I will compare the number of correct statements written among treatment groups by using a mean comparison test and run a text analysis on the content of the statements.
- To understand the mechanism behind people’s decisions to switch or not to switch the articles (belief-based utility), I will run a text analysis on their responses to these questions.
- I will compare the mean performance in each effort task among treatment groups by using mean comparison tests and OLS regressions. I will quantify the perceived instrumental benefit of completing an effort task on an article which is against one’s belief or in line with one’s belief.
- I will run mean comparison tests and OLS regressions to compare the ratings of articles in four dimensions among treatment groups.
- I will run a mean comparison test and OLS regressions to compare prior beliefs on abortion rights with posterior beliefs to investigate if the articles participants read affected their beliefs.
- To account for the demand effect, I will run a text analysis on the participants’ reported opinions on the purpose of the study and also their opinion on the researcher’s political bias.
- I will provide summaries of demographics and the other secondary outcome measures.

Note: Secondary measures include age (including age cohorts and generations), gender, state of residency (states where abortion is legal vs it is illegal), political beliefs (including

the group, the extremism of political opinion, who they voted in the 2020 presidential election, engagement with politics), media consumption, opinion on abortion (the extremism of supporting/opposing abortion rights), risk preference, Information Preference Scale [Ho et al. \(2021\)](#), mean performance in tasks, attention dedicated to each task (time spent on the page of the article, number of (correct) statement written for attention question) and more.

Additional Figures

FIGURE 8: Words Frequently Used by Avoiders

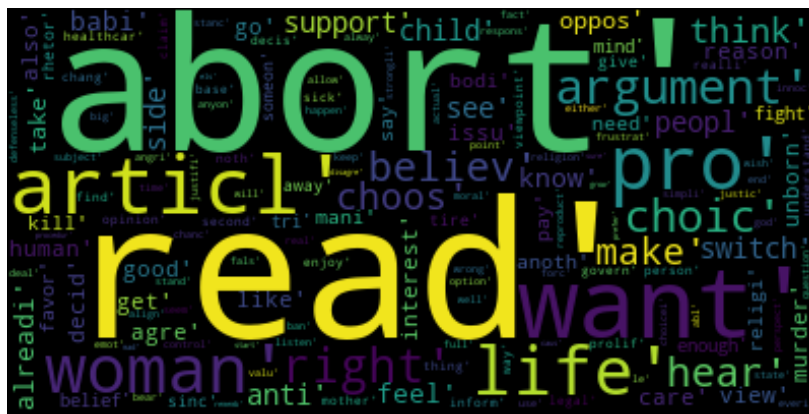


FIGURE 9: Words Frequently Used by Non-Avoiders

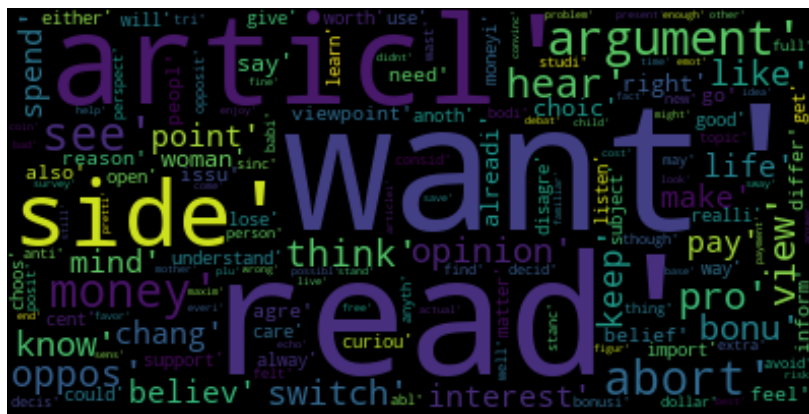


FIGURE 10: Words Frequently Used by Pro-life Avoiders



FIGURE 11: Words Frequently Used by Pro-choice Avoiders



Additional Tables

TABLE A2: Number of Observations in Each Study Groups

	Observations		Total
	Dissonant Treatment	Consonant Treatment	
Session 1: Pro-Choice	272	289	561
Session 2: Pro-Life	230	209	439
Total	481	519	1000

TABLE A3: Summary Statistics

	<i>Overall</i>		<i>Session 1</i>		<i>Session 2</i>	
	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.
Age	40.90	13.85	38.63	12.81	43.79	14.57
Female	0.51	0.50	0.51	0.50	0.50	0.50
White	0.77	0.42	0.76	0.43	0.78	0.41
College	0.56	0.50	0.60	0.49	0.51	0.50
Risk preference	4.86	2.63	4.91	2.62	4.78	2.65
Performance in Article 1 ¹	3.58	0.62	3.64	0.53	3.51	0.71
Observations	1000		561		439	

¹ Scores are out of 4 questions.

TABLE A4: Summary Statistics by Treatment Groups

	<i>Session 1</i>		<i>Session 1</i>		<i>Session 2</i>		<i>Session 2</i>	
	Consonant Tr.		Dissonant Tr.		Consonant Tr.		Dissonant Tr.	
	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.
Age	38.64	13.00	38.63	12.64	43.67	14.14	43.93	15.06
Female	0.51	0.50	0.52	0.50	0.53	0.50	0.47	0.50
White	0.78	0.42	0.74	0.44	0.80	0.40	0.77	0.42
College	0.60	0.49	0.60	0.49	0.52	0.50	0.50	0.50
Risk preference	5.04	2.64	4.78	2.59	4.91	2.68	4.65	2.63
Performance in Article 1 ¹	3.64	0.50	3.64	0.57	3.60	0.67	3.41	0.75
Observations	289		272		230		209	

¹ Scores are out of 4 questions.

TABLE A5: Time Spent Reading the Articles (in seconds) by Treatment

	Treatment		Difference in Means
	Consonant	Dissonant	
Article 1	110.433	110.426	0.008 (0.999)
Pro-life Article 1	121.602	110.418	11.184 (0.119)
Pro-choice Article 1	101.545	110.435	-8.891 (0.154)

p-values in parentheses. * $p < 0.10$, ** $p < 0.050$, *** $p < 0.010$

Notes:

TABLE A6: Performance on the Effort Task by Treatment

	Article		Difference in Means
	Consonant	Dissonant	
Panel A: Stage 1 Articles			
Pro-Life People	3.596	3.406	0.190*** (0.005)
Pro-Choice People	3.638	3.636	0.002 (0.973)
Overall	3.619	3.536	0.083** (0.035)
Panel B: Stage 2 Articles			
Pro-Life People	4.321	4.824	-0.503*** (0.000)
Pro-Choice People	4.922	4.553	0.369*** (0.000)
Overall	4.609	4.667	-0.058 (0.262)

Notes: The table reports the average number of correct answers participants gave to the multiple-choice questions for each article type. Column 1 represents mean values for the consonant article and Column 2 represents the mean values for the dissonant article. Column 3 shows the results from a two-sided t-test and reports the p-values in parentheses. Panel A reports participants' performance in the first stage articles whereas Panel B reports their performance in the second stage articles. Participants answered four multiple-choice questions in the first stage and five multiple-choice questions in the second stage of the experiment. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

TABLE A7: Belief Updating by the Number of Times of Exposure to Dissonant Information

	Number of Exposure		
	None	Once	Twice
Panel A: Pro-life Participants			
Prior Belief	88.085	85.120	84.310
Posterior Belief	93.000	86.940	83.342
Diff. in Means	-4.915 (0.137)	-1.821 (0.152)	0.968 (0.460)
Panel B: Pro-choice Participants			
Prior Belief	93.952	91.858	93.795
Posterior Belief	95.810	93.064	93.835
Diff. in Means	-1.857** (0.027)	-1.207*** (0.000)	-0.040 (0.906)

p-values in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$