Syracuse University

## SURFACE at Syracuse University

**Dissertations - ALL** 

SURFACE at Syracuse University

8-26-2022

# Social Pressure & Accuracy Motivations- Strategies to address problems of Directionally Motivated Reasoning in Political Information Processing

Colin French Syracuse University, frenchc197@gmail.com

Follow this and additional works at: https://surface.syr.edu/etd

Part of the Political Science Commons

#### **Recommended Citation**

French, Colin, "Social Pressure & Accuracy Motivations- Strategies to address problems of Directionally Motivated Reasoning in Political Information Processing" (2022). *Dissertations - ALL*. 1614. https://surface.syr.edu/etd/1614

This Dissertation is brought to you for free and open access by the SURFACE at Syracuse University at SURFACE at Syracuse University. It has been accepted for inclusion in Dissertations - ALL by an authorized administrator of SURFACE at Syracuse University. For more information, please contact surface@syr.edu.

#### Abstract

How effective can social pressure be when encouraging accuracy motivations amongst the public? In politics, directionally motivated reasoning is a powerful force that can shape the way people access, process, and remember political information, which can often lead to inaccurate viewpoints, or opinions backed up by erroneous or unsupported information. These inaccuracies can be problematic for Democratic accountability. Accuracy motivations, or seeking the most accurate answer possible, are preferable for a public's political knowledge and information processing. Using three novel survey experiments on the American public, I test whether inducing accuracy motivations via types of social pressure- in-group conformity, out-group disassociation, public shame, and rewarding correct responses- has any effect on increasing accuracy motivations, both by the amount of information sought, and by how accurately subjects responded on knowledge questions.

I find that using social pressure to incentivize accuracy increases the proportion of correct responses on political knowledge questions. Varying types of social pressure were all somewhat successful in inducing accuracy motivations. I find some mixed evidence suggesting that the effects of social pressure induced accuracy motivations is mitigated by the presence of strong directional preferences on that topic.

This study suggests that while social pressure is effective at promoting accuracy motivations, how successful it is in improving political knowledge and dissuading inaccuracies is context specific. I conclude with a discussion of what practical implications of accuracy-based social pressure might look like, and consider the ways in which individuals can have their directional preferences satisfied without having to rely on conspiracies, misinformation, or inaccurate readings of the political facts and climate.

#### Social Pressure & Accuracy Motivations- Strategies to address problems of Directionally Motivated

#### **Reasoning in Political Information Processing**

By

Colin George French

BA- St. Lawrence University, 2012 MsED- SUNY Potsdam 2015 MA- Syracuse University 2019

Dissertation

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Political

Science.

Syracuse University

August 2022

Copyright © Colin George French. 2022. All rights reserved.

#### TABLE OF CONTENTS

#### Introduction

Chapter 1- Literature Review and Theory

Chapter 2- In-Group Out-Group Experiment

Chapter 3- Shame and Reward Experiment

Chapter 4- Contextual Factors, Justification Slider Experiment

Chapter 5- Discussion and Thoughts

Appendix

References

## **List of Figures**

1.1 Treatment Effects on nonpartisan questions (Pooled)- Page 51 1.2 Treatment Effects for In-Group- Page 53 1.3 Treatment Effects for Out-Group- Page 54 1.4 Treatment effects on partisan questions (Pooled)- Page 56 2.1 Shame treatment effects on nonpartisan questions- Page 72 2.2 Shame treatment effects on moderately partisan questions- Page 73 2.3 Shame treatment effects on highly partisan questions- Page 75 2.4 Reward effects on nonpartisan questions- Page 77 2.5 Reward effects on moderately partisan questions- Page 78 2.6 Reward effects on highly partisan questions- Page 79 3.1 Alternate Justifications treatment- all groups- Page 91 3.2 Immigrant Crime Justification- Page 94 3.3 Immigrant Welfare Justification-94 3.4 AR Caliber Justification-95 3.5 AR Murder Justification-96 3.6 Regressive Tax Justification- 97

## List of Tables

Table 1.1- Page 51

Table 1.2- Page 53

Table 1.3- Page 54

Table 1.4- Page 56

## Table 1.5- Page 57

Table 1.6- Page 58

Table 2.1- Page 80

Table 3.1- Page 90

Table 3.2- Page 91

#### **Introduction- Why This Topic is Important**

When watching a game of hockey, the perspective of a fan and that of a referee are entirely different. The fan, who is at the very least emotionally and even possibly financially vested in the performance of their preferred team, wants a certain outcome. They want their team to win a game, to win a cup or championship, to be successful, and to provide an entertaining product.

The perspective of the referee, on the other hand, is much less emotional. The referee has a vested interest in creating a fair playing field- evaluating the game and its rules with impartiality and fair-handedness. This is not to say that the referee does not have a preferred side- perhaps the coach or players on one team are nicer or more likeable for whatever reasonbut this latent bias should not, in an ideal sporting event, sway the referees view of the facts. A commitment to even adherence rules is part of their job. The referee is, in this sense, motivated purely by accuracy, and has a bias towards following the rules of the game.

I chose this dissertation topic in no small part to the fact that, when it comes to politics, much of the American public (And, for that matter other countries other than the USA) tend to view political information, stories, news, and opinions much more like the fan of a hockey team than as the referee. While described in further detail during the literature review and theory, the natural impulse to "take a side" can have massive implications for how people see the world, and how they read and react to new information.

In effect, we see what we want to see, and are willing to ignore/avoid/dismiss anything that challenges what we'd like to see, and actively seek out that which jives with it. To the sports analogy- what's a penalty on the opposition may certainly not be a penalty on the individual's

1

favored team: even if the circumstances of the play were similar or even identical. And this is only amongst those individuals in the public actually interested enough in politics to seek out information- many who have little interest in politics may not even see or hear much in the way of news, opinions, or current events.<sup>1</sup>

This kind of reasoning is as prevalent in politics as it is in sports fandom, or even fandom in general. Politics has become more than just a means to an end for a lot of people, it represents different value systems, a struggle of good versus evil, or a contest between right and wrong. We tend to view our allies, in-group members as almost always in the right, and that those view views or opposing fanbases almost always wrong. Cognitive dissonance creates problems for viewing things objectively and analytically.

This psychological bias, henceforth referred to as "Directionally Motivated Reasoning," has some troubling normative implications for political discourse, and serves to further divide the country at a time when political polarization is extremely pervasive. If people dive into online communities to discuss politics, and see only those that more or less agree with their point of view, there is no avenue towards understanding and empathizing with those who may see politics differently (Kunda 1990.)

This lack of discussion and engagement with other ideas or perspectives can lead to an increased 'othering' of political opponents, which can be harmful to social cohesion and even lead to dehumanization. If one thinks that someone who votes differently is doing so out of complete malice or even stupidity, losing elections starts to look more like being governed by something evil or illegitimate. Scholars of polarization can rightly point to the conspiracies

<sup>&</sup>lt;sup>1</sup> I distinctly recall one of my high school friends not being familiar with Hurricane Katrina 6 months after the event

surrounding our last two presidential elections. Large numbers of Democrats still believe the 2016 election was illegitimate due to Russian interference, of which no solid evidence has been found (ABC News, Pew.) Even greater numbers of Republicans, including many high-level party officials and elected representatives believe the 2020 election was illegitimate based on voter fraud, of which no solid evidence exists (The Guardian.)

The politicization of facts has been another problematic trend, of which not just the public is to blame (Bolsen & Palm 2019). It is often easier to simply invent false narratives than it is to do the amount of research required to make a well-supported point in a debate or campaign. Selective exposure to information can also be considered politicization of facts, as presenting any one or two given statistics without full context can bias people away from the truth.

For example, federal public spending, and federal income tax rates have both been subject to bias and manipulation in a partisan way by politicians. A high information individual such as a politician has the ability to take information and present it in a selective way to satisfy their supporters. If Bernie Sanders claims that the wealthy pay a lower percentage in taxes than middle class Americans, by certain definitions he can be correct. Capital gains taxes often range between 15 to 18 percent, and wealthier people often see a much higher amount of their yearly earnings from returns on investment than income (CPBB.) The income tax bracket, on the other hand, shows that people earning over 400 thousand dollars a year pay a substantially higher rate of around 35 percent. Because the public does not have well founded and complex understandings of the tax system that we have, Bernie's statement, while technically accurate, might lead some of his supporters to understate the actual top income tax bracket mark, being unable to differentiate between the two types of tax.<sup>2</sup>

The federal budget also is a solid example of when selectively presented information can yield directionally incorrect beliefs. Often the percentages of the federal budget, and the purposes to which they are allocated, are shown only via "discretionary" spending, which shows that the military is by far the largest proportion of the discretional budget. However, when the entire budget including mandatory spending on entitlements is shown, the military drops to a much smaller percentage of the total pie. Which of these two statistics is shown may have serious implications for how the public views the budget. If a politician is running (Or an organization advocating) on reducing the military budget, naturally they will use the discretionary data only. While not dishonest, this skews public perception.

But where does social pressure fit into this problem of seeing what we want to see? At the height of the Covid-19 pandemic, massive campaigns designed to try to change public behavior (Without using coercion) were implemented. TV viewers saw ads encouraging vaccination, mask wearing, and social distancing. Some of these campaigns were from governments, some from private companies, but they all represent non-coercive social pressure. An effort, to varying effects, to try to encourage people to engage in what these organizations considered to be more auspicious behavior by using a variety of social tactics.

- Keeping family and elderly safe<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> The wealthy do not, on the other hand, pay a 35% tax rate on much of their earnings, regardless of the fact that it is the highest tax bracket.

<sup>&</sup>lt;sup>3</sup> https://www.health.govt.nz/covid-19-novel-coronavirus/covid-19-information-specific-audiences/covid-19-older-people-their-family-and-whanau

- Being responsible for public heath<sup>4</sup>
- Showing others that you care about them<sup>5</sup>
- Being a good citizen

These are just a few of the types of pressures exerted to try to get people to handle Covid differently than they might were they thinking only of themselves.

While many economic models and economic theories of decision-making often stress the important of the rational, atomistic individual, I argue herein that as people are social animals, the perspectives, attitudes, and wants of those around us do impact the way we behave and how we choose to act. Social pressures define a large amount of what we do- from what we wear, to what we drive, to what careers we seek.

#### The overarching thesis of this dissertation is thus: Can social pressure, under the

**right circumstances, be used to encourage accuracy motivations?** Furthermore, how successful is activating accuracy motivations on improving democratic literacy among the public, and under what circumstances and in what contexts are accuracy motivations easier to activate and more effective? I contend that social pressure can be used to improve democratic literacy by activating accuracy motivations, and that accuracy motivations will be most effective in improving accuracy (Measured in this study by accuracy on knowledge questions as well as more information seeking) in cases where 1) Preexisting directional preferences are weak or 2) Directional preferences are satisfied prior to the inducing of accuracy motivations.

<sup>&</sup>lt;sup>4</sup> https://www.aha.org/wearamask

<sup>&</sup>lt;sup>5</sup> https://www.ispot.tv/ad/njQn/cdc-foundation-wear-a-mask

Referencing to other political science research on social pressure, I am in this case considering better (And more accurate) political knowledge among the public to be a normative good that should be striven for. Accurate notions of political systems, constitutional structure, and institutions can be as simple and straightforward as who is in the Senator, said Senator's name, and their political party. They can also be as complex as determining how much of the federal budget goes to what or which jurisdiction certain laws and ordinances fall under. Knowledge of these things -and most importantly, accurate knowledge- has enormous implications for models of representative government. The more accurate picture we have of politics, and what is going on in government, the easier it becomes to assign credit for outcomes we like, blame for those we do not, and a general understanding of which representatives we consider worthy of our support.

This dissertation is laid out as follows- first, I evaluate the literature on social pressure, specific types of social pressure and their influence on political behavior, motivated reasoning, and a number of specific contexts of each category such as in-group out-group pressure, accuracy motivations vs directional goals, and the like. Second, I run an original experiment testing two types of social pressure, in-group and out-group, on accuracy motivations. Third, I conduct a second original experiment, one to test the effect of both positive and negative social pressure. Finally, I conducted a third experiment to evaluate the effectiveness of induced accuracy motivations under certain contextual circumstances. I conclude by discussing the implications of my findings, both for the public and for potential government or private campaigns, and suggest some recommendations for future research tactics and measurements.

#### **Chapter 1**

#### Existing Literature & Research on Social Pressure & Motivated Reasoning

One of the most consistently disappointing features of Democratic government is the basic ineptitude of the general public. This core public incompetency, which is ubiquitous across democratic states in the world, is a many-headed beast. First, citizens tend to have very low levels of core political knowledge. (Converse 1960, Zaller 1992, Delli Carpini & Carter 1996) In many cases, this ignorance makes the matter of democratic representation problematic, especially insofar as the public is expected to hold representatives accountable for their performance in government. (Achen & Bartels 2016)

The American public is not shielded from this problematic issue, in fact, it is an exemplary case of the problems related to low public knowledge. Americans struggle with basic knowledge, especially on matters of foreign policy (Bennett 1988, Bennett 1996.) This problem of political ignorance has been vastly studied, including its potential problems and inconsistency with democratic governance (Caplan 2011.) That the public knows very little about policy, the politicians they vote for, or even base ideological concepts, has been a widely held view among scholars of political behavior for some time.

But ignorance is not the only issue of public incompetence in democracy, in fact, it may be one of the least concerning. Of greater concern is that the public is often not only ignorant of political facts, but that they are flat out wrong about many of them. In recent years, greater attention has been paid to this shortcoming- that people not only have low levels of knowledge, but they also hold beliefs about factual issues that are not in keeping with reality. Misperceptions, or beliefs that do not align with the <u>best available facts and evidence</u> (Nyhan 2012) are a significant problem.

It is one thing to have little or no knowledge of a political topic, but another matter entirely to have a set of held views that are factually inaccurate. As Thorson (2015) rightly notes, political misperceptions can bias people's interpretations of political issues. To think of it in statistical terms, political ignorance would cause random error, misperceptions have the potential to cause systematic error. A consumer who does not know which beverage option is healthier is apt to make random mistakes, but one who mistakenly believes that Mountain Dew has fewer calories than seltzer is likely to make 'wrong' decisions insofar as their own utility calculus is concerned.

In the political sphere, overestimating the immigrant crime rate has the potential to cause a voter to choose more anti-immigrant stances, with the justification that they are supporting reducing crime. Assuming that is their chief motivation, anti-crime motivated voters would likely not be concerned with immigration at all (Were they operating under assumptions of perfect information). Consequently, pervasive misperceptions can be thought of as problematic for theories of representative government and voter behavior. Evidence that misperceptions do in fact bias relevant policy positions and support for increased spending has been found in the field of public education (Scheuler 2016.)

My research is driven by the following major question- can the voting public have their preferences changed via social pressure to value accuracy over directionally motivated reasoning? If so, what kinds of social pressures are most effective in instilling a sense of accuracy motivations among individuals on matters of political knowledge? My argument is that

social pressure is the key to motivating the public towards accuracy. Public campaigns, social meetings, and other forms of social pressure have in many cases been successful in changing behaviors, both within the political arena (Gerber & Green 2010, Panagopolous 2014) and outside of politics. These effects are found to be strongest when the pressure is explicit; i.e. directly observed by other people rather than implicit. (Matland & Murray 2016.)

In contrast to atomistic, rational-choice heavy models of human behavior, my theory relies on the belief that human beings are inherently social animals. We are heavily influenced in our behaviors based on how they will be perceived by our friends, family, peers, social groups, and even society at large. These influences have been shown to be sometimes long-lasting (Davenport et al 2010.) People will engage in numerous behaviors in an effort to either 'fit in' to an existing social structure, either formal or informal, and may often shun behaviors seen as less desirable for their desired group membership. Even something as simple as a 'nudge' based on social norms has been found to decrease the likelihood of social media users to want to share an incorrect story with their news feed (Andi & Akesson 2020.)

Even fans of a common soccer team have been found to be more responsive in providing aid to another individual in need if they see that said individual is part of the same in-group- in this case, soccer team fandom (Levine et al. 2005.)

#### Social Pressure & Its Influence

The effects of social pressure have been widely studied, with a particular emphasis in Sociology and Psychology. The effects of social pressure on political behavior have also received scholarly attention, but this literature is somewhat more recent. In this part of the literature review, I will outline some of the more significant studies regarding social pressure that are pertinent to my thesis, and discuss some of the ways in which these studies might be applied to a context of political behavior- if they are studies form outside of political science.

In a now famous psychological study, psychologist Solomon Ashe (1955) showed that social pressure can even cause individuals to turn away from their own judgement in the face of other individuals having different opinions. Participants in the study were given a line on a piece of paper, and a second paper with lines of three different lengths. Participants were expected to be able to choose which of the three lines was equivalent in length to the line on the first page. This would seem like a relatively easy assignment for most participants, but Ashe's experimental treatment had other respondents- put in place as strategic treatments- guess the line length. When respondents prior to the subject gave deliberately wrong answers, it was able to sway a significant number of respondents into giving the incorrect answer.

Asch's work remains widely cited, and for good reason. Other human being's perspectives are capable of swaying our perceptions, even as to something so objectively measurable as the length of a line. If a person's idea about the length of a line are so easily swayed, what about information or ideas that are slightly more complex? Asch's work also indicated that the likelihood of the subject's reneging to the inaccurate line lengths increased when the number of "confederates" suggesting other line lengths increased. In a political arena where people are often exposed to a variety of political perspectives and views of the truth from a lot of different people, it's easy to see how social pressure can translate into the world of political information and behavior.

In 1963, the Milgram experiment (Milgram 1974) saw examples of experimental subjects continuing to apply unpleasant and potentially harmful shocks to other human beings for supposedly answering questions wrongly, simply due to the presence of an authoritative figure

telling them that the experiment needed to continue. Even without any overt form of coercion applied, large numbers of subjects were willing to shock patients all the way into the dangerous levels of electricity, simply from some slight pressure applied by the authority figure. While intended as a demonstration of how the German population could have agreed to the atrocities of the Nazi regime, this study also has alternative applications to social pressure & politics. One could realistically argue that participation in the January 6<sup>th</sup> 2021 insurrection attempt at the capital may have in part been motivated by social pressure.

Over the past fifteen years, political scientists have begun to further investigate the kinds of effects social pressure can have on political behavior. If we know that these pressures have strong effects on everyday behavior, then political behavior may also be in some ways determined by the same sorts of pressures. This could lead to normatively positive or negative results, both of which have been the subject of recent scrutiny.

One of the most cited studies of social pressure was conducted in 2008 by Alan Gerber and Don Green, investigating voter turnout. Their experiment told some subjects that their status as a voter (whether they turned out to an election or stayed home) would be advertised to their neighbors. Presumably fearing the social sanctions associated with free riding on the electoral process, those subjects who were told that their status would be broadcasted were far more likely to turn out to vote. Given that the choice to vote or not vote is typically anonymous and not available for perusal among others, this study strongly suggests that the imposition of social pressure can have real and measurable effects on behavior.

In subsequent years, further investigations into pressure and turnout have been conducted. The effects of social pressure were found to hold over multiple election cycles, showing significant 'staying power,' typically a critique of experimental social science. (Green and Gerber 2010.) In some cases, these social treatment effects on turnout actually persisted for more than a year (Davenport et al 2010.) One of the major conclusions of the series of studies conducted on social pressure was just how more substantively large an effect social pressure had on individuals compared to more traditional get-out-the-vote and voter mobilization techniques. Additionally, less intense social pressure treatments were also found to be effective (Mann 2010.)

The effectiveness of social pressure on political behavior also varies depending on the 'type' of pressure applied. While Gerber and Green's initial experiment was explicit social pressure, meaning the pressure applied was very overt, 'implicit' social pressure was found to be less effective, at least in the form of displaying a set of eyes in an experimental treatment to make viewers feel as though they were being watched (Matland & Murray 2016.) Their findings were described as "weak at best," which indicates that differing types of social pressure might vary in their effectiveness at changing behavior.<sup>6</sup> These null findings were in response to a set of papers finding small, but still significantly significant impacts on voter turnout from implicit social pressure (Panagopoulos 2014)

Panagopoulos also rightly differentiates between what he defines as "Positive" and "Negative" social pressures. Negative social pressure, like the seminal experiment from Gerber and Green, tends to invoke feelings of shame or inadequacy. To use the carrot-stick analogy, negative social pressure is the stick- people feeling bad about their perceived shortcomings, and having those shortcomings exposed to others that may judge them harshly as a consequence.

<sup>&</sup>lt;sup>6</sup> For this reason, in my experiments I vary the types of pressure applied, as well as the consequences of success or failure to comply with said pressure.

Positive social pressure, on the other hand, is very much the carrot- people want to feel rewarded and praised by their peers or people whose opinion they hold in high esteem. A child gleefully presenting their A+ paper to their parents is an example of the kind of long term effects of positive social pressure. Although Panagopoulos does not note, it is possible for both of these pressures to exist from a single causal factor- pleasing your parents with a good grade, and wanting to avoid their disappointment re-a poor grade can both be considerations simultaneously when it comes to social pressure. Panagopolous found in his study that an experiment designed to focus more on positive social pressure still mattered, but was less effective than the negative pressure exerted by Gerber and Green.

Social pressure also need not be applied in person. Something as simple as tagging a user in a Facebook status update was found to have strong impacts on voter turnout, although there existed no statistically distinguishable difference in the effects based on shame versus effects based on pride of performance (Haenschen 2016.)

#### **In-Group Conformity**

One of the forms of social pressure that has received much scholarly attention is the effects of social in-groups. An in-group is any collection of individuals for whom the primary respondent considers themselves affiliated with. These affiliations can be formal, such as membership in a Greek organization or political party registration, where most parts of the group are 'on paper'. They can be semi-formal, such as a group of friends or acquaintances who share a common interest, workspace, sports team or hobby, but are not a documented or registered member. Research has shown that even getting to know a person for a short time in a controlled setting can increase a participant's likelihood to comply with their requests (Burger et al. 2001) Some of these in group pressures can be from interactions as bland and inane as everyday life. People are also more likely to respond positively to requests from individuals who they hold positive affect towards (Cialdini & Trost 1998) or even individuals who the subject had had a short conversation with (Dolinski et al 2001.) Knowing someone just a small amount already gives a big boost to the degree that an individual takes another's ideas, opinions, and requests seriously. These influences can often cause conflict between social pressure on behalf of a group, against more atomistic notions of pure self-interested behavior. (White et. al 2014)

There is also some evidence that group norms have a tangible effect on political behavior, just by virtue of individuals wanting to mimic or conform to behavior of their in-groups. Harkening back to the discussion on voter turnout, people who are in social networks with likely voters are as a consequence more likely to turn out to vote themselves, indicating a potential latent social pressure effect to conform (Huckfeld & Sprague 1995.) People also tend to view politics through the lens of groups, with a focus on "what groups get what" from policies and with strong affective implications if they are a member of a group (Conover 1988.) Group membership also influences what issues people care about, and flat out alter their perceptual framework for political analysis (Conover 1984.)

For this dissertation, I am focusing primarily on more formal group memberships, but the influence of the others cannot be ignored. In some cases, people can feel associated with multiple groups, whose preferences do not always overlap, which has been the subject of much recent scholarship. Nevertheless, in-group conformity has many scholarly examples of being a very powerful social pressure. In cases of political messaging, group members are just as likely to be

swayed by their peers within their own political party as they are elites, indicating that they take the views and suggestions of their political in-group very seriously (Toff & Suhay 2019.)

Some of the most now-infamous experiments have addressed in-group pressure. While unethical and in many cases not well conducted experiments, the notoriety of studies such as the Stanford Prison Experiment, where subjects were sorted into guards and prisoners with combative motivations (Zimbardo 1971.)

#### **Out-Group Nonconformity**

While In-groups can have strong influences on the behaviors and lifestyles of those who try to adhere to them, there has also been substantial scholarship investigating so-called "Out-groups." In stark contrast to in-groups, an out-group tends to be any collection of individuals either formal or informal, that a person wants to distance themselves from. In the American political system, we could easily conceptualize a registered Democrat to see Democrats as an in-group, and Republicans as an obvious out-group. Individuals tend to avoid products, behavior, or other factors that they associate with an out-group (White et al. 2014.) This is often referred to as "dissociation," in that a person will forge few to no strong ties with products that they consider part of the out-group (White et al. 2007.)

Naturally then, the individual will not only have potential motivations to aspire to adhere to the behaviors, identities, and actions of the in-group, but may also want to take part in behaviors to indicate their distance from, or lack of solidarity with, the out-group. Even work adjacent to this field has seen empirical results that experimental corrections of misperceptions became less effective when out-group membership and social reminders of between-person differences were activated (Garrett, Nisbet, and Lynch 2013.) In-group pressure is also more successful than out-group at reducing abusive or offensive behavior online (Munger 2017.)

Out-groups are a relevant force in politics as well. Similarly to the above discussion of ingroups, a rise in negative affect towards members of the other major US political party has caused the increased polarization of even products, brands, or forms of self-expression signaled by members or supporters of the 'other' political party.<sup>7</sup> Research has shown that people will pick activities, lifestyles, or even churches based on their political leanings (Hetherington and Weiler 2018.)

An unfortunate modern example of this sort of performative behavior is mask-wearing. Studies have shown that those who identify with the Democratic party are far more likely to wear masks when they are optional, or to adhere to mask mandates (Gadarian et al. 2021). While some people either wear or shun masks based on their own risk calculations, others may view masks as a sort of performative behavior. On many occasions during the height of the pandemic, some people noted that they wore masks outside so as to "Not look like a Republican" (Boston Globe) or conversely, shunned masks indoors as to "Not look like a Democrat." Regardless of what we may think of the merits behind these sorts of behaviors, it is clear simply from these anecdotal examples that sometimes behaviors can be explained by a desire to differentiate oneself from an out-group that the individual does not have positive affect towards, nor do they want to be mistaken for.

#### **Directionally Motivated Reasoning**

<sup>&</sup>lt;sup>7</sup> While it is true that the USA has more than two political parties, given the modest 3<sup>rd</sup> party voting at a national level, I decided to focus exclusively on Republicans and Democrats as salient group membership in this dissertation.

The field of behavioral political science and political psychology is full of examples finding that people are not fully rational, fair, objective seekers and disseminators of information, especially in the realm of politics. One of the earliest works grappling with political behavior came from Walter Lippmann in 1922, who noted that it isn't possible for individuals to understand politics fully, or even approximate full information. Instead, he analogized the use of political information in behavior as "Pictures in our heads," harkening to the sort of salient issue considerations placed at the top of one's head in the popular Receive-Accept-Sample model of political information popularized by Zaller (1992.)

The political world is full of nuance, complexities, context, and large amounts of information. The United States constitution, with its emphasis on Federalism, decentralized power, as well as checks and balances further complicates the equation. In an idealized "folk" theory of Democracy, citizens are supposedly able to identify which politicians are responsible for certain outcomes, appropriately assign credit or blame, and make rational changes/choices at the ballot box based on these considerations. However, for a variety of reasons, including directionally motivated reasoning, we know that the public often falls short of this goal (Achen & Bartels 2016).

So what is directionally motivated reasoning? Colloquially, when it comes to politics, we often seek out, interpret, and remember political information, facts, or even misinformation, while having some desired ends, or conclusions, that we 'want' to reach. In the sense that people want to prove themselves right, or reinforce their worldview, information can often be processed through a lens designed to come to the 'desired' conclusions. In psychology, Kunda (1990) found that individuals often process information with directional goals in mind- in short- trying

to reach a preferred conclusion. Motivated reasoning is pernicious throughout political information processing in a variety of ways (Redlawsk 2002).

First, people will often specifically seek out information that fits with their view of the world, for the purposes of feeling more secure in their beliefs. Consider an individual who, for whatever original reasons, dislikes immigration and immigrant populations. This person might seek out information suggesting that immigrants and high immigration levels are harmful. This confirmation bias can occur whether or not the information sought out is accurate- many studies have shown that Americans tend to overestimate immigrant crime rates compared to the factual numbers- and so this motivated confirmation bias can push people away from accurate perceptions of reality (Druckman 2012, Lebo & Cassino 2007)

This confirmation bias in directionally motivated reasoning can lead to inaccuracies on political knowledge questions whether the information that the individual seeks is accurate or inaccurate. Selective exposure to accurate- but limited- information can cause inaccuracies. Returning to the example of the voter who does not like immigration, if this person seeks out numerous anecdotal stories about immigrants committing crimes, it may lead them to overstate the problem. Not because the information that they sought out was false, but because the selective exposure to instances of the problem could cause the motivated person to then overstake the likelihood of these events occurring at any time. In the layman's sense, if an individual who only leaves their house during the wintertime, they might falsely assume that the earth always has snow on the ground.

Of course, misperception-based issues can also emerge from this selective choice of what news people indulge, in that people are much less scrupulous of claims made that are in their preferred direction (Jerit and Barabas 2012) Also, not only do people seek out these worldconfirming stories and information, but they are also better at recalling those pieces of evidence that fit with their normative priors.

It is worth noting, however, that motivated reasoning in politics does not always have to be a force towards inaccuracies or misperceptions. In the right circumstances, political elites could actually use motivated reasoning to promote an emphasis on accuracy so long as the types of political messages being pushed are in line with the "induced motivation" (Bayes et al 2020)

The consequence of much of this research reveals a disturbing trend in the ways that citizens tend to access, absorb, and recall information. If we go into a new program, online database, or other forms of involvement with politics and political information, too often it is with the express goal of proving oneself right (Taber et al 2009). Scholars have found that motivated reasoning leads to overestimating the popularity of one's own preferred policies and politicians (Stroud 2008, Nir 2011.) This so called "False Consensus" effect is amplified in group settings (Wojcieszak 2008.)

Additionally, motivated reasoners fail to fully understand the ideas and opinions of those they disagree with (Wojcieszak et al. 2009) Partisans often view the progress and wellbeing of the economy through a political lens (Bartels 2002, Evans and Anderson 2006.) More recent work has indicated that motivated reasoning's effect on the perception of the economy can be overcome by extreme economic circumstances, however, how they assigned blame for responsibility of the conditions was still highly selective, indicating a different outlet for bias (Bisgaard 2015.)

This has major implications for democratic performance, and we can see multiple ways in which people can be led to inaccurate conclusions on matters of basic fact thanks to this. The rise of the internet and 24-hour news cycle have made motivated reasoning and information acquisition easier, leading to a more insular political experience (Prior 2007.)

Motivated Reasoning is not, however, an immovable object when it comes to public opinion. A recent scholarly piece showed that there exists a 'tipping point', wherein subjects are exposed to wave after wave of disconfirming evidence, eventually people will begin to actively update their views. (Redlawsk et. al 2010.) Furthermore, motivated reasoning may simply be at its most effective when individuals are haphazardly or casually receiving information. Watching Fox news in the evening over an alcoholic beverage is less likely to find the news information seeker in a state of high cognitive awareness. A recent study found that subjects who scored higher on Cognitive Reflection Tasks (CRT) were in general more likely to be able to correctly identify false information (Pennycook & Rand 2019)

#### **Accuracy Motivations**

In stark contrast to directionally motivated reasoning, accuracy motivations can be considered the antithesis- a desire on the part of the public or any particular respondent to answer political knowledge questions as accurately as possible, according to the best available facts. To the example of immigration from the previous discussion, an individual strongly motivated by accuracy would attempt to acquire and remember information without a strong directional bias, with the goal of accumulating correct knowledge and answering questions to the best of their ability. A person studying for the GRE, LSAT, or bar exam could be considered a prime example of when accuracy motivations are activated- as they want to do as well as possible on the test.

Ciandini and Goldstein present an interesting perspective on the importance of accuracy in the context of social situations;

"A person's desire to respond appropriately to a dynamic social situation demands an accurate perception of reality. The need to correctly interpret and react to incoming information is of paramount importance, particularly to targets of compliance-gaining attempts. One inaccurate perception, cognition, or behavior could mean the difference between getting a bargain and being duped."

One thing that is important to note here is that 'accuracy' in this context could be seen as somewhat subjective. For Ciandini and Goldstein, accuracy herein is valuable because it helps people achieve desired goals. In this context, accuracy is helpful because it allows the individuals to determine what is the best course of action to achieve their goals, while simultaneously making clearer the kinds of decisions which were helpful in their success, or were inimical in their efforts.

Politics is different here. Insofar as we know that people have directional goals, accuracy is not necessary or sufficient in terms of political knowledge to achieve these ends. People have a variety of desired ends in the political sphere, not all of which =can be explained through a more constrained description of rationality. So the suggestion that accuracy is always beneficial for people does not hold as well in a political context. If we "want" to be right on an issue, getting the accurate information is not always the way to go, especially when some of the better data goes against us. Furthermore, people have been found to consider others to be more prone to misinformation or false narratives than they are themselves (Koo et. al 2021.)

So if accuracy motivations do not necessarily have a strong influence on political behavior (At least, under most circumstances in which directional preferences are present) how might we look differently in the political arena if we were accuracy motivated? Getting more questions right on political phenomena would be a good start. Studies have found that inducing accuracy has seen some measured improvement in how subjects do on responses (Bolsen, Druckman, & Cook 2014) People also do not need to have full and complete information in order to make informed democratic choices, but holding knowledge in key areas of interest is necessary (Lupia & McCubbins 1998.)

But other previous scholarly attempts to 'induce' accuracy motivations have been met with mixed results. One experiment attempting to induce accuracy motivations do seek out more information, and from more sources, but also tend to then lean more on biased information that they found, in part because more information can lead to relying on the less well reasoned arguments (Pietryka 2016, Kunda 1999, Lau & Redlask 2006). This finding runs contrary to my own theory, as I discuss later.

I posit that what the previous authors consider accuracy motivations are simply information-seeking motivations. Other scholarship has seen that experimental inductions can lead to a significant increase in the amount of information being accessed, but that this is not usually assessed in an impartial way (Albertson & Gadarian 2015.) This conflict of definition is one reason why for many of the following studies I use accurate answers, rather than evaluating information seeking as my primary dependent variables.

#### Contextual Level Factors- "Hot-Button" Issues and "Directional Satisfiers"

As some of the leading scholars in the field have suggested, figuring out when and under what circumstances accuracy motivations 'work' deserves more scrutiny (Flynn, Nyhan, Reifler 2016.) Insofar as we always have accuracy and directional motivations competing in our heads, under what circumstances are accuracy motivations more important may well depend not only on varying factors between individuals (heterogeneous effects) but also on the context of the type of political and factual questions being discussed (strength of directional preference, Issue salience.) More politicized fact-based misperceptions naturally have been shown to be more resistant to experimental corrections (Gollust, Lantz, and Ubel 2009.)

The way in which information is presented to viewers also has implications for how successful accuracy motivations can be. In a recent study, participants who received information in graphical form were more successful in combating misperceptions than subjects who received the same information in text form (Nyhan & Reifler 2019.)

#### The Distinction between "Inaccuracies" and "Misperceptions."

There has been a wide and rich body of scholarship, much of which is referenced in my theory and review of the existing literature, on misperceptions in politics. To be clear, misperceptions are just one form of inaccuracy that I address in the following research. Inaccuracies are often misperceptions- views not in keeping with the best available evidence. Misperceptions are also clearly falsifiable, rather than moral views or opinion-based responses. But not all inaccuracies are misperceptions. When it comes to political knowledge and political knowledge questions, absolute ignorance is an issue.

Non misperception-based inaccuracies can emerge naturally. Bad estimation is an issue especially on political knowledge questions. If an individual is asked how many members of the Senate there are in the USA, and answers 102, this may not be a strongly and genuinely held

'false belief' but rather a result of bad guessing. Bad guessing is likely to comprise a high proportion of inaccuracies on questions where there is not a strong directional component.

The point here is that the subject of this study; whether accuracy can be promoted by social pressure; is not purely a topic motivated by concern about the propagation of misinformation or misperceptions. Those are simply one part of the issue of public ignorance/motivated reasoning. The goal in encouraging accuracy motivations from a normative perspective is to improve voter competence by addressing both naturally occurring inaccuracies (Bad guessing) and directionally-motivated inaccuracies (Often misperceptions.)

#### The Gaps

Based on the previously provided scholarly research, there remain a number of interesting unanswered questions. The most important one, and focus of this dissertation, is whether social pressure can be used to effectively activate accuracy motivations, and under which circumstances are said accuracy motivations successful in increasing political knowledge. Social pressure has a scholarly history now of being able to motivate desired positive behaviors through a variety of mechanisms. These mechanisms have varied in their emphasis; both positive reinforcement to encourage desired behavior, and negative punishment for undesirable behavior. I aim to investigate how different types of social pressure can be effective in yielding accuracy, and additionally, whether there are underlying contextual factors such as issue salience, preexisting directional preferences, and other factors that can improve or mitigate the success of said social pressure. Getting citizens out the door to vote is an impressive and interesting finding. Whether the same people can be pressured into viewing politics more like a referee than a fan, is another matter entirely. With so many different types of social pressure, questions remain about what kinds of pressure might be most effective. People want to conform to the behavior of a desired in-group, want to behave in a way that reflects well on their in-group as well as themselves, want to avoid negative behaviors associated with a less desirable out-group.

Social pressure can also be positive, in that it is accompanied by a reward, or negative, where a punishment or social sanction can be inflicted for failure to improve.

### Theoretical Contribution- Promoting Accuracy Motivations & Contextual Level Factors

Now that we have discussed at length the concepts, theories, and existing literature relating to the problem of political inaccuracies on knowledge, what remains is this dissertation's theoretical contributions and assertions about the ways in which people can be motivated to improve their accuracy motivations, and subsequently hope to improve political knowledge and resistance to misinformation. The above literature reveals that accuracy motivations matter, they can change in importance relative to directional preferences, that social pressure is a powerful force in human behavior, and that in many cases the weight of these factors is often context dependent.

Barriers to Accuracy, Knowledge, and Democratic Accountability

Based on the previous literature, theory, and evidence the average citizen has a number of circumstantial and cognitive barriers that are inimical to their democratic performance. Insofar as we think that higher levels of political knowledge, greater accuracy on matters of political fact, and not buying in to unsupported or conspiratorial notions are positive for democracy, our citizens attempting to participate have a number of issues to overcome in order to be the most responsible voting citizen possible.

First, we all have the pre-existing directional motivations. If we hear an anecdote that we are predisposed to agree with, we tend to accept it without much scrutiny. This tends to lead to having a basket of ideas in our head about our politics, some of which are accurate, while others may be falsehoods or misunderstandings of the full context. If we treat news and anecdotes that contrast with our worldview with greater scrutiny, be it fact-checking or dismissing them offhand, this can lead to a biased view of the situation. In short, if you like a politician, and do not register any negative consequence that they might be responsible for, the link between the ability to use your vote to improve your own circumstances or those of society becomes tainted. We are, in effect, fans of a team.

Second, there is not much rational reason to view politics as a referee with an eye towards accuracy in its 'baseline' form. Directionally motivated reasoning makes it easy to blame any bad situations or shortcomings on some 'other' politician or political actor. If a Republican sees a bill passed primarily by Republican members of congress and then feels a decrease in their standard of living, the directional response may simply be to blame Democratic party members for not supporting it strongly enough, or to simply suggest that the dip in circumstances is not related. Who we assign blame to has roots in motivated reasoning (Druckman 2012.)

What follows is an image of reality that is not fully in keeping with the best available evidence. Whatever people's preferred politics are, many vote and participate with a basket of opinions, views, and supporting evidence for their ideas that include many things that are distorted or flat out inaccurate. A citizen who entered the Obama presidency already disliking then-Senator Obama due to political reasons, when asked to justify their dislike in four years, might cite his opinions on abortion, guns, or tax policy, but might also use inaccurate information (Such as conspiracies about his religion or birthplace) as a 'justification' for their views.

So if we acknowledge that directionally motivated reasoning can be harmful for democracy and inimical to higher levels of accurate political knowledge, what can be done to improve the situation? If the mechanism of voting offers little to no rational economic incentive for voters to better educate themselves, and take a more impartial view of the facts, we must potentially look elsewhere for ways of fixing the issue at hand. As noted in the literature, scholars have attempted to try to induce accuracy motivations via a few techniques, but I propose a framework that I consider to be more organic- social influence of our peers.

What remains heavily understudied is the relationship between social pressure, accuracy motivations, and political competence. Experiments to induce accuracy motivations have often done so with financial rewards, by compensating subjects according to the number of questions they get right. Additionally, much of the literature on social pressure focuses on overt punishment, with less attention to less overt social pressure. It is with this in mind that my dissertation focuses on the following question; Can social pressure for accuracy motivations improve public accuracy/competence, and under what circumstances is it most successful in improving actual measurable answers of objective political fact? In other words, and with a nod

to the literature on misperceptions, when and how can this social accuracy pressure successfully 'move the needle' in a way that loosens the public's reliance on misguided or inaccurate assertions to support their priors?

This chapter will include a base level theory regarding how accuracy motivations can be activated, some additional hypothesis about the contextual factors that might increase or decrease the effectiveness of said activations, and also some arguments about how accuracy motivations, while more desirable in political information processing than Directionally Motivated Reasoning, are still not a panacea for problems of misperceptions/misinformation in politics.

I am comfortable in asserting that citizens getting large numbers of political knowledge questions wrong is a normative 'bad' for a number of reasons. As discussed in the literature review, one of the staples of representative democratic governance is that citizens must have some basic level of political literacy in order to succeed in using elections to better represent their interests and desires out of government. In order to make these kinds of decisions, a basic understanding of what is going on around the public is important.

I argue that there is not much rational self-interested incentive for voters to accumulate better knowledge, or to focus on accuracy when analyzing new political information and stories. Left unchecked, most people will continue to collect and view politics through a highly directional lens. We want to be supported, not challenged, in our worldview, which is why increasingly people avoid talking politics with those they disagree with, and even disassociate with family members with different political beliefs, and will not date potential partners that hold substantial political disagreements with.<sup>89</sup> Partisanship is often the best predictor of these divides, but does not represent the entire picture.

Furthermore, political knowledge measures do not offer much incentive for accuracy on their own. Certainly, no one wants to be made to look a fool in public, but most surveys are conducted anonymously, as is the actual process of voting. There are not many direct economic sanctions for inaccurate beliefs about things such as the number of justices on the Supreme Court, the current party in government, or where Barack Obama was born. A voter could live their entire lives thinking that the Democratic and Republican parties are the exact opposite ideologically from where they are without any reason to correct. As mentioned previously by Cialdini and Goldstein; some people desire accuracy so that they can achieve their goals more efficiently by having information, but since a Democratic process is made by a massive collection of votes, and as such political participation is focused more on intangible factors such as self-worth, expression, or fandom, no such incentive for correction exists (Buchanan & Tullock 1961).

For this reason, I believe social sanctions are a productive avenue towards improved voter competence and accuracy. I hold this belief for two reasons; first, social influence, like economic self-interest, is a very strong motivator of human behavior. Our actions differ greatly from those we would undertake in a Robinson Crusoe-esque isolation. While many of the rational-choice actors I have references focus on the individual's preferences, I believe people's social standing amongst their peers, in-and-out groups, friends, and other associates is an important part of their political identity, behavior, and by extension, their political information

<sup>&</sup>lt;sup>8</sup>https://www.npr.org/2020/10/27/928209548/dude-i-m-done-when-politics-tears-families-and-friendships-apart <sup>9</sup> https://www.theatlantic.com/family/archive/2021/03/trump-friend-family-relationships/618457/

processing and recall. Get out the vote campaigns, public health and masking campaigns, and other social pressures allow us to "Hold each other accountable" in the same way that a dissertation writing group might alter behavior by forcing authors to set aside a particular block of time to do writing, with peers in the room holding each other accountable for productivity.

The second reason why I consider social pressure a potentially useful motivator of accuracy motivations is that it has very auspicious implications for real life public competence. In the same way that the recent pandemic saw social sanctions against avoiding mask wearing, proper social distancing, and vaccination (In addition to the real legal restrictions,) social influence has been shown to be effective in changing behavior from more cynically self-interested, to more societally desirable.

This theory; that social pressure can be used proactively, to improve democracy, has several components, and several asterisks. Below I present the following four theoretical assertions, with expanded definitions and explanations beyond...

 Social pressure (Of several varieties) can be used to activate accuracy motivations, improving respondent's prioritization of getting the facts as clearly and accurately as possible.

Social pressure has been shown to be effective in improving voter turnout, and there is no clear theoretical reason why similar social pressure to prioritize accuracy on matters of political knowledge would not also improve things. In this dissertation, I investigate a few types of social pressure to gauge their effectiveness in promoting accuracy. In-group conformity, out-group disassociation, and explicit positive and negative reinforcement are all investigated as social pressure treatments.

2) These socially induced accuracy motivations will be more successful in creating accurate answers when the questions have weaker (Or no) directional preferences.

Not all facts and matters of accuracy are as political as others, and not all facts have been politicized. Directional reasoning goals will vary in strength according to the salience of the issue or matter to the individual, the strength of their prior convictions, and how politicized the matter of fact actually is. Social pressure will be more effective in motivating accuracy on matters where directional preferences are weak or nonexistent.

Getting a subject to investigate in an even-handed manner the amount of rainfall three years prior is much less likely to be associated with strong directional preferences than the matter of how many AR-15 style assault weapons are used in mass shootings.

#### *3)* Negative social pressure will be more effective than positive in motivating accuracy.

The important Gerber & Green study on voter turnout in addition to much of the following literature by Panagopoulos starts to distinguish between different types of social pressure, and evaluating their relative effectiveness in engaging voters. Many of the existing findings focus on negative social sanctions- having one's failings broadcast to the public or being shamed for their lack of engaging in prosocial behavior.

I posit that when it comes to motivating accuracy, people will be more effectively swayed by negative social sanctions than positive social reinforcement. I believe that most individuals have a greater fear of being looked upon harshly than their motivation to stand above the rest and be praised.

Part of this is simply because the act of political knowledge is considered something of a basic social expectation. Knowing your representative is typically not met with a "Good for you" response, as it is considered to be something that most anyone should know, especially if they have the right to vote. Whether the American public's performance matches that expectation is clearly in doubt, but nevertheless, the fact that political knowledge and getting relatively basic questions on politics and policy correctly is 'expected,' my theory is that negative reinforcement will be more effective in yielding better outcomes.

# *4) In-group conformity will be more important than out-group disassociation in motivating accuracy.*

Karyn Amira, Jennifer Wright, and Daniela Goya-Tocchetto recently found in a study over three survey experiments that when given an opportunity to either help their partisan ingroup or harm a partisan out-group, they will usually choose the former. If it is true that people would rather choose to help and in group, it may also be true that they will opt to promote their own in-group by improving their accuracy and complying with the pressure with more gumption than they shun the opposing partisan outgroup.

That said, affective polarization is strong, and many scholars have found that the negative affectation associated with the opposing political party is strong. Rathje et al. (2021) found that social media users are far more likely to share negative stories from political out-

groups. Partisan sorting has also severely decreased the level of affect towards partisan outgroups (Robison & Moskowitz 2019)

5) Contextual factors, such as satisfying respondent's directional preferences via noninaccuracy-based justifications and expressions, can help improve respondent's receptiveness to accuracy motivations.

An increasing amount of scholarly attention is being paid to the contextual factors which can impact the effectiveness of accuracy motivations in combating inaccuracies or misperceptions. For most political stances and issue positions, there is a myriad of potential justifications that can be used to support or oppose a stance. My theoretical suggestion is that if the public is given information that will work to satisfy their directional preferences (Based in fact or non-falsifiable opinion,) they will feel less dependent on inaccuracy-laden justifications for their opinions, and therefore be more open to dropping absolute falsehoods from their information disseminating process. In colloquial terms, if you give someone who dislikes Barack Obama 10 other reasons to dislike him, accuracy motivations will be more successful in eliminating truly inaccurate assertions about him or his presidency, such as the birther movement.

My theory runs directly against the findings of Pietryka, who above argued that inducing accuracy motivations can actually harm people by exposing them to more information, thus leading them to sometimes pick even worse heuristics to believe. If this is the case, can we really say that these individuals were motivated more by accuracy? Accuracy motivations imply that the person holding them cares slightly more than they otherwise would about the credibility and verifiability of a particular anecdote. A truly accuracy motivated individual should therefore be more scrupulous, not less, of information, even if they expose themselves to more.<sup>10</sup>

It is important to note that social pressure is not inherently pro-accuracy. In the following studies, I use social pressure directly with the goal of increasing accuracy motivations, but we should understand that social pressure can also be effective in promoting less desirable behavior. As noted previously, the public often engages in directional behavior due to social pressures and desire to fit in with their political in-group. Previous research has documented a strong link between group membership and belief in conspiracy theories, insofar as that group has a vested interest in belief about something not supported by the evidence (van Prooijen 2018.)

If this is true, some inaccuracies may actually be spurred on by social pressure. As such, the theory is not that social pressure is inherently pro-desirable behavior, simply that it can be used as such. Peer pressure to start smoking cigarettes as a child is distinct from peer pressure to study for a test, though they both may have an effect (Bountress 2016.). I make no claim to have all the answers, or that the public needs to be 'parented,' or steered in the correct direction on all issues. But to the degree which we consider certain types of behavior normatively preferable, such as actually going to vote or being well educated in politics, pressure towards accuracy can be considered benevolent.<sup>11</sup>

## A short normative discussion

<sup>&</sup>lt;sup>10</sup> I also have some qualms with the experimental design of the piece in question. The use of credits to proxy expenditure of time to access information on candidates positions is not a perfect analogy for the information acquisition process.

<sup>&</sup>lt;sup>11</sup> This is not unlike the liberal arts mission- creating a well educated, well rounded citizen with the knowledge needed to participate.

One of the driving purposes of this study is the suggestion that accuracy motivations are superior normatively to directional motivations. While people will always have preferences, analytical thinking will always yield better results in a democratic system. If a person cannot objectively judge the performance of a given elected official, either because they want to like or dislike them, their quality of life is diminished by continuing to keep that official in power.

Pietryka (2016) argued that in situations where the stakes of government intervention in our day to day lives increase, such as a state of emergency, people should naturally gravitate more towards accuracy motivations. But observation of the public's reaction to elements of the COVID-19 pandemic do not lend favorably to this argument. Significant portions of the population still believe that vaccines are incredibly unsafe, that COVID had little to no real fatalities, and other views simply not in alignment with the best available evidence.

If the public is unable on its own to objectively evaluate government and its functions, social pressure remains one of the only ways to encourage accuracy without some form of special interest or potential rent-collecting bias into the equation. Whether it is Orwell's ministry of truth, headed by the government, or a presentation of industry favorable research funded by the same financial interests set to benefit from the expansion of said industry, collected interests that claim to have a say in the 'truth' can also often profit from falsehoods, or at the very least directionally motivated 'selection' of data to serve their purpose.

For this reason, business or government run campaigns to encourage accuracy motivations will always be subject to problems. A new paper mill likely doesn't want you to know the exact amount of particles of pollution are added to the water supply, no more than a drug company wants to reveal all its potential side effects. While there exists large swaths of regulatory policies and agencies for a variety of these kinds of issues, I argue normatively the ability to have natural civilian oversight is also important. Especially in an era when technology is changing rapidly, regulations will not always be able to keep in time.<sup>12</sup>

Global warming is one of the more important examples of this phenomenon. Exposure to biased news media pitching a directional agenda is directly linked to citizens holding misperceptions or false beliefs about climate change- notably, that it is not occurring (Garrett et al 2016.)

Therefore social pressure, insofar as it emerges organically such as a civic culture, can be a method of promoting accuracy without the same concerns of rent-seeking. To the degree that we can agree culturally that political knowledge and accuracy motivations are desirable for politics, social pressure has the potential to unlock higher levels of voter literacy, in the same way that it can encourage voter turnout.

#### Not a Panacea...

To be clear, this is not to suggest that all social pressure is geared towards accuracy motivations. One could make a very convincing case that directionally motivated reasoning also has some basis in social pressure. An individual visiting a national convention for either Democrats or Republicans in the United States could find themselves pressured to believe all sorts of inaccurate or misleading notions of a directional nature- such as that the 2020 election was 'stolen' or that the January 6<sup>th</sup> riots at the US capital were committed not by right-wing extremists, but antifa. People may feel obligated to subscribe to conspiracy theories and inaccuracies simply because those around them encourage it.

<sup>&</sup>lt;sup>12</sup> The rise of the 3D printed "Giga Gun" is an example of how technology might be used to shirk gun regulations

Furthermore, while much of the focus of the upcoming studies involve trying to motivate people to steer away from inaccuracies (And whether justifications for political stances based in inaccurate information can be reduced,) there are simply some stances that are probably irredeemable. That a significant portion of the American public believes without evidence that the 2020 election was stolen is so far removed from the best available evidence that it seems almost impossible to overcome. Accuracy motivations can help, but some political discourse has become so removed from reality (And elite figures pushing these narratives are not being at all helpful) that combating them has become impossible.

As a consequence of this, I do not claim that politically oriented social interaction, and the underlying pressures therein, are inherently accuracy-rewarding. I am approaching this study with a pro-Democracy normative bias, and as such am arguing about the potential for pro-accuracy social motivations. What this means for the practical implications of these studies is that, if my theory is correct that accuracy-promoting social pressure can be effective, it's real-world influence will be contingent upon the intentions of the party inducing the pressure.<sup>13</sup>

In the following chapters, I present observational data, as well as data from three original experiments. Chapter 2 tests an experiment with in-group and out-group pressure. Chapter 3 is an original experiment testing the effects of reward and patriotism-based pressure on accuracy motivations, as well as evaluating the difference in effects on politically charges versus politically neutral facts. Chapter 4 is an experimental test of a contextual factor- adding directionally satisfying justifications for positions. Chapter 5 is a short discussion of the total

<sup>&</sup>lt;sup>13</sup> As an academic, inducing accuracy socially in the vacuum of experiments can be useful for causal inference. That said, as mentioned previously, governments, businesses, and groups with any sort of special interest cannot always be expected to act out of pure democratic benevolence. There will always be something to be gained by keeping the voting population either misguided or in the dark about certain issues.

findings for the theory, as well as potential avenues for new research and ways of augmenting the existing project.

# **Chapter 2**

# **In-group**, out-group:

# **Explicit Social Pressure Treatments Encouraging Accuracy**

As illustrated in the previous chapter, there are a wide variety of social influences and pressures that influence the behavior of individuals both in a political and apolitical contexts. As suggested in the theory, people are truly social animals. To the degree that we care how we appear to those around us, behavior can be influenced by social cues, others setting trends for behaviors, and a myriad of other examples. While some preliminary studies attempting to induce accuracy have met promising results, my contribution herein is to evaluate the effects of targeted social pressure on accuracy.

While I have discussed at length the importance of social factors in human economic and political behavior, and several different types of social pressure, in order to properly test the

theory that the public can be motivated to care more about political accuracy requires further refinement of terms. For the first empirical test of my theory, the focus will be on 'group' identity. Group identity has been widely studied in both psychology and political science, and multiple scholarly lines of research have analyzed how group membership and group identify can act as influences in human behavior and politics (Miller et al 1981, Greene 1999)

People will frequently adjust their behavior to alter their relationships with a given group. If you take the example of a college student joining a Greek organization, in many cases the student might alter their manner of dress, speech, behavior, or even food consumption in order to 'fit in' with an in-group that they want to be a member of, and whose actions and behaviors are seen as preferable to the alternative. Once a full-fledged and involved member of the group, the individual might also be greater motivated to achieve a higher GPA, attend more classes, or involve themselves in charity work, a form of in-group promotion to make their group look better in the eyes of others and themselves. So in-group conformity, and in-group promotion are both important influences.

If we assume this Greek organization has a rival, they can represent a less desirable outgroup. Out-groups can have their dress, behavior, actions and style shunned as a form of disassociation with them by the college student. Furthermore, if the out-group is strongly disliked, the student may even act in antagonistic ways towards them, such.

If we know that group pressure can alter the motivations of an individual, the question then becomes- can we use social pressure as a weapon against directionally motivated reasoning? And in this context, can we motivate respondents to better focus on accuracy motivations by convincing them that it is either a) in the interests of their partisan in-group or b) to differentiate themselves from a dislike partisan out-group? Theoretically, we can imagine that most citizens in the heavily polarized American public believe that the opposing political party has a much bigger problem when it comes to political knowledge.

My theory is that people *can* be successfully pressured to better value accuracy in responses, though only to a certain degree. Accuracy motivations, even if experimentally induced, are always going to be up against the odds when it comes to directionally motivated reasoning. For most people, reaching a conclusion with political information that is comfortable for their priors is a massive force in information acquisition, processing, and memory. So, even if accuracy is incentivized, it may not be enough to push it over the edge, so to speak. For this reason, I expect better results on questions that are somewhat neutral, than on those that have strong normative implications for respondents.

#### Methods

To test my theory and hypothesis for this first experiment, I recruited a sample for a survey experiment via the company LUCID holdings LLC. LUCID is a UK based survey company which purports to provide affordable representative surveys for both company and academic research. The company provides a variety of services despite being only ten years old and is has seen increased use in academic studies for being a more affordable 'representative' service than YouGov or other competitors. LUCID has been the choice of company for many recent experiments in social science, and scholars have recently used Lucid for the purpose of mass replicating experiments conducted during COVID-19 to moderate success. (Peyton 2020) The final N for the study was 823 respondents. In keeping with the theory of partisan group identity, the sample was split into two groups pre-treatment. Worth noting- LUCID was also the service used for the Brexit related Survey data and its corresponding arguments.

In order to make sure that participants were focused on the survey, not only was an attention check built in (Asking respondents to pick the color 'blue' from a list of provided colors,) they were also forced to remain on the page with the social pressure treatment for at least a minute. This lengthens the duration of the survey, but ideally forces the respondents to actually stop and read the information before advancing. Furthermore, in this and all following experiments, subjects were required to answer every question. No omissions were permitted in order to advance.

People who identified as Democratic, or "Lean Democratic" were placed into their own in- Group, and Republicans and Republican-leaners in the other. This also leaves open the possibility of another investigation into the importance of salience of political identity into group pressure analysis. I selected partisanship as it has a recent history of being an incredibly salient group identity, especially during an era of polarization. (Iyengar & Krupenkin 2018) While previous research has indicated that alternative group identities can influence partisanship (Green 1999) more modern work is beginning to indicate that partisanship can actually have downhill effects on other behaviors, and is often seen as an 'unmoved mover' of preferences. (Greene 2004) After partisan sorting, there were 482 Democratic respondents and 341 Republican respondents.

Once the sample was divided into Republican and Democratic groups, each was randomly assigned to either one of two treatments, or a control condition. The advantage to randomization in experiments is that, when successful, it allows to isolate on the single variable of interest and avoid problems of endogeneity. (Jacobs 2019, Druckman et al 2006) There were two distinct treatments for each partisan category, both an in-group and an out-group treatment. As previously discussed, sociological research has shown both that people tend to alter their behavior to better align with their perceived in group, as well as make choices to try to make their own group look better. Other findings have shown that out-group pressure, or pressure to avoid association with a less preferred group, also exist. (Lam & Seaton 2016, De Dreu et al. 2016) In a political identity sense, we could imagine this as a registered Republican avoiding products they see as Democratic, or vice versa. The recent partisan split over Goya, a food company popular for its beans, had its market heavily altered after it's CEO publicly endorsed then-president Donald Trump, a Republican. This is just one contemporary example of how association of a product with an out-group can alter consumer preferences, and with the ever growing rise in negative affect towards the opposing political party in America (Iyengar et al. 2018) it follows that Democrats and Democratic-leaners, as well as Republicans and Republicanleaners would want to differentiate themselves from their less preferred out-group perhaps more than at any other time in recent history.

Based on group theory, my hypotheses are as follows...

*Hypothesis 1A- In-group social pressure will increase accuracy on political knowledge questions.* 

*Hypothesis 1B- Outgroup social pressure will increase accuracy on political knowledge questions.* 

Respondents should, if group pressure theory holds in this context, care about the perception of their own group, and aspire to distance themselves from a significant out-group. With partisanship playing such a major role in politics, and people increasingly viewing their political party as a major identity, respondents should emerge from the treatments increasingly motivated to get questions correctly, rather than not take the time to research.

*Hypothesis* 2- *Inaccuracies steeped in directionally motivated reasoning will be more resistant to accuracy motivations.* 

Work by Anson (2016) demonstrated that partisans are more likely to resist factual information that conflicts with their priors. Gerber & Huber (2010) found that partisans are more likely to give credit to their own party for an economic upswing. Bartels (2002) demonstrated that partisanship continually influences the way Americans see and interpret new political information and events. For this reason, we should expect that any studies of political inaccuracies, and attempted corrections should account for the partisan lens in which individuals evaluate information. True facts which paint any political party in a positive or negative light will be taken differently by citizens. For this reason, I expect that political questions that have the potential to paint a political party (Or political figure associated with a party) in a positive or negative light will be much less likely to be corrected, even in the presence of greater accuracy motivations.

I draw no strong theoretical proposition for whether in-group conformity, or out-group disassociation will be a more powerful social influence. Political affect for those of a different party are currently extremely poor, as negative polarization has been taking place over the past twenty years. Nevertheless, people may still feel strong in-group ties to their own political party, to go along with negative affect toward the others. Unlike a future experiment, neither of these social pressure treatments are explicit- Green's and many other studies relied on the idea of the voter names being made public to find the strongest effects, while these treatments are meant to be implicit.

#### The Treatments- In Group

There are a variety of ways in which in group pressure can alter individual behavior. Two of the most significant are:

- Trying to make one's in group look better compared to others groups, and disassociate with actions considered an undesirable "out-group" behavior.
- Changing behavior to better conform to the individual's perception of what the other members of the group tend to do.

In the case of in-group pressure for this experiment, I elected to choose the motivation to make one's group look better, in the form of a fabricated political knowledge test. The <u>in-group</u> treatment wording was "*As you may know, much of the public does not know much about politics. Many people even believe in falsehoods and answer incorrectly on political facts. Recently, the* (**Respondents party**) has been making a concerted effort to have its members and supporters do better on political knowledge tests, and be more accurate when answering questions on politics and current events. The following questions will be an effort to see if this campaign to improve (Respondent's party) supporter knowledge has been successful." Whichever political party was the chosen preferred one by the respondents was what appeared as the party in question for the treatment.

The theory here is that if respondents to the survey believe the political knowledge of their political party is being evaluated, they will take greater time and energy researching the provided political questions in an effort to make their own preferred party look better. While this experiment was not conducted in a lab, and so I was not able to track the information seeking process of the respondents, the survey was administered online, and with no hard time limit. Consequently, those sufficiently motivated to pursue accuracy in political questions would be capable of doing so, with the availability of modern search engines.

The out-group treatment focused more heavily on disassociation with a less preferred group. As mentioned earlier, individuals often feel pressure to avoid behavior that is associated with a less preferred out-group. (Kalkhoff & Barnum 2000) In this case, I highlighted political inaccuracy in the opposing political party with a treatment worded as follows: "*As you may know, much of the public does not know much about politics. Many people even believe in falsehoods and answer incorrectly on political facts. In particular, we have found that members and supporters of the (Not Respondents) Party are particularly likely to answer inaccurately on political knowledge questions, and get large numbers of questions on factual matters wrong. This study will attempt to identify if this trend remains." This treatment offers a slightly different type of group pressure, as theoretically some of the respondents would be motivated to seek accuracy on their political questions as a means of disassociating themselves with the less preferred political party, the behavior in this case is represented by inaccuracies on political knowledge questions.* 

For the political knowledge test, I used two distinct sets of political questions, with important differences in the kinds of questions posed. Many political knowledge batteries have been challenges for containing obscure statistical values, of which the general public has little frame of reference from which to formulate an answer (Bullock et al 2015) To avoid this problem, the questions were kept relatively simple, with a multiple choice format to allow for simpler cognitive processing and answers. The political knowledge questions are used as a dependent variable, with the expectation that social pressure for accuracy will increase the percentage of respondents who answered each question correctly.

But as mentioned earlier, not all political inaccuracies are the same. Previous work on the causes of directionally motivated reasoning and inaccuracy have indicated that political questions that are steeped in ideological biases are particularly difficult to correct. For this reason, I filtered the political knowledge battery into two categories; partisan, and nonpartisan. The partisan category are questions (With right and wrong answers) that had partisan implications in their responses. These questions would require the respondent to overcome an internal bias (directionally motivated reasoning) in order to answer correctly, either by favoring a political figure that is associated with the other political party, or by casting a negative light on a more preferred political figure. The other category are so-called "neutral" political questions, in that they are political related questions that can measure accuracy, but do not require overcoming the same psychological biases in order to answer correctly. The list of DV questions in each category were as follows:

## **Partisan Dependent Variables**

- Under which president has the stock market grown over the full course of their presidency? (Both)
- Under which president has unemployment fallen, over the full course of their presidency?<sup>14</sup> (Both)
- Under which president has the national debt decreased over the course of their presidency? (Neither)

<sup>&</sup>lt;sup>14</sup> At the time this experiment was run, the COVID-19 pandemic and it's subsequent unemployment spike had not yet occurred, and therefore at the time unemployment had fallen under the Trump presidency.

 Under which president has the US government run a deficit, over each year of their presidency? (Both)

For each question, respondents were given one of four choices- Donald Trump, Barack Obama, neither, or both. These particular political figures were chosen to represent ideological biases because of their recent importance. Furthermore, they are the best-known member of their respective political parties. (Pew Research)

Because every one of these questions requires either acknowledging that something good happened under the opposing party's president, or that something bad happened under their preferred party's president, they all encounter directional motivations to at least some degree. A strong Democrat would have to overcome directional motivations to acknowledge that the stock market grew under President Trump, and a Republican to acknowledge that the same thing had happened under President Obama.

For that reason, I expect social pressure for accuracy to have its otherwise positive impact on question responses to be mitigated by these directional barriers and issue salience.

#### **Non-Partisan Dependent Variables**

- 1) What job or political office is held by Angela Merkel? (Chancellor/PM of Germany)
- 2) Who was Bill Clinton's Vice President? (Al Gore)
- What country did the US invade in 2001 in an effort to find Osama Bin Laden? (Afghanistan)
- 4) How many years per term does a United States Senator typically serve? (Six)

These two categories, partisan and nonpartisan, are not intended to be perfect. We could imagine that perhaps because Bill Clinton was a Democratic president, that there might be some ideological biases. In order to increase confidence in these questions, I pre-tested a large number of political questions on an undergraduate Introduction to Political Science course, asking the respondents to rank questions from partisan to nonpartisan. The four questions in the nonpartisan category were the questions (Out of ten) that scored the lowest among respondents in terms of how partisan they were.<sup>15</sup>

The sample of 823 respondents drew from a variety of demographic factors. Participants ranged in age from 18 to 86 years old. 413 of the respondents were Democrats, 299 were Republican, and 257 listed themselves as independents.

While the questions were all multiple choice, answers were recoded into a binary variable such that a correct answer is "1," and any other incorrect answer is a "0". This allows measurement of the average treatment effects on the likelihood of a correct answer on each question. The argument could be made that some wrong answers on the questions could be considered "better" or closer to accurate than others, but for the purposes of this study, only fully accurate answers were counted as correct.

In other words, this experiment is testing the likelihood of a correctly answered question via exposure to the experimental social pressure treatments. For this experiment, I informed respondents that they were permitted to use outside sources to identify the correct answers to the questions if they desired. This information was given to both treatment and control groups. The theoretical suggestion here is that if the treatments are effective in activating accuracy

<sup>&</sup>lt;sup>15</sup> Of these, the questions on Representatives and Senators were the least partisan, with an average rating of .2 out of 5 from the respondents.

motivations, the subjects will not only 1) be more likely to stop and look up the information before responding and 2) also greater prioritize reliable information sources, since they are theoretically driven by a greater desire to answer the question accurately vs directionally.

Participants were not browser locked for this survey, and so were free to choose whatever their preferred medium for seeking information. All told, I had two measurements for accuracy motivations in this study. First, the proportion of correct responses to the question by group. Second, I also measured the duration of time spent on the political knowledge question page to see if there was a difference in the amount of time spent responding to the fact-based questions. If treatment groups were encouraged to seek outside sources, it follows that they would spend a greater duration answering the questions than someone simply answering with untreated motivations.

## Figure 1.1- Treatment Effects on Nonpartisan Questions (Pooled)

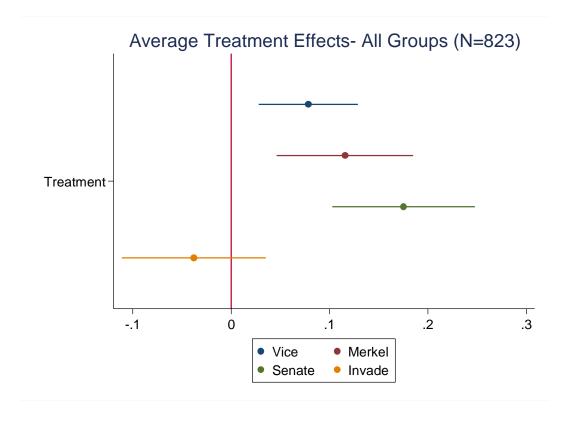


 Table 1.1- Pooled Treatment Effects (N-823)

	Vice b/se	Merkel b/se	Senate b/se	Invade b/se
Treatment	0.078**	0.116**	0.175***	-0.038
	(0.03)	(0.04)	(0.04)	(0.04)
constant	0.808***	0.382***	0.375***	0.545***
	(0.02)	(0.03)	(0.03)	(0.03)
R-sqr	0.011	0.013	0.027	0.001
dfres	820.000	820.000	818.000	820.000
BIC	590.226	1116.971	1181.272	1204.341

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Being exposed to either treatment group was associated with changes of likelihood of a correct response in three of the four questions. A coefficient of .116 for knowledge of Angela Merkel, for example, means that a respondent exposed to one of the treatment groups was 11.6 percent more likely to get Merkel's role in government in Germany correct. Treated respondents

were 17.5 percent more likely to correctly identify a Senator as serving six year terms, and 8 percent more likely to identify Al Gore as Clinton's VP.

When all of the treatment groups; in-group and outgroup for both Republican and Democratic respondents are pooled into one group, the treatment effects for nonpartisan political questions are quite large for three of the four questions. Those exposed to social pressure were substantially more likely to correctly identify Al Gore as Bill Clinton's vice president (p=.002), Angela Merkel as the Prime Minister of Germany (p=.001), and 6 years as the term for a Senator (p=.000). Interestingly, the question about the invasion of Afghanistan saw no improvement, with just as many people incorrectly choosing Iraq, Pakistan, and Iran over the correct choice, Afghanistan. (p=.309)

But this pooled data tells us little except that, in the general sense, social pressure seems to have improved accuracy among respondents, at least on some questions. In order to test the theory about in-group and out-group pressure specifically, the data was split to identify the effects of the in group and out group treatments independently of one another. Republicans and Democratic respondents were pooled together, because there is nothing presently in my theory about between-party differences in the effectiveness of social pressure.

For those respondents exposed to the in-group treatment, in which they were told that the political knowledge of their party was being tested, the results were strikingly similar to the entire pooled group. In-group pressure did appear to increase the proportion of correct responses to nonpartisan political knowledge questions. The effects appear somewhat smaller, though this is likely just a function of the smaller statistical power of the divided sample. Once again, the one area which saw no improvement was correctly identifying Afghanistan.

FIGURE 1.2

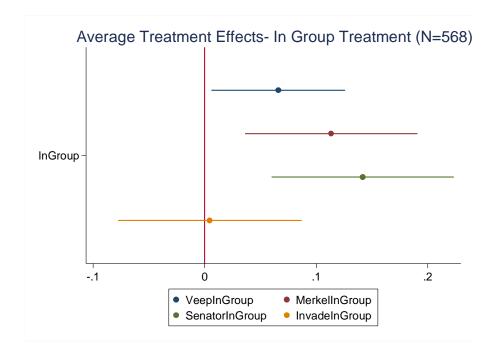
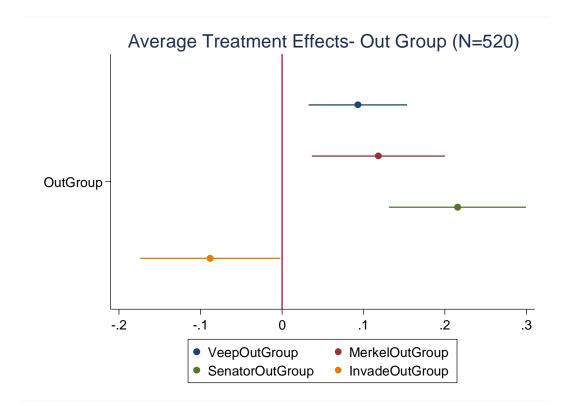


Table 1.2- Comparison of Means, In Group

In Group Treatment	Control	Treatment
Merkel	33.46	44.04**
Vice President	80.83	87.42*
Senator	37.50	51.66**
Invasion	54.51	54.97

I isolated the out-group treatment to evaluate its effects, which were nearly identical in direction to the in-group treatments but were statistically more powerful. To be clear, none of the differences in means between the average treatment effects were statistically different from each

other, but across this small sample we find that in-group pressure was associated with only increased probabilities of 6.6 percent, 11.3 percent, and 14.2 percent across the Merkel, Senator term, and Afghanistan invasion questions, while the out-group treatment is associated with modestly larger percentages of 9.3, 11.8, and 21.6 respectively. Strangely, while the out-group treatment was slightly more effective in improving accuracy on the first three questions, it pushed the Afghanistan question in the incorrect direction. That said, the difference in effect sizes between the two treatments was not in itself statistically significant, (P=.19) despite this being the largest statistical variation between the two treatment groups.



# FIGURE 1.3

Out Group Treatment	Control	Treatment
Merkel	33.46	47.64**
Vice President	80.83	90.16**
Senator	37.50	59.06**
Invasion	54.51	45.67*

Table 1.3- Comparison of Means, Out Group

As of yet, I have not settled on a solid reason why the question about the 2001 invasion of Afghanistan was so challenging to respondents. If they were motivated by accuracy (As seems to be indicated by the improvements on the other three questions) and were not running into problems of motivated reasoning related to partisanship (It was considered a politically neutral question in the pretest) then why did these motivations fail to improve the accuracy of the responses? Perhaps the question was more challenging to find an immediate answer online, or perhaps people struggled with the use of the 2001 date (The US invaded Iraq in 2002, which is very close) In either event, it Is worth investigating if certain different types of politically neutral questions are more resistant to effort to improve accuracy from test subjects.

#### **Results- Partisan Questions**

My theory posits that accuracy motivations, even when engaged, will be less effective in actually yielding correct results in cases where strong preexisting directional preferences exist. As expected, questions that were more partisan saw much less success in terms of improving respondent accuracy. There was not significant movement in most of the categories, except a marginal improvement in those that answered that both Presidents had presided over economic growth correctly.

	I	Average Tre	atment I	Effects- Poo	led (N=8	22)
Treatment-				•		-
	1	05	0 • Growth • Deficit	.05 n • Debt • Unemp	.1	.15

FIGURE 1.4
------------

Table 1.4- In-Group Effects on Partisan Questions

In Group Treatment	Control	Treatment
Debt	33.83	33.11
Unemployment	24.81	20.53
Deficit	27.82	28.15
Growth	14.29	17.88

Out Group Treatment	Control	Treatment
Debt	33.83	37.4
Unemployment	24.81	24.02
Deficit	27.82	38.19*
Growth	14.29	24.8*

Table 1.5- Out-Group Effects on Partisan Questions

Despite the fact that accuracy motivations were relatively unsuccessful in increasing the number of partisan questions answered correctly, there were some interesting takeaways from this particular section of the experiment. For each question, the correct answer was either both Barack Obama and Donald Trump (Growth, unemployment and deficit) or neither Obama nor Trump (National debt shrinking). Naturally, partisans were quite likely to give credit to the President of their own party on the positive factors and blamed the other party's president for the negative indicators, in keeping with theories of partisanship perceptions of economic performance. However, both among the treatment and control groups, respondents were far more likely to get the completely correct answer (i.e. both or neither) than they were to get the completely incorrect answer. This may be an indication either that respondents knew the correct answer and instead used the question as a way to signal their support for one man over the other, or that in seeking information to answer the question, they found biased or incomplete sources that gave only one of the two presidents credit. In either event, it's clear that this degree of social pressure was not enough to overwhelm directionally motivated reasoning, at least not on the more politically charged questions.

#### **Results- Information Seeking**

Because this experiment induced accuracy with the hope that respondents would reach outside of the actual text of the survey to look up results, for this experiment I used the total duration of the time respondents spent on the page as a proxy variable for information seeking. While we identified that encouraging accuracy did have some measurable effects on correct answers, it also follows that those exposed to a social pressure treatment should have spent more time and effort accessing information to help aid them in answering the questions correctly. In keeping with this theory, my expectation was that those respondents who were spurred on to care more about getting questions correctly would spend longer on the page, as they either sought the information from their computer, phone, or via any physical medium that might be present where they were taking the survey.

For this experiment, the information seeking process was intended to be open-ended, with respondents not given direct links. In a later experiment, hyperlinks with factual information were included, but for this project I wanted to give respondents the opportunity to look things up for themselves, via whatever source they considered to be a good one in answering the question.

 TABLE 1.6- Duration on Page (In mean seconds)

Control	In-Group	Out-Group
45.3	52.8**	49.2*

Consistent with my theory that accuracy motivated individuals would take more time to look up information, those in treatment groups did spend longer on the page. In order to properly analyze the results, I had to drop several outliers from the analysis. Of the 823 respondents, 17 individuals spent more than one hour on the accuracy page. Because the survey experiment did not have a time limit, I suspect that a number of individuals stopped partway through the survey, and then returned to it at a later date.

The results are consistent with my theory, but it should be noted that this is very much an imperfect dependent variable. It cannot be assumed that time spent accessing information was necessarily done so only with accuracy motivations in mind. To offer more robust testing of the actual information access, for future experiments I will include more explicit measures of fact checking.

#### **Discussion and Future Experiments**

While this experiment tested both in-group and out-group pressure, in a future experiment I may want to standardize the within-group motivation between treatment groups. Additionally, other future experiments would benefit from more standardized dependent variables, that is, political knowledge questions that are all relatively homogenous in terms of difficulty, and ease of access to information. It is also worth consideration what others sorts of social pressure might be useful in motivating accuracy. While in this experiment I focused largely on group pressure, there are a wide variety of other types of social pressure that have already been shown in some cases to alter behavior.

Because this experiment was conducted via lucid over the internet, I was not able to identify what websites or sources respondents used upon attempting to answer the questions. That leaves a gray area wherein participants may have been motivated to search for information, and still came to an inaccurate answer, and there is no good way to get at the 'how' this occurred, be it biased sources, incomplete information, or intentional selection of only confirmatory evidence (Bringing us back to the problem of directionally motivated reasoning trumping accuracy motivations.) While I was able to measure the amount of time spent answering the questions which I used as a proxy variable for the amount of research done, online survey takers can be notoriously flakey, where visits to the restroom or even taking a break halfway through the survey can be very disruptive to that data.

As expected, it was more difficult to move respondent's views on issues with stronger partisan implications. Under what circumstances people are willing to be flexible on more partisan based inaccuracies; such as immigrant crime, the 2020 election, or others, deserves greater study, and the later experiments in this dissertation attempt to do just that.

#### **Chapter 3- More Experimental Evidence & Contextual Level Factors:**

#### **Social Shaming and Rewards**

One of the more interesting findings from the previous experiment was the distinction in effectiveness of accuracy motivations in improving accuracy on questions without a serious directionally motivated reasoning component, versus those that did. As I discussed in the findings section of chapter four, both treatments to attempt to activate accuracy motivations were far more successful in improving accuracy among more politically 'neutral' questions, such as the number of representatives in the House of Representatives than they were in improving scores on questions with a more serious directional component.

On the one hand, the previous results were promising in a couple ways. First, there are some positive normative implications for improving accuracy even on 'neutral' mistakes or general political ignorance.

But one of the primary motivating factors for this dissertation was to attempt to mitigate directionally motivated reasoning, and its skewing effect on the information seeking process in terms of directional preferences. At the very least, my hope was to lower its overall degree of important in the assessment and answers of political knowledge questions *relative* to accuracy motivations.<sup>16</sup> Most of the evidence from chapter four seemed to indicate that raising accuracy motivations mostly improved response accuracy in instances in which little, if any, directional motivations are present.

<sup>&</sup>lt;sup>16</sup> Few, if any of us can be seen as truly neutral arbitrators of fact. To the degree that this is a spectrum from directional to accuracy, the hope is simply to make accuracy more important, not to try to remove every subject's directional biases.

Additionally, the previous experiment focused heavily on two specific types of social pressure. In-group conformity, and out-group disassociation were both found to be important in moving the needle on accuracy motivations, but a variety of other types of treatments for social pressure remain. In fact, presenting treatments as "My party good, other party bad" as a means of trying to improve accuracy might be considered a good-with-bad scenario, potentially worsening affective polarization or increasing notions of a false consensus in order to try to pitch accuracy as a "Democratic" or "Republican" phenomenon. Certainly, respondents from the previous experiment who were motivated to seek correct information based on wanting to make their own party look better, or the other worse, might emerge from said applied pressure feeling better about their own group, and thinking less of the other, which could have negative consequences for political discourse between-groups.

For that reason, in this experiment I elected to test four hypotheses related to my theory about social pressure and accuracy motivations. I also added an additional measurement for accuracy motivations. After every section asking questions about a topic, I provided hyperlinks at the bottom of the page, and measure how many were clicked during a response. Every hyperlink led to a news site (See appendixes) that if read would provide the respondent with the factual information that would help them answer the question correctly.

The treatments for the first level of this experiment remain relatively similar to those of experiment 1, though I make some adjustments in terms of the types of social pressure.

*Hypothesis 1- Subjects exposed to a social pressure treatment promoting accuracy motivations will do better on political knowledge questions.*  Because previous studies (Panagopolous 2016,) found that positive social pressure was somewhat less effective than negative social pressure (Green et al 2010) in improving voter turnout, I suspect that the shame-based social pressure treatment will be more influential than the reward based.

*Hypothesis* 2-*Treatment subjects will be more likely to click on the provided links to answer their questions.* 

For this experiment I also included a downstream experiment for the purposes of testing a contextual factor- whether satisfying directional preferences mitigates the resistance of a motivated reasoner to newly presented factual information that conflicts with their priors.

#### Methods

For this experiment, I recruited a sample of 865 participants via Amazon's Mechanical Turk. Henceforth "MTurk," Mechanical Turk is a platform meant to bring together recruiters (In this case, a researcher) and workers (In this case, experimental participants.) These workers took a survey that lasted an average of six minutes and were compensated a dollar each for their participation.<sup>17</sup> This experiment took place on March 2<sup>nd</sup>, 2022 and was fully approved by the Syracuse University IRB for an expedited review.

In order to ensure proper attention was paid to the experiment, and attempting to avoid users simply randomly clicking through the survey, two attention checks were added. Those who failed either check ended up dropped from the sample and their responses were not recorded. All told, only 119 participants failed an attention check, a much lower proportion than

<sup>&</sup>lt;sup>17</sup> This comes to an average of over 11 dollars an hour, considered by this researcher to be an ethical wage for work that can be conducted anywhere.

in the previous LUCID studies. As a drawback, unlike the previous experiment, this experiment has no claim to be nationally representative. Experiments and their consequent data can still be analyzed with a 'convenience sample,' because the randomization of an experiment controls for any potential omitted variable bias/endogeneity. That said, this data cannot be used as observational for the purposes of regressions or other non-experimental analysis, and so this chapter will focus primarily on the two embedded experiments, and not attempt to draw analysis from pre-treatment questions.

The attention checks were presented first after answering the demographic data, and then again once more in between the first and second experimental breaks. Respondents were asked first whether they remembered the purpose of the study, with options for 1) A survey on political beliefs, 2) Their "Perfect Sunday" or 3) Trends in pop culture. Respondents who were deemed to be clicking through the survey without reading it were dropped.

All respondents were given a consent form approving their participation in the study and explaining that its purpose was to gauge public opinion. They answered a battery of demographic questions, as well as a few questions about their political ideology and participation, for the purpose of later evaluating if any heterogeneous effect among groups exist. All of these questions were administered before treatments, and in random order. Respondents were later debriefed at the end of the experiment as to the full purpose of the study, which was not revealed to them in the consent form so as to not give away anything about the nature of the treatments and corrupt the study.

The sample was randomly broken into three groups for the first layer of the experimenttesting two distinct social pressure treatments against a one control group. Unlike the previous experiment, which focused on in-group affiliation and out-group disassociation, this experiment probes social pressure in different ways.

The first social pressure treatment from this experiment was negative social pressure associated with shame. The treatment bemoaned the fact that Americans had really struggled with political knowledge, lagging behind their fellow citizens in France, England, and other European Countries, and that some of the following questions were meant to evaluate if this trend had continued.

The feeling of shame as a social pressure has been used before in experimental works in political science. In a 2007 experiment Costas Panagopoulos used both pride and shame as social manipulators, and found shame to be arguably the most influential. He defined his study of shame as

"To test whether voters are more effectively mobilized by appeals that engender feelings of pride (for reinforcing or perpetuating social and cultural values or norms) or shame (for violating social and cultural values or norms)."

The difference here between this treatment and Panagopoulos's is that the shame is felt on a societal level by the individual, for not living up to the expectations as Democratic citizens of being well-informed and reasonable *as a country*, rather than as an individual. The person does not feel as though they individually have violated a norm or expectation so much as they feel shame that their entire country has not been living up to this expectation. So while this treatment seeks to invoke the same feeling, it is meant to be felt at different levels. <sup>18</sup>

<sup>&</sup>lt;sup>18</sup> If an individual feels shame on a societal rather than personal level, one potential challenge is that they will buck-pass this problem. If they feel shame that the entire country is lacking in political knowledge, they can cast

The second social pressure treatment incorporated a slightly different type of negative social pressure- the <u>threat</u> of not having one's voice heard in the survey. In the opening consent form, participants were told that the purpose of the study was to gauge American public opinion on the issues and try to get a feel for what the American people thought about an issue. The experimental treatment took this a bit further, informing participants that this survey was actually also meant to try to figure out what the "knowledgeable" members of the public thought about political issues. Participants who were not deemed to be politically knowledgeable enough views would not be counted, and their answers to the next few questions, many of which were on high stakes political debates, would be discarded.

This experiment utilized a number of political issues both with and without strong directional components, much like experiment 1. Unlike experiment 1, for this study I allowed the participants themselves to code the knowledge questions as either important to their political opinions (Inferring some directional preferences associated with the topic) or less important to their political views (Weaker directional preferences.) This is a distinction from the first experiment, which used independent undergraduates to code the questions into partisan and nonpartisan.

Respondents were asked to rate each of the following questions after answering them (How important is your answer to this question to your political beliefs?) on a scale from 1 to 10. I coded questions that had an average score of less than 3 as neutral, questions which averages from 3.1 to 6 as 'somewhat important' and averages from 6.1 to 10 as 'Very important.'<sup>19</sup>

responsibility for these failings onto other people. This is one of the drawbacks to making shame more general for this treatment, is that it may lead to less powerful results.

<sup>&</sup>lt;sup>19</sup> I left it up to the respondents to determine their own definition of what "Matter to your political opinions" meant. While I considered elaborating to the note of "Does this question matter to the degree that realizing you

The neutral political knowledge questions were as follows:

How many years does a US Senator typically serve per term?
 Answers provided were 2, 4, 6 (Correct), and 8 years.

Which country did the US Invade in 2001 in an effort to find Osama Bin Laden?
 Possible answers were Afghanistan (Correct), Iraq, Iran, and Saudi Arabia

3) Who was Bill Clinton's Vice President?

Possible answers were John Kerry, Al Gore (Correct), Barack Obama, and Hillary Clinton

4) How many members of the House of Representatives are there? Possible answers were 50, 100, 435 (Correct), and 538.

Naturally, of the four coded as neutral, senator term length and members of the House were found to be the least important to respondent's politics. We could imagine an individual feeling very strongly that the term of a Senator is too long, or that the House of Representatives should be bigger or smaller (Bigger perhaps in the sense that they believe Puerto Rico should have a representative) but these are relatively niche beliefs that have minimal directional motivated reasoning implications. While it has been found that many Americans believed the war in Iraq (wrongly) to be about finding Osama Bin Laden (Gershkoff and Kushner 2005,) the 2001 time stamp should help alleviate any directional motivations.

Three questions ended up in the 'Somewhat important' category, representing some mild directional preferences.

5) What is the highest Federal income tax bracket in the US?

were wrong about it might make you think twice about your stance on the topic?" but this seemed to explicit and close to the treatment to be shown to the subjects.

Possible answers were 17%, 27%, 37% (Correct) and 47%

6) Is Ukraine a member of NATO- The North Atlantic Treaty Organization?Possible answers were No (Correct) and Yes.

7) Since 2015, have the number of refugees (asylum seekers) to the United States increased, decreased, or remained the same?

The top income tax bracket was surprisingly low in respondent's self-reported importance to politics. We can imagine a pro free-market citizen motivated to show that the wealthy pay a very high rate in taxes and that this should be reduced, or a more egalitarian minded respondent having directional preferences in terms of reporting a lower top tax bracket. In some cases, the top tax bracket for income might be influenced by some political advocates noting that other taxes, such as capital gains, are much lower (Whilst being disproportionately earnings from higher income individuals) leading for them to wrongfully conflate capital gains tax rates with income. Alternatively, a wealthy individual might overstate the tax rate, given that they are also likely to pay state and local taxes which increase the proportion removed from any given paycheck. This can lead to measured inaccurate responses from the public.

The questions that were coded by respondents as most important to their political views (6.1 and above) were:

8) Has the total number of undocumented immigrants being held in detention facilities at the US southern border, increased, decreased, or remained the same under President Joe Biden?

Possible Answers- Increased (Correct), Decreased, Remained the Same.

9) Do first-generation American Immigrant populations commit more or less crime than native-born Americans?

Possible answers- More, less (Correct), about the same

10) About how many estimated undocumented immigrants are there currently residing in the United States?

Possible Answers- 1 million, 5 million, 11 million (Correct), 20 million 30 million.

Some of these questions were selected intentionally with the goal of pushing back against topics where respondents might see substantial levels of directionally motivated reasoning in their priors and previous information exposure and dissemination. That border detentions have increased significantly under Biden is an accurate piece of information that could conflict with a pro-immigration individual's assessment of Biden's practices as president. The familiar immigrant crime question counteracts the public's tendency to overestimate immigrant danger (Caplan 2009) and the undocumented immigrant tally question addresses the overestimation of undocumented from anti-immigration and possible underestimation of pro-immigration respondents. Again, studies have shown that people often overestimate immigrant populations, and I believe undocumented will be no exception.<sup>20</sup>

One other significant way that this experiment differs from the prior chapter is that I provided a list of links within the survey which provided easy access to information needed to answer the questions. These links were to solid, reliable information, not cherry picked, which could help the respondents should they choose to take the time and click to find the information.

<sup>&</sup>lt;sup>20</sup> Because there is no perfect way to measure a population that quite literally has no documentation, the best available estimates have been used to determine the best response.

In order to not bias the results, information for all questions and their corresponding answers were included.

Based on the treatments, types of questions, and later justifications, I propose the following hypotheses for the first order of the experiment:

H1)- Participants exposed to social pressure for accuracy will score better on political knowledge questions than those in the control group.

H2)- Accuracy motivations will be more successful in yielding correct answers on issues considered less partisan, where fewer directional preferences lie.

H3)- Those exposed to social pressure for accuracy will be more likely to read the provided factual information.

## **Results- Social Pressure Treatments- Shame**

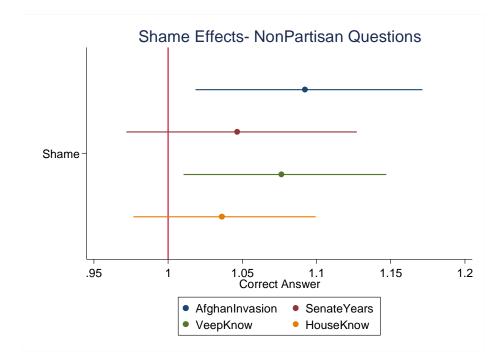
For the first treatment group of the experiment, subjects were exposed to a shame-based social pressure treatment. This treatment read as follows:

"In recent years, the United States public has come under criticism for having extremely low levels of knowledge on political issues compared to citizens of England, France, South Korea, and other democratic countries. The US public tends to get wrong answers on matters of simple political fact, and have been shown to be more easily manipulated by false information. The purpose of this survey is to evaluate whether this trend has continued." Unlike in-group and out-group treatments from the prior experiment, this treatment offers a glimpse into shaming the public for the purposes of accuracy motivations. Telling people that the United States as a country has failed to live up to expectations in terms of political knowledge can invoke feelings of shame, especially among those respondents who take a sense of pride in their country and feel a desire to try to improve its performance relative to other countries that they do not perhaps hold in the same regard.

Calling to the attention of the respondents that the US struggles with knowledge on political issues is a way of activating accuracy motivations in response to the set of questions, both political and less political, and in keeping with my theory, my expectation is that the level of politicization of an issue will increase its resistance to accuracy motivations. As said prior in the theory and literature review, there are always several competing motivations when individuals seek out and look for knowledge, as well as how the disseminate it.

For all questions in this experiment, I recoded the variables into a binary with a value of "1" indicating a correct response, and "0" indicating an incorrect response. Because these questions did not include a "Don't know" category, no other rescaling of the variables was necessary. First, I evaluated the effects of the shame pressure treatment on the reader-identified "Nonpartisan" questions. Interestingly, as noted in figure A, only some of the answers saw significant increases in their accuracy responses. (N=582)

# FIGURE 2.1



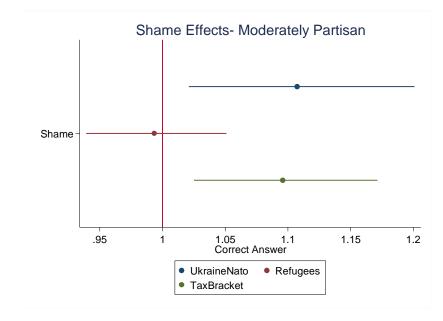
The question as to which country the US invaded in 2001 to find Osama Bin Laden saw significant increase in correct responses (P>.05). Being exposed to the shame-based treatment was associated with a 8.8% increased probability of answering the question correctly. The control group answered the question right around 72 percent of the time, those exposed to the treatment rose over 80 percent.

The other significant increase was the correct identification of Bill Clinton's Vice President. Here the control group also did an excellent job with the baseline, with 77 percent of control respondents correctly identifying Al Gore as Clinton's second hand. Nevertheless, exposure to shame about the US's performance on political knowledge increased accuracy with a coefficient of .073 (P>.05).

Counter to my base theory, two of the less partisan knowledge questions did not see significant improvements. Both numerical questions, both the term of service of a Senator and the number of members of the house of Representatives saw modest score improvements, but neither reached the level of statistical significance. Senate scores improved by .045 (P=.223) and house scores by .035 (P=.239) The baseline knowledge of the house of representatives was particularly high, with the control group getting the question right 82 percent of the time.

One interesting theoretical note about these high baseline scores is that it may well be that the control group, while not socially pressured for accuracy, nevertheless have some serious latent accuracy motivations present for questions such as Senate term or House membership. Even despite the anonymous nature of the survey, it may well be that a number of the control group respondents nevertheless had accuracy motivations and sought out the correct answer before responding to the question. This might explain some of the more modest movement among treatment variables, as well as some of the surprisingly high baseline scores for accuracy.<sup>21</sup>

#### FIGURE 2.2



<sup>&</sup>lt;sup>21</sup> MTurk workers have been noted for their excellent performance in tasks, and no one wants to be made to look a fool.

For the questions coded as "Moderately Partisan," shame treatments also yielded mixed results. First, the matter of whether Ukraine is a member of NATO became of increased importance right around the time the experiment was conducted, a couple weeks after the Russian invasion of the country. Surprisingly, the baseline correct knowledge for this question was relatively low (47% correct.)<sup>22</sup>

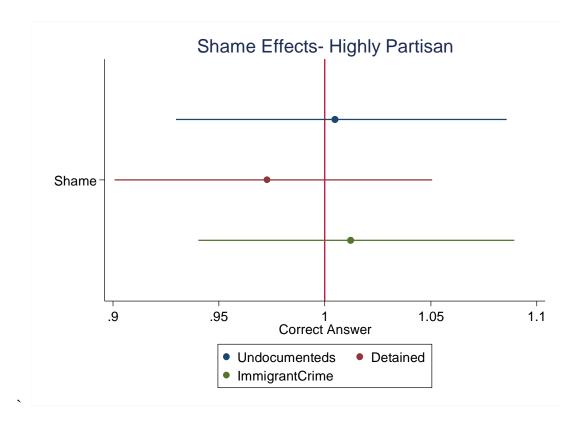
The experimental shame treatment did see a significant change in the proportion of accurate responses (No) by over 10 percent (P>.05.) I offered a link to a list of all member NATO states, of which Ukraine was not included.

The question on refugee seekers to the United States was surprisingly not successful in seeing any substantive movement. The question; "Have the number of refugees to the United States increased, decreased, or remained the same" had a relatively easy to access correct answer- levels are clearly much lower than they were in 2015, for a variety of reasons. I did not see any movement after inducing shame, though this may have to do with the fact that the immigration information that I provided had refugees a few blocks down the list. (See Appendix) The baseline response score for this question was atrocious, with only 14% correctly identifying that the number had dropped.

The question on the upper-class tax bracket on the other hand did see movement. The baseline accuracy for this question was high (74 percent) and a shame-based treatment was associated with a .0915 coefficient (P>.01) making it the strongest improvement empirically thus far.

<sup>&</sup>lt;sup>22</sup> This may represent some degree of 'expressive' response, where some people report an answer of what they might like to be the case, rather than what they know is the case.

FIGURE 2.3



Interestingly, all three questions coded as "Highly partisan" by respondents dealt with matters of immigration. The average rate of immigrant crime, number of undocumented immigrants in the US, and whether the number of people detained at the southern border had changed were all self-reported as highly important to respondent's political views.

While there was not the expected difference postulated by my theory between the shamebased treatment effects on low or somewhat partisan responses, as shown by figure 8, there was no significant movement on any of these dependent variables. Only a baseline 34% knew that the best estimate for current undocumented levels in 2022 was around 11 million, and inducing shame for the purposes of accuracy did not improve these results. Shame treatment had a modestly negative result on the proportion of people correctly noting that border detentions had increased of late, and saw little movement on the highly contentious issue of immigrant crime rates.

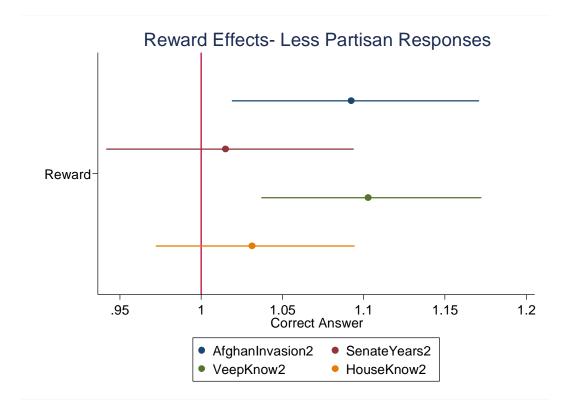
## **Treatment Effect- Reward Pressure**

For the second treatment group, I exposed respondents to a positive social pressure treatment in the form of social reward. Those in the reward treatment read the following prompt: "In this survey, we are trying to evaluate the differences in political beliefs of individuals with higher or lower levels of political knowledge. For this survey, only the opinions of people who scored an 8/9 or higher on the forthcoming political knowledge quiz will be recorded. Those who did not receive this high score will still be compensated for the survey, but their views will no longer be counted. Please answer all the questions accurately to the best of your ability."

To the degree that people care about their voices being heard, and do not want to look like fools, this treatment should engage accuracy motivations among respondents. In my theory, the public wants to be considered smart enough, or knowledgeable enough to participate in the political process. Even though this survey experiment did not claim to be a nationally representative poll, respondents have a desire (No doubt varying from individual to individual) to have their opinions heard. <sup>23</sup> Henceforth, this treatment will be referred to as social "Reward" for accuracy.

# FIGURE 2.4

<sup>&</sup>lt;sup>23</sup> One could also argue that there is an element of shame in this treatment as well- that is- respondents feeling pressure to not shame themselves by getting questions wrong. No one wants to be considered a 'low information' voter.



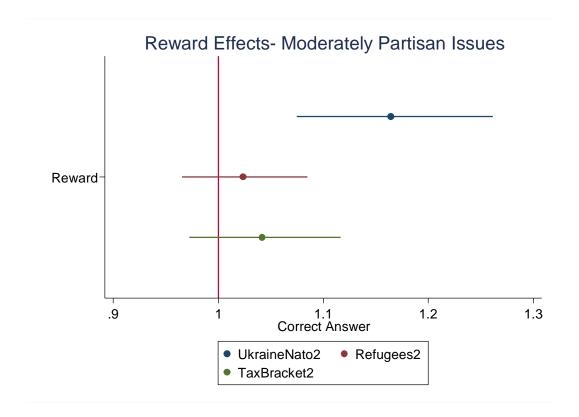
The results for the reward-based social pressure treatment for less partisan questions is eerily similar to the results for the shame-based treatment, although this pattern did not hold across all political issues. Reward-based political pressure saw a coefficient of .088 for knowledge of the Afghanistan invasion (P>.05.) Knowledge of Clinton's VP also increased substantially (P>.01.) Similar to the shame treatment, correct identification of a Senator's term, or the members of the House of Representatives saw modest improvement, but neither close to passing the threshold of significance (P=.698 and P=.307 respectively.) Again, high baseline scores in these two categories were already relatively high, leaving less space to improve.<sup>24</sup>

Aside from the similarity in effects on the four less politicized independent variables, the substantive values of the two treatments appear similar on this battery of questions. While

<sup>&</sup>lt;sup>24</sup> For a future study, a knowledge variable about a number in government less well known than a Senator term of House membership might be used so as to have a lower baseline knowledge score.

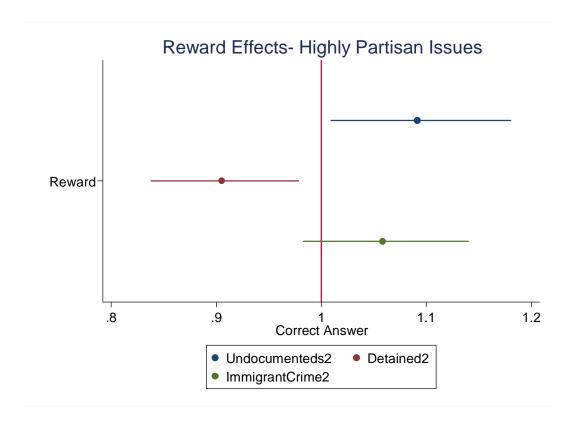
previous researchers have found different effects depending on the type of social pressure applied, for this set of questions, the results appear startlingly similar. This does not hold however across more partisan questions.

FIGU	IRE	2.5
FIGU	RE	2.5



The reward treatment was slightly less effective in shifting the needle towards accuracy in the moderately partisan category. Knowledge of Ukraine shifted greatly (P>.01,) but neither knowledge on refugees nor understanding of the top income tax bracket shifted significantly, despite seeing a higher average (P=.425 and P=.244 respectively.)

FIGURE 2.6



The highly political issues saw an interesting combination of results. First, unlike the shame treatment, rewarding respondents who wanted to make their voice heard did see a substantial increase in the proportion of respondents getting the number of undocumented immigrants estimated to be in the US correctly, by an increase of almost 9%. The correct response on immigrants- that they commit fewer crimes than native born Americans-, saw almost a 6 percent increase, though this did not quite reach the threshold for significance. Perhaps most curious, and the first variable to shift substantively in a direction counter to my theory, is that treated respondents actually got the question on whether more or fewer immigrants were detained at the border incorrect than the baseline. Whether this represents a backlash effect (Nyhan et al 2014) or simply an artifact of an experiment with so many DVs is unclear.

All told, for several of the dependent variables my hypothesis regarding social pressure increasing accuracy motivations was supported, though in some cases it was not, yielding mixed results. For hypothesis 2, I found only weak support for the theory that the level of politicization of an issue will decrease the effect of accuracy motivations. The following table shows summary statistics of the percentage of each group to get the accurate answer on each question.

Group	VP	Refugee	Immigrant	Tax	Detainees	House	Senator	Invasion	Ukraine	Tax
			Crime	Rate				2001		Regressive
Control	77.8	14	27.8	74.2	68	82.7	68.6	71.2	47	57.3
Shame	85.1*	13.4	28.9	83.3*	65	86.2	73.2	80*	57.3*	53.2
Reward	87.5**	16.4	33.45*	78.3	58*	85.8	70.1	80*	62.3*	51.1

Table 2.1- Comparison of Means Across Treatments

It does stand out from the data just how poor respondents were at correctly identifying that the number of refugees to the US had decreased under the Biden presidency across all groups. This needn't be a strongly partisan matter- COVID-19 impacted movement across borders of all kinds a great deal. Nevertheless, some of these baseline level differences in just how well respondents got the answers correctly are interesting. As noted in the previous chapter, some future studies might benefit from an effort to make every included dependent variable question as close to 'equivalent' in its difficulty to answer. But the reality of politics is that some matters are much simpler than others, and encouraging accuracy should be an important goal irrespective of how challenging the matter is.

#### **Results- Information Seeking**

Unlike the previous experiment, for this study I used actual hyperlinks to relevant political information to evaluate the amount of information sought. These hyperlinks varied in how much information was provided, but each held the necessary data to answer the political knowledge questions used as dependent variables. To measure this, I coded a variable registering whether any given hyperlink had been accessed by respondents. All told, six hyperlinks were included on topics related to the accuracy questions, which are included in the appendix.

Interestingly, the number of hyperlinks accessed was relatively high even among the control group. On average, people who received no social pressure prompt still clicked on an average of almost 3 of the provided hyperlinks. I had no theoretical expectation as to what the baseline amount of information access would be, but I admit that I was surprised at how committed to looking up information the baseline control group was.

All told, being exposed to social pressure did increase the amount of links accessed in both the shame and reward-based treatments (p=.03 and .017 respectively.) This does not, however, account for how much attention was paid to the content of each hyperlink. In the control group, the average respondent clicked on 2.9 hyperlinks, compared to 3.7 for the shame treatment, and 3.9 for the reward treatment.

# Discussion

While the empirical results were somewhat mixed, some evidence was in support of the hypotheses, others were not. While shame and reward based social pressures had very similar effects on less politicized questions, shame pressure was more successful in improving accuracy among moderately politicized questions, and reward based was the only treatment that saw substantial accuracy improvement among those questions considered highly politicized.

#### **Chapter 4- Contextual Level Factors and Directional Support**

While the previous experiments have focused on accuracy motivations, and the public's openness to them, questions remain about some of the contextual factors that underlie whether or not social pressure for accuracy is successful in improving political knowledge and discouraging inaccuracies and inaccurate responses. Experiments 1 and 2 demonstrated some mixed, but promising findings about social pressure's ability to improve performance on some of these questions, but the theory of motivated reasoning posits that directional motivations are always present to one degree or another, especially on politically charged issues, even when accuracy is encouraged or rewarded.

One of the more promising findings from the adjacent literature on misperceptions or inaccuracies on political knowledge is that, because of directionally motivated reasoning, these inaccuracies or false beliefs are not necessarily driving a person's preferences away from the model of democratic theory. A recent major study (Little et al 2021) suggested that much of the problem for democratic accountability from motivated reasoning had a lot more to do with "Desensitization," or the inability to gauge a politician's performance re-their own views, rather than "Divergence," where motivated reasoning drives a facts-based perception gap between motivated reasoners. If this finding is to be believed, inaccurate responses need not be problematic for democratic accountability.

Harkening back to my theory, people can have a variety of motivations in the back of their mind serving as justification for their particular position on an issue. While a member of the general public cannot realistically be expected to have a comprehensive knowledge of all the facts, data, and statistics related to the issue that they have an opinion on, many may have a small shopping list's worth of reasons for feeling the way that they do. If you consider the thought process of a particular motivated reasoner who is against abortion in all cases, thus having strong anti-abortion directional preferences, you can imagine the ways in which some of these justifications accumulate. The reasoner, either through anecdotes, processing bias, or information seeking bias, could come to the following five justifications for their position on abortion.

- 1) Abortion is morally wrong
- 2) Abortion stops a beating heart (Somewhat false)
- 3) Most abortions happen in the third trimester (Very false)
- 4) Abortion procedures make them uncomfortable
- 5) People shouldn't be having unprotected relations

Justifications 1, 4, and 5 are unfalsifiable in the scientific community. They are directional opinions, rather than something that evidence can contradict. When alternative directional justifications are 'given' by the principle to the subject as a way of allowing them to satisfy their opinions, experimentally 'treating' those justifications based in misinformation or inaccuracy became doable.

This experiment instead uses variance in the availability of these alternate justifications to measure whether presence of these alternatives can help 'satisfy' directional preferences enough to see movement and the reduced reliance on inaccuracy-laden justifications. In other words, consider additional several justifications that could be used against abortion. If the motivated reasoner was given more "mental ammo" to support their prior views on abortion, would they be able to more easily renege on their falsehood-based assertions? Americans could be given any number of reasons to dislike President Obama that have nothing to do with conspiracies or falsehoods about his place of birth. So if fixing directional inaccuracy just as simple as offering alternatives?

*Hypothesis)- Social pressure for accuracy will be more effective when respondents have alternate justifications to lean on. Those in the treatment group will have lower scores for justifications steeped in inaccuracies than those in the control group.* 

While both groups are pressured toward accuracy, I believe that people will be more willing to decrease their reliance on inaccuracies to support their directional preferences. This should be manifested in a decrease in the degree of importance respondents self-report on the survey.

#### Methods

For experiment 3, the MTurk sample of 865 was randomly split once again, this time into one of two groups rather than one of three as with the previous experiment. The order in which the experiments were conducted was randomized in an effort to control for any effects that one experimental break might have on another. In this case, both treatment and control group introduced a social pressure treatment towards accuracy, similar to the in-group one used in experiment 1. However this time, in order to make the in-group pressure universal, the text of the prompt was changed to "Americans" as the in-group, rather than Republicans or Democrats. Below is the text presented:

"As you may know, much of the public does not know much about politics. Many people even believe in falsehoods and answer incorrectly on political facts. Recently, Americans have been making a concerted effort to have its citizens do better on political knowledge tests, and be more accurate when answering

questions on politics and current events. The following questions will be an effort to see if this campaign to improve American knowledge has been successful."

For clarity, this social pressure is uniform across both groups. All respondents received a prompt to encourage them to avoid inaccuracy and do better as Americans on political knowledge. Where the experiment comes in in this study is in the form of justification 'sliders' that come after the respondent has shared their view on a particular topic. Directly after respondents were asked their opinion about three different political topics, they were asked to slide a level, on a scale from 0 to 10, rating how important the following justifications were to their position on said political issue.

#### **Question Design**

For each topic, responders were either filtered into a control group with only two slides to justify their response (All based in inaccuracies), or a treatment group with five total slides. Two are the same as the inaccuracy laden ones in the control group, but an additional three sliders with non-falsifiable, largely opinion-based justifications. These are not meant to be a comprehensive list of all justifications as to how one could feel about a political topic, but providing half the respondents with the means to indicate the 'why' of how they feel on a topic should, if my theory holds, decrease the amount of emphasis people put on inaccurate statements as justifications.<sup>25</sup>

I picked three general topics where directional preferences are likely to be strong. Gun laws, immigration policy, and tax laws. Each of these contentious issues in American politics are

<sup>&</sup>lt;sup>25</sup> For future study, more open-ended response possibilities would be ideal

salient with the public.<sup>26</sup> Respondents were asked two opinion-based questions to establish their preferences on each particular issue. For immigration, subjects were asked if immigration levels should be increased, decreased, or remain the same. Subjects were also asked about current undocumented immigrants, and what should be done to address the situation- if they should be deported, pay a fine, that the current system was fine, given a pathway to citizenship, or granted immediate amnesty. These views were used to calculate the direction of preferences.

For guns, I asked one general and one specific question again. First, if gun laws should be more restrictive, less restrictive, or remain the same. For a more detailed question, I also asked about AR-15 rifles and their legality. The choices there ranged from an outright ban on those style weapons, through making them more difficult to obtain, all the way to arguing that they should be fully legal.

For taxation, I asked both about whether the wealthy should be taxed more heavily, as well as whether the respondents felt the current tax system was extremely unfair, somewhat unfair, or fine as it is. These six questions give me leverage to test treatment effects not only across the full treatment and control groups, but to also test for heterogeneous effects based on the directional preferences of the subjects. In other words, I sorted the sample to test the effectiveness of the treatment not only across the full sample, but along subsections of the population that have different personal opinions about immigration, guns, and taxation.

As these are all opinion-based questions, the social pressure for accuracy that was applied in the earlier prompt should not have any major or meaningful effect on the answers to those six

<sup>&</sup>lt;sup>26</sup> https://www.pewresearch.org/politics/2022/02/16/publics-top-priority-for-2022-strengthening-the-nations-economy/

questions. They were included instead to get a feel for people's 'priors' or viewpoints on the issues in which they are evaluating, followed by their justifications for their beliefs.

For the justification sliders, respondents were prompted with the following text (Photo in appendices)

"The following questions will ask you to rank the reasons for your positions on immigration, guns, and taxes. Please rate them from 0 (Not at all important) to 10 (Very important)"

The Gun related sliders were as follows:

- 1) Assault rifles are used for most gun murders in the USA (False)
- 2) I'm uncomfortable with those types of weapons in public hands
- 3) I'm concerned about potential criminals being able to buy guns
- 4) I'm against most forms of gun ownership
- 5) AR-15's fire more powerful rounds in joules than most hunting rifles (False)<sup>27</sup>

The use of assault weapons in mass shootings often cause the public to overestimate the proportion of deaths caused by them in comparison to other firearms. Answers 2-4 are legitimate, unfalsifiable propositions. For the AR-15 rifle, it is an extremely dangerous and efficient rifle, far more than most hunting guns in terms of rounds per minute, accuracy, and ability to accept modular attachments. However, it's caliber bullet was created during the 1980's to cut

<sup>&</sup>lt;sup>27</sup> The .223 Remington or 5.56 NATO round, often used interchangeably, are on the very bottom end of the acceptable power standards for big game hunting.

development costs, and is far less powerful in terms of muzzle energy than most rifles used for hunting.<sup>28</sup>

For immigration related questions, the justification slides included:

- 1) Immigrants raise the crime rate (False)
- 2) The U.S. needs to protect its current culture
- 3) Immigrants take out more in public services than they contribute via taxes (False)
- 4) COVID-19 means people should be moving across borders less
- 5) The Immigrant population is too high

Like with gun restrictions, these serve as directional satisfiers for anti-immigration respondents. Two are measurably false, as previously discussed immigrants commit fewer crimes, and also most comprehensive studies have shown that immigrants are actually net contributors in terms of government revenue.<sup>29</sup>

For taxation, the following alternate slides were offered:

- 1) The wealthy use loopholes to pay less taxes
- 2) The wealthy have a lot of money to spare
- The US Income tax bracket is regressive- the poorest 10% pay less in total taxes than the wealthy (False/Misleading)
- 4) We need to be able to afford more government provided services.

<sup>&</sup>lt;sup>28</sup> https://www.army.mil/article/48657/evolution\_of\_the\_m855a1\_enhanced\_performance\_round

<sup>&</sup>lt;sup>29</sup> https://www.americanimmigrationcouncil.org/topics/tax-contributions

The control group received only the two inaccurate sliders, while the treatment group received all five. To test the hypothesis, I evaluated the averages for the two inaccuracy laden justifications between the two groups. All told, 433 respondents ended up in the control condition, 422 were sorted into the treatment. A randomization check confirmed that the randomization of this experiment also covered all demographics fairly.

Worth noting is that each of these misperception-based sliders are 'directional.' The gun sliders are anti-gun directional inaccuracy. Immigration has anti-immigration directional justifications, and the tax has what we might consider 'anti-wealthy' person directional sliders. I chose these particular directions because they are somewhat common misconceptions that arise, but there is no question that I also could have included pro-immigration, pro-gun, pro-wealthy inaccuracies. That 99 percent of immigrants get a college degree, that gun ownership is negatively correlated with gun violence, or that the wealthy pay more in taxes than at any time in American history, for example, could all be inaccurate justifications in the opposite direction. Nevertheless, to keep this study simpler, I focused primarily on one direction.<sup>30</sup>

## Results

Unlike the previous experiments, these data are extremely consistent across all dependent variables. Every single inaccuracy-based justification saw a statistically significant decrease in its score from respondents to the survey who had multiple more sliders to choose from. The most

<sup>&</sup>lt;sup>30</sup> Again, in future interview work, it would be great to parse this out further

substantively large decrease among the treated group was towards the erroneous statement that AR-15s were involved in most gun murders in the United States.<sup>31</sup>

Figures 14 and 15 show the effects, and 15 also shows the relevant baseline averages for these justifications in the control group. As a robustness check, I also ran the same analysis dropping all respondents who put a score of "10" or "0" for every slider, indicating an indifferent click-through, and the results all held.

# Table 3.1

# Effects of the presence of alternative justifications

	(1)	(2)	(3)	(4)	(5)
	immcrime	immservices	regressive~x	armurder	arpower
treatment	-0.816***	-0.814***	-0.533**	-0.905***	-0.596***
	(-4.32)	(-4.46)	(-3.22)	(-5.00)	(-3.47)
N	855	855	855	863	855

t statistics in parentheses

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## FIGURE 3.1

<sup>&</sup>lt;sup>31</sup> This may be because this slider is the least ambiguous of the sliders

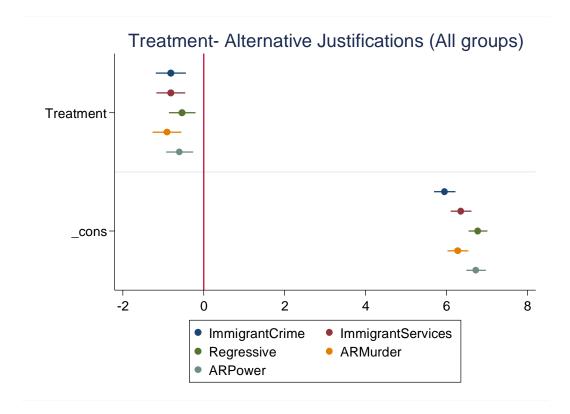


Table 3.2- Comparison of Means Across Groups

Group	Control (2 slides)	Treatment (5 Slides)
AR Powerful	6.45	5.73*
AR Behind Most Murders	6.12	5.42*
Immigrant Crime	6.32	5.50*
Immigrant Services	6.24	5.43*
Tax below 20%	6.48	5.81*
Tax system regressive	6.52	5.74*

There was, to be expected, a great deal of variation by the respondents in terms of the values used in the justification sliders, but it is interesting to see that offering alternatives for directional preferences regarding anti-immigration sentiment, anti-gun sentiment, and pro-tax on the wealthy sliders reduced reliance on inaccuracy-based justifications, even among the entire sample which included liberals, conservatives, moderates, and a whole variety of preferences on the issues.

In figure 3.1, the "\_cons" measurements show the baseline levels of justifications across all groups. One interesting thing to note when looking at the data is that of the five inaccuracy-based justifications, those two that had the highest baseline level (That the tax system is regressive and that AR-15 rifles fire more powerful rounds than most hunting rifles) also saw the least amount of substantive improvement.

Because both treatment and control groups received a social pressure exposure for accuracy, we can lay the causal responsibility entirely at the feet of this provided contextual experiment. So why then, when given only inaccuracy-based justification sliders, are the figures higher? Going back to the theory, individuals like to feel secure in their beliefs, and demonstrate directional preferences. Absent other ways to show the reasons for why they feel the way they do, respondents might feel obligated to ratchet up the justifications despite knowing they are not the real reason, absent other alternatives.

Secondly, we know that often times survey respondents will share answers that they know are incorrect for expressive benefits (Malka & Adelman 2022.) It may very well be that showing directional preferences in the form of higher slide justifications is a way for respondents to signal their opinions about the issue at hand, irrespective of whether the reason is accurate or

not. Offering multiple justifications can not only help respondents satisfy their directional preferences, but also their expressive preferences in answering survey questions.

### Do Priors Matter? Testing Treatment Effects across Groups

In order to test for heterogeneous effects across treatment groups, I resorted the survey respondents into subgroups based on their answers on the opinion questions offered prior to the slider justifications. It is worth noting that subdividing the groups in this way significantly reduces statistical power of the sample, and so risks a type 2 error where movement across the variables might be seen, but does not reach the threshold for statistical significance.

For the first set of responses, I sorted the subjects into three groups for each category. For immigration, respondents were sorted into one of three groups- Pro-immigration, status quo, and anti-immigration. Pro-immigration were the 206 respondents who either supported a pathway to citizenship or total amnesty for current undocumented immigrants. Status quo were the 232 respondents who are fine with the current system, and anti-immigration were the 417 respondents who wanted either to charge a fine or outright deport our undocumented immigrants.

FIGURE 3.2

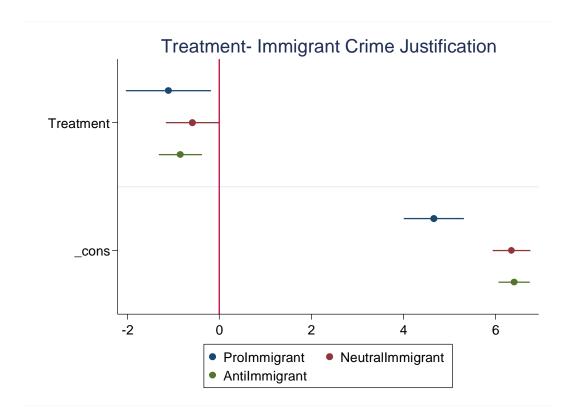
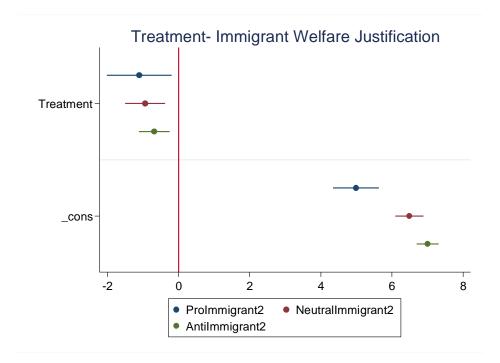


FIGURE 3.3



Interestingly enough, the alternative sliders held in reducing dependence on immigrants committing crimes as a justification across all treatment groups. As shown by the constant, while the pro-immigration group had "Immigrants commit more crimes" as a much lower justification, indicating their directional preferences, having more justifications available was significant in each of the three treatment groups. Similar results were observed across all groups regarding the inaccurate notion that immigrants take more from social services than they contribute in taxes.

To measure prior gun directional attitudes, I sorted the sample based on their response to whether gun laws in the US should be tightened, left the same, or loosened. 448 respondents wanted stricter gun laws, 332 thought gun laws should remain the same, and 75 felt they should be loosened. These were ranked as anti-gun, neutral-gun, and pro-gun.

#### FIGURE 3.4

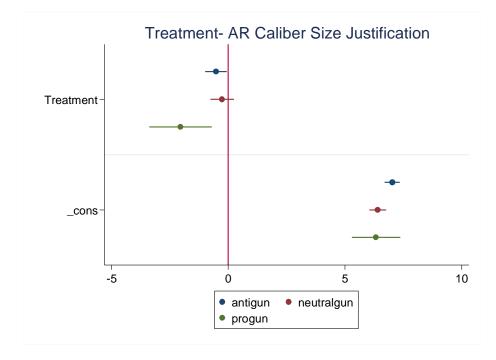
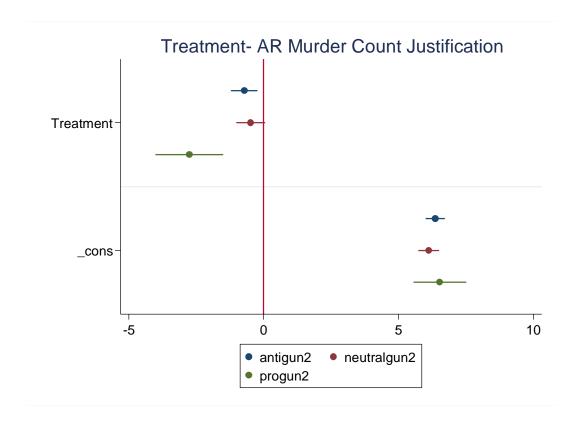
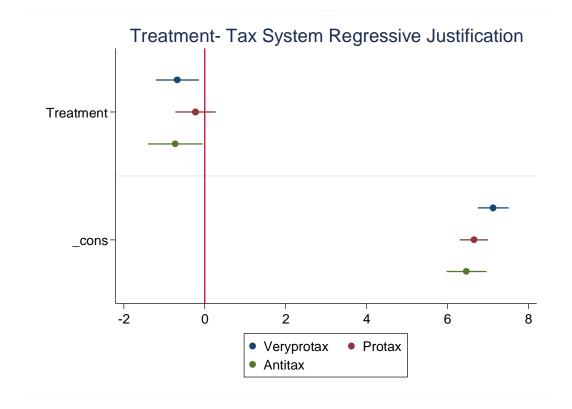


FIGURE 3.5



Here, the results were a little bit more unexpected. For each justification, the respondents who wanted gun laws to remain the same were not swayed by the treatment to a significant level. But perhaps most befuddling is that the base rating for both incorrect assertions that AR-15s fire super powerful rounds and that AR-15s are behind most gun deaths in the US were not significantly different depending on the individual's beliefs about gun laws. It is possible that these incorrect justifications that I included in the experiment are not actually terribly relevant-that is, not a significant portion of an individual's directional preferences involving guns. An anti-gun respondent may well view these two matters as completely irrelevant to their views on gun laws writ large.

Finally, for taxation, respondents were categorized based on their response to a question about what the wealthy in America should be taxed. The 309 respondents who chose "A lot more" were coded as Very pro tax, those 316 who said "A little more" are coded Pro tax, and the combined 223 respondents who chose either "The same" or "Less" were coded as Anti-tax.



# FIGURE 3.6

Once again, the results are mixed, but the treatment remained relatively effective. Unlike with guns, however, we see a little more disparity in the untreated rankings for this justification between people who want to raise taxes, and people who would rather they stay close to where they presently are.

# Discussion

In this chapter, I conducted two experiments to test the resilience of directionally motivated reasoning against accuracy motivations, and how satisfying those preferences could allow accuracy motivations to be better activated and more effective at yielding true, factual responses among participants. In the first experiment, I found that both negative (shame about public's lack of knowledge) and positive (rewarded accurate answers with having their opinion taken into consideration) worked in motivating accuracy enough to shift responses in a more factual direction on some issues. While social pressure for accuracy did appear to be more successful on issues characterized by the subjects as "Less important" to their views than those of higher directional importance, those results were decidedly mixed. In future, I would like to find alternative ways of measuring pre-existing directional preferences on those issues, rather than relying on the public to identify them on their own for the researcher. While the logic tracks intuitively about competing motivations, and the data noise may be a result of the nature of the measurement of directional preferences, I cannot claim to have support for H2, though I found plenty of support for H1.

For the second experiment, I found very clear cut evidence that by offering justifications to satisfy the directional and expressive preferences of respondents, combined with accuracy-motivating social pressure, led to a decreased reliance on inaccuracy/misperception based justifications for people's beliefs. Similar to what the aforementioned Brexit study hinted at, spurring on accuracy seems to more effectively change the "why" of what people believe, rather than what they believe.

These results should be positive for those concerned about directionally motivated reasoning's impact on democratic performance. Motivated reasoners are going to reinforce and support their desired conclusion in many cases, but this need not be based on inaccuracies.

Opinions, selective statistics, and general moral views all can be factors in a person's political positions. The goal is not to set out and try to change people's views- difference of agreement and opinion about matters of policy and governance are what make Democracy relevant- it is difficult to imagine a population with universal values. Rather, for scholars trying to motivate accuracy, a softer approach might be fruitful- pairing the correction of a misperception with a new piece of true evidence that they can use to fall back on.

I do believe that this "Here, have a different piece of red meat for your beliefs" approach would also be interesting when viewed under a lens of qualitative interviews. Respondents receiving text prompts over the internet can only go so far in terms of getting at the underlying details and justifications people have for their viewpoints. Though I evaluated these concepts quantitatively using attitudinal questions and justification sliders, these had to be standardized across respondents, and left little room for creativity or alternate responses from the subjects.

In interviews, I might be able to simultaneously dive back into ways of inducing social pressure (Other than, "the study must continue", of course) but also allow people to list off their own justifications for why they feel the way they do about a topic. A hypothetical conversation could go as follows:

S- "I want the rich to pay more in taxes because they actually pay a lower income tax than the working class people."

P- "Wanting the rich to pay more in taxes is a reasonable position! As it turns out, the rich actually have a substantially high-income tax bracket, but because often much of their wealth and earnings aren't in income, these are taxed at a lower rate. So it isn't the income taxes causing the discrepancy, but rather the nature of our tax system."

This is an idealized interaction, but the logic stands. I do think this section of the theory, moving forward, should include some interviews. Once again, it should be noted that the empirical results of this chapter may simply be an artifact of the methodology. To draw any conclusive causal arguments about these justification sliders will require a reworking of the methodology, on account of the existing study's imbalance of the number of justifications provided.

#### **Chapter 5- Conclusion: Findings Recap and Suggestions for Future Research**

That the public struggles with matters of political knowledge is well documented, and has negative implications for democratic performance, be they on simple nonpartisan matters of fact, or the more pernicious directionally based inaccuracies, of which misperceptions and conspiracy theories are a common example. The opening theory of this dissertation suggested that social pressure might be an effective method of promoting accuracy motivations in the public, and that the effectiveness of said social pressure would depend on how strong directional preferences were among the public on a particular issue. Chapters 2, 3 and 4 offered some empirical investigations as to the accuracy of this claim, and also contextual factors which might make socially pressuring accuracy a more successful enterprise.

The previous chapters suggest that even light and implicit forms of social pressure can improve political sophistication via activating accuracy motivations. Activated accuracy motivations in these studies were successful, though not uniformly, at increasing the number of political knowledge questions that participants got correct. These findings seem to contradict previous arguments that accuracy motivations are not terribly effective at combating misinformation or misperceptions. Additionally, they suggest that social pressure continues to be an extremely strong influence on political behavior and public opinion, which opens the door as to what other major political factors might be altered by the strategic use of social pressure.

Chapter 2 demonstrated that group identity, and the social pressures therein, can have some effects on a desire on the behalf of the public to reason with accuracy goals, and improved accuracy on political knowledge questions among a variety of subjects. Both in-group conformity, and out-group dissociation were found to move the needle among respondents, particularly on matters of fact that have not been politicized. Perhaps the most important distinction from this LUCID experiment was the effects of accuracy motivations on questions with either neutral, or directional implications.

Chapter 3 tested two additional types of social pressure on accuracy motivations, and used a different measurement of existing directional preferences. Both a reward for desired behavior, and an in-group treatment of shame were tested, with similar effects on increased levels of knowledge. Furthermore, subjects who were exposed to social pressure in the in-group shame treatment were more likely to open and access news information that was provided in the survey.

As expected, accuracy motivations could only go so far in combating political questions laden with directionally motivated reasoning. It is easy for an individual who has been primed to care about accuracy to look up the number of years a Senator serves in a typical term, who the Vice President is, or the length of several lines presented to them. These questions do not have strong directional implications, in that they are not the kind of questions in which directionally motivated reasoning is an important factor. So perhaps unsurprisingly, accuracy motivations work best for political knowledge in cases where directional motivations are largely absent. While the overall objective of this project was large, one of my key takeaways from these studies and the trends in the data is that there really is no perfect way for people to digest and recall political information. There will always be biases in the information collection, dissemination, and recollection process, and attempts to get people to care more about the 'facts' of any given situation depend heavily on context, motivated reasoning, and the strength of their viewpoints.

It is interesting that social pressure has received such substantial investigation in the context of its effect on voter turnout, but substantially less on other areas in politics that we might consider to be normative "Goods." In general, we would like to see people turn out to vote, choose candidates based on their preferences and how well said candidates align with their preferences, and be able to accept and interpret new political phenomena, news, and events in a fair manner. Doing so, at least to some extent, is axiomatic to the functioning of an electoral democracy with multiple choices in candidates or parties.

What I believe this study has shed some light on is that it is possible to motivate people to care a little more about accuracy, though this motivation is limited in its scope and potential. <u>If</u> <u>Public Choice scholars are to be believed, and there is no rational, self-interested, atomistic</u> <u>rationale for observing and updating beliefs about politics and making good self-interested</u> <u>choices, then perhaps outside imposed social pressure is one of the only avenues to get people to</u> <u>engage in the political process in a way even remotely in the image of how democratic</u> <u>participation is supposed to work.</u> Achen and Bartels did well in showing the holes in the current idea of "Folk theory of Democracy," and certainly, we can see a plurality of data and evidence pointing to the fact that people do not do an ample job of being a well-educated and rational electorate. Nevertheless, if a public health campaign can get many people to wear a mask, or turn

out to vote, social pressure has the potential, if used with benevolent intentions, to get people to think more objectively about politics and, at the very least, do better on matters of political knowledge than those left to their own devices.

Policies such as the anonymous nature of voting, polling, and other political activities may actually be behind some of these low levels of political information and lack of corrective tendencies therefore. No individual can be made to inform someone else of who he has voted for, regarding any politician, proposition, or even local ordinance. Someone who incorrectly voted for Donald Trump thinking him a left-winger or Bernie Sanders thinking him a conservative need suffer the social sanctions of their inaccuracies. This is not to suggest that anonymous voting should be removed- there are good reasons for it to stay in place. But in-person political participation, including political events and discussion between individuals of different political perspectives could go a long way to motivate people to fact-check, or at the very least seek more fungible tangible evidence to back their perspectives.

This is not to say that social pressure is or will always be used in this benevolent sense, however. While this dissertation found some promising results, it is important to note that social pressure could be used, and likely is, to reinforce directionally motivated reasoning, or to continue to accept and believe false information. In fact, theory about social pressure and compliance would indicate that in some cases, stated belief in a conspiracy theory like former President Obama being born in Kenya, might be important to political group membership.

Additionally, there is little reason to assume that any groups, large or small, well organized or loose, have any reason to use their social pressure for accuracy motications, except in cases where the facts support their preferred narrative. Moneyed interests, or political interests rarely align perfectly with a completely well informed an accuracy motivated public. Even if they did, we have seen from previous studies that said accuracy motivations are far from perfect.

The point, therefore, is that social pressure is a very important part of political information processing. To the degree that people are social and feel the influence of others, these pressures have the potential to skew the public towards directional or accuracy goals, depending on the messaging and intent.

One of the more externally valid extrapolations of this dissertation is the evidence that when the public is provided with alternate directional justifications for their prior beliefs, they are more likely to drop inaccuracy or misperception based answers as justifications for their views. For almost any issue or political position, there exist plenty of justifications to support a directional goal that are not inaccurate, or at the very least unfalsifiable. That immigrant populations "Harm American culture," while being a distasteful view, isn't clearly provable or disprovable, the way an assertion about the crime rates of first generation immigrants can be.

What this means for scholars of misperceptions is that these false beliefs needn't necessarily be axiomatic in the public's directional preferences. There are plenty of ways for political organizations, social groups, special interests, or politicians to satisfy the public's directional goals without relying on false or misleading information. For this reason, I think it is incumbent upon all the aforementioned platforms to focus on reaching their audience without lying, or spreading misinformation. If misinformation isn't necessary to ramp up support for a policy or politician, it would be meaningless to use it rather than an accurate piece of information, unless inaccuracy based arguments were somehow more effective in activating voters.

COVID-19 and the subsequent public campaigns to try to motivate people to wear masks and get vaccinated, in venues and states where neither were mandated, were met with some success, though the United States still had significant holdouts. Government led campaigns, even when altruistic, are subject to resistance either from people with a strong sense of individualism, or whose group membership shuns compliance with government mandates. In fact, in some groups, not wearing a mask or getting vaccinated represent a form of in-group conformity.

Harkening to these covid-based health campaigns, it is not unthinkable to suggest that a public campaign to promote public knowledge of political affairs might have some effect. Based on the findings of this study, it might be more practical to start with very basic, non-politicized facts as such as knowing one's representative and the rules and institutions of American government. While this study focused on structural factors such as Senator term length and the number of representatives in the house, there are a legion of facts relevant to the American political system that social pressure towards accuracy might improve public knowledge of.

In theories of democratic accountability, knowing who is responsible for what is a massive part of the link between voters and representatives meant to be instrumental in making governments have to consider what the public actually wants in making policy. Absent any base knowledge of the political system (Which is, notably, very complicated and multi-layered due to separation of powers and federalism) the public cannot form effective judgements. Even a viewing of "Schoolhouse Rock" might be useful.

The main point regarding the external implication of this study is that any push towards improving public literacy on political issues should start from the bottom- with simple matters of fact in government. Conspiracy theories and high profile misperceptions grab a lot of the scholarly attention, but these are strongly linked to motivated reasoning, as well as potentially matters of political expression and in-group signaling. In a country where many people still do not know who the vice president is, or how their representative voted on a bill (Let alone what was in the bill itself) I believe the first action item should be improving the public's accuracy on the simplest, most fundamental institutions of American government.

In terms of potential ways to flesh out these findings, and get deeper into the data itself, I have a few suggestions. First, the dependent variables for both major experiments were relatively simple- questions answered correctly (By the best available evidence.) In experiment 2, I also evaluated duration of the survey and use of external clicked links as measurements of accuracy motivations. Nevertheless, these dependent variables could be measured in different ways.

Secondly, in an effort to expand this project into a book-length study, it would be beneficial to conduct a variety of in-person interviews to get into the sometimes muddy waters of political information processing that are sometimes difficult to unpack via quantitative methods. For experiment 2, offering up alternative justifications to satisfy directional preferences was somewhat successful in reducing subject's reliance on inaccuracy-based justifications. That said, it would be beneficial to actually talk to the subject about these alternate justifications.

Consider this experiment in interview format. The interviewee can lead into the treatment by discussing a variety of different facts or opinions that fit with the respondent's priors, in an effort to make them feel secure and grounded in their preferences. Following this up with some peer-to-peer social pressure to promote accuracy could not only open eyes, but would also give the respondent the ability to discuss how and why they might have reduced confidence in the misperception laden justifications. These interviews could also have variations in the way in which the principal interviewer presented the alternate justifications. We could imagine how the level of acceptance of treatments and social pressure might vary according to the mannerisms of the interviewer, and whether the subject believed that they were on "Their side" for the purposes of accepting new information. One of the challenges with online anonymous survey experiments is that I believe much of the public, especially those with more conservative leanings, assume academics are on the opposite side of the political spectrum. Therefore, trying to steer a conservative away from "Immigrants commit more crime" might be more challenging if the individual believes that the academic is trying to 'steer' them to their own preferred worldview.

Finally, a fully representative survey, conducted via YouGov or another organization that is able to measure for demographics in a way that allows for observational analysis would be welcome. The survey data I utilize in the first empirical chapter is very rough, even for proxy variables, and it would be good to test for heterogeneity among the public in terms of the effectiveness of accuracy motivations.

Studying this topic has been engaging and motivating- the idea that the public struggles with basic democratic literacy and engagement is concerning, but I believe representative democracy to still be the most auspicious choice of government available to us in terms of protecting minority rights and individual liberties. Any improvement, however gradual, would be welcome in terms of helping people understand their own preferences, and linking those to their preferences and selections in elected officials.

#### **APPENDIX 1- Survey Questions @ Consent Forms**

## 1.1- Consent Form Experiments 1,2,3



# Department of Political Science 100 Eggers Hall--Syracuse, New York 13244 Project Title: Generic Political Survey

Hello! We are researchers at Syracuse University inviting you to participate in a research study. Involvement in the study is voluntary, so you may choose to participate or not. This page will explain the study to you. If you have any additional questions, please feel free to email Colin French (cfrench@syr.edu) We are interested in learning more about political attitudes in the United States. In this research study, you will be presented with some information (And either a social pressure treatment or no social pressure treatment), and asked a series of questions about your political beliefs, attitudes, and opinions. The objective of the study is to determine the effect of said social pressure on an individual's willingness to seek accuracy in responding to knowledge-based questions. This is expected to take less than fifteen (15) minutes of your time. The risk posed to you is expected to be minimal and to not exceed the risk ordinarily encountered with online computer usage. There are no direct benefits to you other than the gratification that accompanies having contributed to knowledge and academic research. All information collected will remain entirely anonymous. This means that your name will not appear anywhere and specific responses are not linked to your name in any way. However, whenever one works with email or the internet, there is always the risk of compromising privacy, confidentiality, and/or anonymity. Your confidentiality will be maintained to the degree permitted by the technology being used. It is important for you to understand that no guarantees can be made regarding the interception of data sent via the internet by third parties. You also must be 18 years of age or older to consent to this survey. You have the right to refuse to participate in the study at any time. If you consent to being in the survey now, but later change your mind, you have the right to withdraw consent at any time without penalty. If you have any questions, concerns, complaints about the research, contact the investigators by email at cfrench@syr.edu. If you have any questions about your rights as a research participant, you have questions, concerns, or complaints that you wish to address to someone other than the

investigator, or if you cannot reach the investigator, contact the Syracuse University Institutional Review Board at 315-443-3013. Please print a copy of this consent form for your records!

# 1.2- Text Treatments

In-Group (Experiment 1)

As you may know, much of the public does not know much about politics. Many people even believe in falsehoods and answer incorrectly on political facts.

Recently, the **(Respondent's) party** has been making a concerted effort to have its members and supporters do better on political knowledge tests, and be more accurate when answering questions on politics and current events.

The following questions will be an effort to see if this campaign to improve (Party) supporter knowledge has been successful.

Out-Group (Experiment 1)

As you may know, much of the public does not know much about politics. Many people even believe in falsehoods and answer incorrectly on political facts.

In particular, we have found that members and supporters of the (**Other Party**) are particularly likely to answer inaccurately on political knowledge questions, and get large numbers of questions on factual matters wrong.

This study will attempt to identify if this trend remains.

Shame (Experiment 2)

In recent years, the United States public has come under criticism for having extremely low levels of knowledge on political issues compared to citizens of England, France, South Korea, and other democratic countries. The US public tends to get wrong answers on matters of simple political fact, and have been shown to be more easily manipulated by false information. The purpose of this survey is to evaluate whether this trend has continued.

## Reward (Experiment 2)

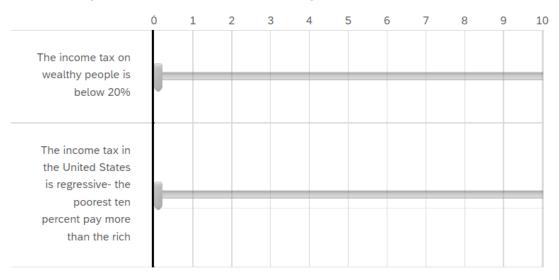
In this survey, we are trying to evaluate the differences in political beliefs of individuals with higher or lower levels of political knowledge. For this survey, only the opinions of people who scored 8/10 or higher on the forthcoming political knowledge quiz will be recorded. Those who did not receive a high score will still be compensated for the survey, but their views will no longer be counted. Please answer all the questions accurately to the best of your ability.

## **1.3-** Slider Treatment (Experiment 3)

## **CONTROL SLIDERS**

#### Q26

I feel the way I do about taxes in this country because...



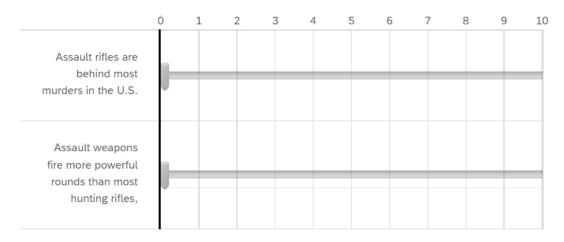
#### Q22

I feel the way I do about American Immigration because...

	Ó	1	2	3	4	5	6	7	8	9	10
Immigrants raise the crime rate											
Immigrants take more in public services than they put in via taxes											

Q21

# I feel the way I do about Assault Weapon laws because...



## TREATMENT SLIDERS

I feel the way I do about taxes in this country because ...

0	1	2	3	4	5	6	7	8	9	10
The in	icome tax	on wealth	y people is	below 20	%					
The w	ealthy use	e loopholes	s to pay les	ss in taxes	5.					
The w	The wealthy have a lot of money to spare.									
The U	The US income tax bracket is regressive- the poor pay more than the wealthy									
We ne	ed more	governmer	nt funding f	for social s	services					

l feel t	ne way I	do about	Assault V	/eapons	Laws bec	ause				
0	1	2	3	4	5	6	7	8	9	10
I'm unc	omfortable	e with thos	e types of	weapons						
•										
Assault rifles are behind most murders in the U.S.										
•										
I'm concerned about criminals being able to buy weapons										
•										
I'm against most types of gun ownership										
•										
AR-15s fire much more powerful rounds than most hunting rifles										

I feel the way I do about US Immigration because ...

0	1	2	3	4	5	6	7	8	9	10
Immigrants raise the crime rate										
The U	IS needs t	to protect if	's current	culture						
Immigrants take more in public services than they put in via taxes										
COVID makes movement across borders more risky										
The ir	nmigrant p	population	is too high	1						

# **1.4- Provided Information Sheets (Experiment 2)**

"Here are some links to information that may help with some of the above questions."

https://usafacts.org/issues/immigration/ https://trac.syr.edu/immigration/quickfacts/ https://www.nato.int/cps/en/natohq/topics\_52044.htm https://www.bankrate.com/taxes/tax-brackets/#:~:text=file%20an%20extension.-, ,There%20are%20seven%20tax%20brackets%20for%20most%20ordinary%20income% 20for,%2C%2035%25%20and%2037%25.

https://www.diffen.com/difference/House\_of\_Representatives\_vs\_Senate

#### REFERENCES

- Achen, Christopher H. and Larry M. Bartels. "Democracy for Realists: Why Elections Do Not Produce Responsive Government." (2016).
- Albertson, Bethany, and Shana Kushner Gadarian. *Anxious Politics: Democratic Citizenship in a Threatening World*. Cambridge: Cambridge UP, 2015.
- Amira, K., Wright, J.C. & Goya-Tocchetto, D. In-Group Love Versus Out-Group Hate: Which Is More Important to Partisans and When?. *Polit Behav* 43, 473–494 (2021). <u>https://doi.org/10.1007/s11109-019-09557-6</u>
- Andı, S., & Akesson, J. (2020). Nudging away false news: Evidence from a social norms experiment. Digital Journalism, 9(1), 106-125.
- Ian G. Anson (2016) "That's not how it works": economic indicators and the construction of partisan economic narratives, Journal of Elections, Public Opinion and Parties, 27:2, 213-234, DOI: <u>10.1080/17457289.2016.1215319</u>
- https://abcnews.go.com/Politics/74-call-election-legitimate-vast-partisan-dividepoll/story?id=43491609

Asch, Solomon. "Opinions and Social Pressure" Scientific American. 1955 193(5)

- Bartels, Larry M. 2002. "Beyond the Running Tally: Partisan Biases in Political Perceptions." *Political Behavior* 24 (2): 117-50.
- Baumeister, Roy F., Ellen Bratslavsky, Catrin Finkenauer, and Kathleen D. Vohs. "Bad Is Stronger than Good." *Review of General Psychology* 5, no. 4 (December 1, 2001): 323– 70. <u>https://doi.org/10.1037/1089-2680.5.4.323</u>.
- Bayes, R., Druckman, J. N., Goods, A., & Molden, D. C. (2020). When and how different motives can drive motivated political reasoning. Political Psychology, 41(5), 1031-1052.

Bennett, S.E.. "Know-nothings" revisited: The meaning of political ignorance today. *Social Science Quarterly*. 1988;69(2):476. <u>https://libezproxy.syr.edu/login?url=https://www.proquest.com/scholarly-journals/know-nothings-revisited-meaning-political/docview/1291566734/se-2?accountid=14214.</u>

- Bennett, S.E. "Know-nothings" revisited again. Polit Behavior 18, 219–233 (1996). https://doi.org/10.1007/BF01498600
- Bisgaard, M. (2015). Bias will find a way: Economic perceptions, attributions of blame, and partisan-motivated reasoning during crisis. The Journal of Politics, 77(3), 849-860.

Bolsen, T., & Palm, R. (2019). Motivated reasoning and political decision making. In Oxford Research Encyclopedia of Politics. Oxford University Press.

- Bolsen, T, Druckman, JN & Cook, FL 2014, 'The Influence of Partisan Motivated Reasoning on Public Opinion', *Political Behavior*, vol. 36, no. 2, pp. 235-262. https://doi.org/10.1007/s11109-013-9238-0
- Kaitlin Bountress, et al. "The Effects of Peer Influences and Implicit and Explicit Attitudes on Smoking Initiation in Adolescence." *Merrill-Palmer Quarterly*, vol. 62, no. 4, 2016, pp. 335–58. *JSTOR*, https://doi.org/10.13110/merrpalmquar1982.62.4.0335.
- Bullock, John G., Alan S. Gerber, Seth J. Hill, and Gregory A. Huber. 2015. "Partisan Bias in Factual Beliefs about Politics." Quarterly Journal of Political Science 10: 519–578.
- Burger JM, Soroka S, Gonzago K, Murphy E, Somervell E. 2001. The effect of fleeting attraction on compliance to requests. Personal. Soc. Psychol. Bull. 27:1578–86

https://www.bostonglobe.com/2021/04/30/metro/why-some-wont-ditch-their-masks-outdoorsim-not-about-look-like-republican/

- Caplan, B. (2007). The myth of the rational voter: Why democracies choose bad policies. Princeton, NJ, US: Princeton University Press.
- Caruana, Nicholas J., R. Michael McGregor, and Laura B. Stephenson. "The Power of the Dark Side: Negative Partisanship and Political Behaviour in Canada." *Canadian Journal of Political Science* 48, no. 4 (2015): 771–89. <u>https://doi.org/10.1017/S0008423914000882</u>.
- Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. Annual Review of Psychology, 55, 591– 621. <u>https://doi.org/10.1146/annurev.psych.55.090902.142015</u>
- Cialdini RB, Trost MR. 1998. Social influence: social norms, conformity, and compliance. In The Handbook of Social Psychology, ed. DT Gilbert, ST Fiske, G Lindzey, 2:151–92. Boston: McGraw-Hill. 4th ed.
- Conover, Pamela Johnston. "The Influence of Group Identifications on Political Perception and Evaluation." *The Journal of Politics*, vol. 46, no. 3, 1984, pp. 760–85. *JSTOR*, https://doi.org/10.2307/2130855.
- Conover, Pamela Johnston. "The Role of Social Groups in Political Thinking." *British Journal of Political Science*, vol. 18, no. 1, 1988, pp. 51–76. *JSTOR*, http://www.jstor.org/stable/193688.

- https://www.cbpp.org/research/federal-tax/substantial-income-of-wealthy-households-escapesannual-taxation-or-enjoys
- Davenport, Tiffany C., et al. "The Enduring Effects of Social Pressure: Tracking Campaign Experiments Over a Series of Elections." *Political Behavior*, vol. 32, no. 3, 2010, pp. 423–30, <u>http://www.jstor.org/stable/40960946</u>.
- De Dreu, Carsten K. W., et al. "In-Group Defense, out-Group Aggression, and Coordination Failures in Intergroup Conflict." Proceedings of the National Academy of Sciences of the United States of America, vol. 113, no. 38, 2016, pp. 10524–10529. JSTOR, www.jstor.org/stable/26471622.
- Dilliplane, Susanna. "all the news you want to hear: the impact of partisan news exposure on political participation." *The Public Opinion Quarterly* 75, no. 2 (2011): 287–316.
- Dolinski D, Nawrat M, Rudak I. 2001. Dialogue involvement as a social influence technique. Personal. Soc. Psychol. Bull. 27:1395–406
- Druckman, J. N. (2012). The politics of motivation. Critical Review, 24(2), 199-216.
- Druckman, James N., Donald P. Green, James H. Kuklinski, and Arthur Lupia. "The Growth and Development of Experimental Research in Political Science." *The American Political Science Review* 100, no. 4 (2006): 627–35.
- Evans, Geoffrey, and Robert Andersen. 2006. "The Political Conditioning of Economic Perceptions." *Journal of Politics* 68 (1): 194-207
- Fazio, Russell H. and Olson, Michael A. 2003. "Attitudes: Foundations, Functions, and Consequences". In *The Sage Handbook of Social Psychology*
- Fields, James M., and Howard Schuman. 1976. "Public Beliefs about the Beliefs of the Public." *Public Opinion Quarterly* 40:427-48
- Gadarian, S. K., Goodman, S. W., & Pepinsky, T. B. (2021). Partisanship, health behavior, and policy attitudes in the early stages of the COVID-19 pandemic. PLOS ONE, 16(4), e0249596. <u>https://doi.org/10.1371/journal.poe.0249596</u>
- R. Kelly Garrett, Brian E. Weeks, Rachel L. Neo, Driving a Wedge Between Evidence and Beliefs: How Online Ideological News Exposure Promotes Political Misperceptions, *Journal of Computer-Mediated Communication*, Volume 21, Issue 5, 1 September 2016, Pages 331–348, <u>https://doi.org/10.1111/jcc4.12164</u>

Garrett, R. Kelly, Erik C. Nisbet, and Emily K. Lynch. 2013. "Undermining the corrective effects

of media-based political fact checking? The role of contextual cues and naive theory." Journal of Communication 63 (4): 617–637.

- Gerber, Alan S., et al. "Social Pressure and Voter Turnout: Evidence from a Large-Scale Field Experiment." *The American Political Science Review*, vol. 102, no. 1, 2008, pp. 33–48, <u>http://www.jstor.org/stable/27644496</u>.
- Gershkoff, Amy, and Shana Kushner. "Shaping Public Opinion: The 9/11-Iraq Connection in the Bush Administration's Rhetoric." *Perspectives on Politics*, vol. 3, no. 3, 2005, pp. 525– 37. *JSTOR*, http://www.jstor.org/stable/3689022.
- Greene, Steven. "Understanding Party Identification: A Social Identity Approach." *Political Psychology*, vol. 20, no. 2, 1999, pp. 393–403. *JSTOR*, <u>www.jstor.org/stable/3792082</u>.
- Greene, Steven. "Social Identity Theory and Party Identification." Social Science Quarterly, vol. 85, no. 1, 2004, pp. 136–153. JSTOR, <u>www.jstor.org/stable/42955932</u>.
- Green, Donald P., and Alan S. Gerber. "Introduction to Social Pressure and Voting: New Experimental Evidence." *Political Behavior*, vol. 32, no. 3, 2010, pp. 331–36, http://www.jstor.org/stable/40960941.
- Gollust, Sarah E., Paula M. Lantz, and Peter A. Ubel. 2009. "The polarizing effect of news media messages about the social determinants of health." American Journal of Public Health 99 (12): 2160.
- Goren, Paul. "Party Identification and Core Political Values." *American Journal of Political Science* 49, no. 4 (October 1, 2005): 881–96. <u>https://doi.org/10.1111/j.1540-5907.2005.00161.x</u>.
- Haenschen, K. (2016). Social pressure on social media: Using Facebook status updates to increase voter turnout. Journal of Communication, 66(4), 542-563
- Huckfeldt, R., & Sprague, J. (1995). Citizens, politics, and social communication: Information and influence in an election campaign. New York: Cambridge University Press.
- Iyengar, Shanto, Yphtach Lelkes, Matthew Levendusky, Neil Malhotra, and Sean J. Westwood. "The Origins and Consequences of Affective Polarization in the United States." Annual Review of Political Science 22, no. 1 (May 11, 2019): 129–46. <u>https://doi.org/10.1146/annurev-polisci-051117-073034</u>.
- Iyengar, S. & Krupenkin, M. "Partisanship as Social Identity; Implications for the Study of Party Polarization." *The Forum* 16 (1): 23-45

- Jacobs, Nicholas. Building Robust Survey Experiments in Political Science: Or, "How I Learned to Love the Null." London, 2021. https://doi.org/10.4135/9781526466082.
- Johnston, Richard. "PARTY IDENTIFICATION: Unmoved Mover or Sum of Preferences?" *Annual Review of Political Science* 9, no. 1 (May 15, 2006): 329–51. <u>https://doi.org/10.1146/annurev.polisci.9.062404.170523</u>.
- Kalkhoff, Will, and Christopher Barnum. "The Effects of Status-Organizing and Social Identity Processes on Patterns of Social Influence." *Social Psychology Quarterly*, vol. 63, no. 2, 2000, pp. 95–115. *JSTOR*, www.jstor.org/stable/2695886. Accessed 6 Feb. 2021.
- Kenny, Christopher. "The Behavioral Consequences of Political Discussion: Another Look at Discussant Effects on Vote Choice." *The Journal of Politics* 60, no. 1 (1998): 231–44. <u>https://doi.org/10.2307/2648009</u>.
- KENNY, Christopher B. "Social Influence and Opinion on Abortion." *Social Science Quarterly* 74, no. 3 (1993): 560–74.
- Klar, Samara. "Partisanship in a Social Setting." *American Journal of Political Science* 58, no. 3 (2014): 687–704.
- Klofstad, C. A. (2007). Talk leads to recruitment: How discussions about politics and current events increase civic participation. *Political Research Quarterly*, 60(2) 180-191
- Koo, A. Z. X., Su, M. H., Lee, S., Ahn, S. Y., & Rojas, H. (2021). What motivates people to correct misinformation? Examining the effects of third-person perceptions and perceived norms. Journal of Broadcasting & Electronic Media, 65(1), 111-134.
- Kunda, Ziva. 1990. "The Case for Motivated Reasoning." Psychological Bulletin
- Lam, Virginia L., and Jodi-Ann Seaton. "Ingroup/Outgroup Attitudes and Group Evaluations: The Role of Competition in British Classroom Settings." Edited by Elena Nicoladis. *Child Development Research* 2016 (September 26, 2016): 8649132. <u>https://doi.org/10.1155/2016/8649132</u>.
- Lebo, Matthew J., and Daniel Cassino. "The Aggregated Consequences of Motivated Reasoning and the Dynamics of Partisan Presidential Approval." *Political Psychology*, vol. 28, no. 6, 2007, pp. 719–46.
- Levine, Mark, et al. "Identity and Emergency Intervention: How Social Group Membership and Inclusiveness of Group Boundaries Shape Helping Behavior." *Personality and Social Psychology Bulletin*, vol. 31, no. 4, Apr. 2005, pp. 443–453, doi:10.1177/0146167204271651.

Lodge, M,, & Taber, C. S. (2000). Three steps toward a theory of motivated political reasoning.

In A. Lupia, M. McCubbins, & S. Popkin (Eds.), Elements of reason: Cognition, choice, and the bounds of rationality (pp. 183-213). Cambridge: Cambridge University Press

Lodge, M., & Taber, C. S. (2005). The automaticity of affect for political leaders, groups, and issues: An experimental test of the hot cognition hypothesis. Political Psychology, 26(3)

- Lupia, A., McCubbins, M. D., & Arthur, L. (1998). The democratic dilemma: Can citizens learn what they need to know?. Cambridge University Press.
- Mann, C. B. (2010). Is there backlash to social pressure? A large-scale field experiment on voter mobilization. *Political Behavior*. <u>http://www.jstor.org/stable/40960944</u>
- Maggiotto, Michael A., and James E. Piereson. "Partisan Identification and Electoral Choice: The Hostility Hypothesis." *American Journal of Political Science* 21, no. 4 (1977): 745– 67. <u>https://doi.org/10.2307/2110735</u>.
- Malka, Ariel, and Mark Adelman. "Expressive Survey Responding: A Closer Look at the Evidence and Its Implications for American Democracy." *Perspectives on Politics* (2022): 1-12
- Matland, Richard E., and Gregg R. Murray. "I Only Have Eyes for You: Does Implicit Social Pressure Increase Voter Turnout?" *Political Psychology*, vol. 37, no. 4, 2016, pp. 533–50, <u>http://www.jstor.org/stable/44132906</u>.
- McChesney, Robert. 2015. Rich Media, Poor Democracy, 2nd Edition. New York: The New Press.
- Milgram S. 1974. Obedience to Authority. New York: Harper & Row
- Miller, Arthur H., et al. "Group Consciousness and Political Participation." American Journal of Political Science, vol. 25, no. 3, 1981, pp. 494–511. JSTOR, www.jstor.org/stable/2110816.
- Mullen, Brian, Jennifer L. Atkins, Debbie S. Champion, Cecel Story, and Mary Vanderklok. 1985. "The False Consensus Hypothesis Tests." *Journal of Experimental Social Psychology* 21:262-83
- Munger, K. (2017). Tweetment effects on the tweeted: Experimentally reducing racist harassment. Political Behavior, 39(3), 629-649.
- Neuman, W. R., Marcus, G., Crigler, A., & MacKuen, M. (Eds.) (2007). The affect effect: Dynamics of emotion in political thinking and behavior. Chicago: University of Chicago Press.

Nir, Lilach. "Motivated reasoning and Public Opinion Perception." The Public Opinion

Quarterly, vol. 75, no. 3, 2011, pp. 504–32, http://www.jstor.org/stable/41288399.

- Nyhan, B., & Reifler, J. (2019). The roles of information deficits and identity threat in the prevalence of misperceptions. Journal of Elections, Public Opinion and Parties, 29(2), 222-244.
- Panagopoulos, C. (2014b.) Watchful eyes: Implicit observability cues and voting. Evolution and Human Behavior 279-284.
- Panagopoulos, C. (2014a.) I've got my eyes on you: Implicit social pressure cues and prosocial behavior. *Political Psychology*, 35(1), 23
- Panagopoulos, Costas, et al. "Social Pressure, Descriptive Norms, and Voter Mobilization." *Political Behavior*, vol. 36, no. 2, 2014, pp. 451–69, <u>http://www.jstor.org/stable/43653198</u>.
- Pennycook, G., & Rand, D. G. (2019). Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. Cognition, 188, 39-50.
- Pietryka, Matthew T. "Accuracy Motivations, Predispositions, and Social Information in Political Discussion Networks." *Political Psychology*, vol. 37, no. 3, 2016, pp. 367–86, http://www.jstor.org/stable/44132823.
- Prior, Markus. 2007. Post-Broadcast Democracy: How Media Choice Increases Inequality in Political Involvement and Polarizes Elections. New York, Cambridge University Press.
- van Prooijen, Jan-Willem, and Karen M Douglas. "Belief in conspiracy theories: Basic principles of an emerging research domain." *European journal of social psychology* vol. 48,7 (2018): 897-908. doi:10.1002/ejsp.2530
- Pyszczynski, T. & Greenberg, J. (1987). Toward and integration of cognitive and motivational perspectives on social inference: A biased hypothesis-testing model.(In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 20, pp. 297—340). New York: Academic Press.)
- Rathje S, Van Bavel JJ, van der Linden S. Out-group animosity drives engagement on social media. Proc Natl Acad Sci U S A. 2021 Jun 29;118(26):e2024292118. doi: 10.1073/pnas.2024292118. PMID: 34162706; PMCID: PMC8256037.
- Redlawsk, D. P., Civettini, A. J., & Emmerson, K. M. (2010). The affective tipping point: Do motivated reasoners ever "get it"?. Political Psychology, 31(4), 563-593.
- Redlawsk, D. P. (2002). Hot cognition or cool consideration? Testing the effects of motivated reasoning on political decision making. Journal of Politics, 64(4), 1021-1044.

- Robison, Joshua and Rachel L. Moskowitz. "The Group Basis of Partisan Affective Polarization." *The Journal of Politics* 81 (2019): 1075 1079.
- Somin, Ilya. *Democracy and Political Ignorance: Why Smaller Government Is Smarter*. Stanford University Press, 2013, p. 280, <u>www.sup.org/books/title/?id=22955</u>.
- Stroud, Natalie J. 2008. "Media Use and Political Predispositions: Revisiting the Concept of Selective Exposure." Political Behavior 30:341-66
- Taber, Charles S., Damon Cann, and Simona Kucsova. 2009. "The Motivated Processing of Political Arguments." Political Behavior 31:137-55
- Taber, Charles S., and Milton Lodge. 2006. "Motivated Skepticism in the Evaluation of Political Beliefs." American Journal of Political Science 50:755-69
- Toff, B., & Suhay, E. (2019). Partisan conformity, social identity, and the formation of policy preferences. International Journal of Public Opinion Research, 31(2), 349-367

https://www.theguardian.com/us-news/2022/jan/05/america-biden-election-2020-poll-victory

- White, Katherine & Simpson, Bonnie & Argo, Jennifer. (2014). The Motivating Role of Dissociative Out-Groups in Encouraging Positive Consumer Behaviors. Journal of Marketing Research. 51. 433-447. 10.1509/jmr.12.0335.
- White, Katherine, et al. "Are All Out-Groups Created Equal? Consumer Identity and Dissociative Influence." *Journal of Consumer Research*, vol. 34, no. 4, 2007, pp. 525– 36. *JSTOR*, https://doi.org/10.1086/520077.
- White, Ismael K., et al. "Selling Out?: The Politics of Navigating Conflicts between Racial Group Interest and Self-Interest." *The American Political Science Review*, vol. 108, no. 4, [American Political Science Association, Cambridge University Press], 2014, pp. 783– 800
- Wojcieszak, Magdalena. "False Consensus Goes Online: Impact of Ideologically Homogeneous Groups on False Consensus." *The Public Opinion Quarterly*, vol. 72, no. 4, 2008, pp. 781–91, http://www.jstor.org/stable/25167665.
- Wojcieszak, Magdalena. 2010. "'Don't Talk to Me' Effects of Id Groups and Politically Dissimilar Offline Ties on Extremism." *New Media and Society* 12:637-55
- Wojcieszak, Magdalena, and Vincent Price. 2009. "What Underlies the false Consensus Effect: How Personal Opinion and Disagreement Affect Perception of Journal of Public Opinion." *International Journal of Public Opinion Research* 21:25-46

## VITA

Colin French <u>cfrench@syr.edu</u> Phone- 315-854-2589

# Dissertation Title- Social Pressure & Accuracy Motivations- Strategies to address problems of Directionally Motivated Reasoning in Political Information Processing

My dissertation investigates the degree to which social pressure, including group identity and political partisanship, can affect the degree to which the public places value on accuracy in responses to political knowledge questions. In a political climate where openness to and acceptance of factual information is often skewed by motivated reasoning, this project seeks to find strategies to test the public's openness to facts when presented with mild social pressure. I use experimental methods, observational date, and interviews to conduct these theoretical tests.

Committee- Shana Gadarian (Advisor), Emily Thorson, Steven White

## **EDUCATION**

PhD, Political Science Syracuse University, August 2022

Comprehensive Exam Fields: American Politics (Major) Comparative Politics (Minor)

MA, Political Science, Syracuse University, December 2018.

M.S.ED, State University of New York at Potsdam, 2015, *With Distinction*.
 Major- Curriculum & Instruction
 Concentration in Social Studies
 Thesis- "The Present Inadequacies of High School Economics Instruction"

#### B.A., St. Lawrence University, 2012, Cum Laude

- First Major- Economics
- Second Major- Canadian Studies
- Minor- Government
- Thesis- "A Comparative Historical Analysis of Fractional Banking in the

USA and Canada"

#### **Research Interests**

Social Pressure & Political Behavior, Public Opinion, Political Psychology, Experimental Methods, Political Misperceptions.