# POLITICAL PERCEPTION IN A (FALSELY) POLARIZED ERA: EXAMINING VALUE EXTREMITY, FALSE POLARIZATION, AND MODERATING FACTORS

By

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## A THESIS

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

Media and Information-Master of Arts

2023

#### ABSTRACT

This study examines the relationship between value polarization and false polarization using data from the 2016 American National Election Study (ANES). By defining false polarization as the difference between perceived and actual polarization in the political arena, the thesis categorizes it into two forms: exaggerated polarization and underestimated polarization. Analysis indicates that as individuals polarize their values, their false perceptions of polarization increase. Both exaggerated and underestimated polarization are affected by value polarization, just to different degrees. In addition, this study examines the interaction between common variables in polarization and political behavior. In conclusion, this study provides insights for future research on the mechanism of false polarization and highlights the importance of perception to the study of polarization.

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#### ACKNOWLEDGEMENTS

I would like to extend my heartfelt thanks to Dr. Ruth Shillair for her invaluable advice, support, and most importantly, encouragement. I am fortunate to have had her as my academic advisor.

My gratitude also extends to Dr. David Ewoldsen and Dr. Michael Stern. Their willingness to serve on my committee and provide insightful feedback on my dissertation was invaluable. I also appreciate the outstanding courses they have taught.

Additionally, I would like to express my appreciation to Dr. Dar Meshi, Dr. Gary Bente, and Dr. Johannes M. Bauer for the assistance and advice.

Finally, I am deeply grateful to my parents for their unwavering support and love. Being an international student at MSU isn't cheap, but you've made it a lot easier (and more fun).

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#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 Overview

Discussing politics is challenging, especially in today's polarized landscape. The intensity of group conflicts ignited by political viewpoints resembles a swirling vortex, dragging everything, whether related to politics or not, into its midst. In this maelstrom, friends become foes, and right and wrong seem to pivot on a fleeting thought.

At the heart of many political conflicts lies the dispute over boundaries. Between nations, there are set national boundaries, and in parallel, groups and individuals mark their personal boundaries. These demarcations are established to create a "safe distance." For individuals, the art lies in understanding when one come too close or remain too distant. As Marcus Aurelius (2015) described the parody nature of human interplay, "They despise one another, yet they flatter one another; they seek to rise above, yet they bow to each other." (p. 249) In the realm of politics, power sometimes operates from behind the scenes and at times takes center stage. Visibility, as Foucault described, is the Panopticon, making power enigmatic. And power distance, becomes one of the tricks in a politician's playbook. Not surprisingly, distance is also the focal point of political polarization. The divisions between partisans have deep roots, diminishing each other ideologically and erecting emotional barriers. It might not be war, but it closely mirrors one.

Distance creates divisions, and from these divisions, hatred emerges like a pattern of stereotyped behavior. Caged animals, like elephants, can sway incessantly; birds circle endlessly or even selfharm. Patients with Autism Spectrum Disorder might constantly repeat phrases or continually rotate their arms. The animosity between partisans manifests in a cyclical pattern of mutual blame, alienating the other, dehumanizing out-groups, and affixing political identities as labels in an adhesive loop. The American public's indifference and blindfold to this hate intensifies with each iteration of this cyclical pattern. In this way, as polarization widens and distances grow, so does the depth of hatred.

Distance also fosters a kind of "virus," or, as scholars might term it, an "alignment." (Fiorina,

2014) As divisions are formed, diverse political ideologies tend to centralize. People with similar political views, feeling the external threat of division, converge to form one pole. On one hand, the binding of party identity and ideology deepens. On the other, as suggested by DellaPosta (2020), polarized politics acts like an "oil spill," affecting even the apolitical, turning non-political behaviors into politically charged ones, and compelling individuals to rally under one banner (Shi et al., 2017; Hanna et al., 2013a).

#### **1.2** Incentive-Compatible Mechanisms

The bimodal distribution of political polarization, and the difficulty in depolarizing, stems from intricate reasons. Yet, if one were to encapsulate the phenomenon succinctly, I believe it's because treating matters in a polarized manner aligns with humans' inherent active and passive pursuits for mental shortcuts, representing an incentive-compatible mechanism.

The first time I encountered the concept of political polarization, my mind often drew parallels with the biblical tale of Moses parting the Red Sea. As the Egyptian army relentlessly pursued the Israelites along the coast, panic set in. In their distress, the Israelites exclaimed to Moses, "Because there were no graves in Egypt, hast thou taken us away to die in the wilderness?" (Exodus 14:11) At that pivotal moment, Moses stretched his staff (rod) towards the sea, creating a pathway between towering sea walls for the Israelites. The cloud pillar, symbolizing the presence of the Lord, stood a thousand feet high, separating the Israelite and Egyptian camps, distinguishing light from darkness.

The Exodus story is replete with binary narratives, such as Moses parting the Red Sea with his staff (rod) and the cloud pillar separating two lands. Binary narratives have been present since ancient times and exist across different cultures. Drawing from the Temporary Expansion of the Boundaries of the Self (TEBOTS) model, narratives are universal, and their evolution often relates to the fulfillment of needs (Ewoldsen, 2020). The cloud pillar to the Israelites is analogous to binary narratives present in Christianity, the Manichaean struggle, Islam, and Taoism's Yin & Yang. What these ancient narratives satisfy is a need for security. This sense of security arises from a simplified interpretation of a convoluted world – light versus dark, good versus evil, victory or defeat.

The mechanics of political polarization often related to oversimplification. It seems indisputable

that humans lean towards a simplified, easy-to-understand world over a complex, undefined reality (Fernbach and Van Boven, 2022). Delving deeper, perhaps the alignment of out-group hostility with in-group love stems from the incentive-compatible roots of the simplified narrative: a straight-forward story spares one the need for additional training or specialized effort in contemplation, essentially echoing a common heuristic principle. For die-hard Democrats or Republicans, the downright evil nature of the opposing party is perceived as a hard-wired fact.

Accompanying the tendency towards oversimplification is the mechanism known as categorical thinking. How long has it been since Americans have witnessed bipartisan consensus? Or, more precisely, how long has it been since Americans have seen bipartisan consensus on domestic issues? If you were to list the issues advocated by elites of both parties as Amazon book titles, and filter by newly listed items, what might emerge are topics related to foreign policy such as "China-bashing" or "The Russia-Ukraine War". This isn't surprising. The catalyst for internal unity isn't love, but external hatred – a truism about politics often echoed by tribalism and nationalism scholars. While one might argue that the oversimplified mechanisms of political polarization might arise from a bottom-up trajectory rooted in individual perspectives, categorical thinking, albeit heavily influenced by individual motivations, is often exacerbated by top-down elite behaviors. Viewing external animosity as a marketable product is not unique to the U.S., nor is it solely prevalent between nations (Fernbach and Van Boven, 2022).

In close affinity to the aforementioned brief discourse on polarization mechanisms is the core IV of this study: values. Values determine, for an individual, what is fundamentally "right" or "wrong". It is, as alluded to earlier, an elusive and vague interpretation of everything around us. Values are central to crafting personal identities (?), driving individuals to legitimize actions even without tangible benefits (?). While relatively stable, with established values being hard to alter, they do reflect preferences across varying dimensions. Values distill complex notions into simpler, often binary terms. Within studies related to political values, egalitarianism and moral traditionalism emerge prominently, deemed as primary guiding principles for Americans in understanding politics (Feldman, 2003).

#### **1.3 Representational Political Animal**

Thousands of years ago, when Aristotle declared man a political animal, he also defined humans as inherently rational creatures. Millennia later, no scholar can readily assume that humans act purely out of reason. Human decisions, from crossing the street to enter a coffee shop to political choices impacting millions, often veer away from pure rationality. One pivotal factor influencing our ability to make rational or optimal decisions is our interpretation of reality.

Reality is vital, but what holds even greater weight is our interpretation of it. To this extent, humans could be define as "representational (symbolicum) political animal." We decipher the world through languages, arts, religions, and other symbolic systems. Yet, the same reality can yield disparate readings. How we portray reality often diverges from the actuality, being distorted, mistaken, or clouded by illusions. From this perspective, rather than asserting humans understand the world through symbols or other mediums, it's more fitting to say we are constantly speaking to ourselves.

How far a person's interpretation of reality deviates from the actual world is, at times, not as crucial. What's more significant is the depth of belief one holds in their interpretation. Distorted realities can create echo chambers, spawn algorithmically-driven hatred and outrage industrial complex, as well as lead to self-fulfilling prophecies.

Therefore, in recent extensive discussions on polarization, an essential question repeatedly arises: Can we accurately perceive polarization? Or, can we correctly gauge the distance between out-groups and in-groups? (Levendusky and Malhotra, 2016b) As previously mentioned, people create boundaries to maintain a sense of safety, and incorrect judgments about these distances can also lead to more radical political attitudes and actions. Consequently, the study of perceived polarization has gained increased attention in recent years. The concept of false or misperceived polarization has been widely discussed. As defined by Levendusky and Malhotra (2016), false polarization is the "people's tendency to overestimate the degree of polarization between groups" (p.379). The reason false polarization is of such interest is not only because people often exaggerate the existence of polarization (Ahler, 2014) but also because false polarization can very much become

a "self-fulfilling prophecy." The public's misconceptions about extremism can not only influence their policy views but also potentially exacerbate extremism *per se*. (Levendusky and Malhotra, 2016a; Ahler, 2014)

#### 1.4 Chapter Discussion

Scholars study polarization through the lens of distance: the greater the distance, the more pronounced the divergence; the closer the distance, the more assimilation occurs, culminating in the current polarized landscape. Various concepts such as party polarization, affective polarization, perceived polarization, and social polarization have been introduced to capture the essence of polarization, leading to significantly different measurement methodologies (Fiorina, 2014; Fiorina and Abrams, 2008; Fiorina et al., 2008). For instance, research on issue polarization often measures variance or standard deviation (Lelkes, 2016; Levendusky, 2009). In contrast, studies on affective polarization frequently calculate the absolute ideological distance between the respondents and their out-party (Iyengar et al., 2019; Hunter, 1992; Lelkes, 2016).

In this study, I start with perceived polarization to investigate to what extent false polarization (namely, exaggerated and underestimated polarization) influences our political values. I use egalitarianism and moral traditionalism batteries from the American National Election Studies (ANES) to construct a polarization variable concerning values (Core IV). I then create a variable for false polarization (DV) based on ratings for five U.S. policy issues. This study also explores the moderating effects of political sophistication, social media usage, political participation, and trust in the government. Introducing these variables, commonly found in mass polarization research, offers a more detailed and comprehensive perspective, aiding in my understanding of how these factors influence and shape the public's political perceptions.

This study uses 2016 ANES time series data to examine the relationships among the aforementioned variables. Since 2016, ANES no longer asks about party issue position, leading previous research on false polarization topics to rely mostly on 2012 and earlier data. However, much has changed in American politics. Over the past decade, one can easily observe that with ongoing alignment, the stances of parties, party members, and party elites have become increasingly similar. Today, claiming that party elites influence party members' political behaviors leading to polarization, or vice versa, is challenging to substantiate with convincing evidence (Hunter, 1992; DiMaggio et al., 1996; Bafumi and Shapiro, 2009; Evans, 2003; Garner and Palmer, 2011). The context of the presidential election debates made the 2016 election a unique year. In that year, voters were found to decide based more on their likes and dislikes of the presidential candidates.(Gentzkow, 2016) This shift wasn't solely because of Trump's emergence, though his election undoubtedly expedited the process.This study utilizing issue position questions related to candidates provided by ANES, undertakes a thorough exploration of the relationship between presidential candidates and the public's political behaviors and perceptions (Enders and Lupton, 2021).

See Figure 1 for details of the proposed mechanism.

#### **1.5** Organization of the Chapters

Chapter 2 provides a systematic framework reviewing polarization, with a focus on defining what false polarization is and what it isn't. It elucidates how political sophistication, social media news consumption, and political participation can interact with political value polarization to affect false polarization, and how these variables have been closely associated with polarization in previous studies. Chapter 3 operationalizes the main variables, describing how the relevant variables in this study have been manipulated. Chapter 4 reports the results of this study, including three regression models. Chapter 5 discusses the findings of the study. Chapter 6 summarizes the entire study, focusing primarily on limitations and future possibilities.

#### **CHAPTER 2**

#### LITERATURE REVIEW

What is polarization and what isn't? Over the past few decades, the term "polarization" has incessantly bombarded the ears of the American public: journalists wield this inherently dramatic and conflict-driven term to capture attention; politicians evoke it as if the nation stands on the brink of a "cultural war" tomorrow (Jacoby, 2014); scholars, when addressing polarization, often find themselves amidst a mixed of interpretations. And by definition, polarization can simply be understood as "a state of having two opposing or contradictory tendencies, opinions, or aspects" (McCarty, 2019; Dictionary, 1989).

The mechanisms of polarization are not so simply explained. The bimodal nature of polarization suggests an overlay of division and alignment (Jost et al., 2022; Hanna et al., 2013b). In this context, individuals tend to harbor a sense of "naïve realism" (Fernbach and Van Boven, 2022), believing they are in the "light" (objective) and presuming those who disagree with them are often too coarse, failing to view issues objectively. Scholars studying polarization often coin varied terminologies based on their unique research perspectives. Different observational angles lead to diverse perceptions of the degree of polarization. Additionally, some researchers have shed light on other variables influencing polarization. For instance, with the advancement of ICT technology, it's posited that exposure duration on social media can also lead to varying degrees of political opinion polarization (Prior, 2013; Wilson et al., 2020; Levendusky and Malhotra, 2016a).

In the subsequent sections of this chapter, I will systematically delve into the progress of polarization research in the United States, starting with studies related to elite polarization and mass polarization. I will categorize polarization research into two measurement methods (issuebased and affective-based) and two analytical perspectives (division and consistency). Using the measurement methods as the classification criterion is pivotal for introducing the core dependent variable of this study: false polarization. Thereafter, I will review the impact of some important variables in previous research on polarization, such as media usage, political sophistication and political participation.

#### 2.1 From Elite to Mass Polarization

The research on polarization over the past few decades has witnessed a significant shift from focusing on elite polarization to mass polarization (McCarty, 2019). Early studies predominantly focused on the policy discrepancies within the corridors of power, where once, bipartisan consensus among political elites was the norm. Such consensus laid a robust foundation for inter-party collaboration and dialogue (Lelkes, 2016). However, as time progressed, the divergence between the elites widened, diminishing the overlapping stances that once united them.

This divergence was not only manifested in specific policy stances but also penetrated deeper into values (Enders and Lupton, 2021), beliefs (Druckman et al., 2021), and fundamental views about the nation's future direction. Such profound polarization affected collaboration, making policy formulation and the achievement of common goals more challenging. Meanwhile, elitelevel polarization also began to resonate with the general public.

A plethora of studies have demonstrated that public political behaviors, such as voting, political donations, and participation in demonstrations, have been profoundly influenced by elite polarization (Banda and Cluverius, 2018; Zingher and Flynn, 2018; Diermeier and Li, 2019). As the policy differences between the two parties widen, voters become more steadfast in their stances and less likely to support the opposing party. This "us versus them" mentality not only intensifies political polarization but also leads to further societal fragmentation (Banda and Cluverius, 2018). Some researchers even suggest that due to psychological factors like social identification, mere reminders of party affiliation can amplify love for the in-group and hostility towards the out-group (Fernbach and Van Boven, 2022; McCarty, 2019).

With the dynamic shifts in the political environment and continuous academic deep-dives into elite polarization, a core contention emerged: Is it elite polarization that drives mass polarization, or is it mass polarization that compels political elites to become more extreme for garnering more votes? Relevant research indicates that elite polarization and mass polarization might be a dynamic, mutually reinforcing process (Robison and Mullinix, 2016; Theriault, 2008).

Banda and Cluverius (2018) employed the ANES and Voteview databases to examine elite

polarization in Congress. Analyzing 33,025 Democratic and Republican supporters from 17 surveys between 1978 and 2016, the study concluded that as elites in the U.S. Congress became more polarized, affective polarization levels among party members increased. Moreover, as elites became more polarized, party members' evaluations of both parties declined, but the negative view towards the opposing party was more pronounced than that for their own.

Diermeier and Li (2019) introduced a novel behavioral voting model to inspect the relationship between partisan affect and elite polarization. They discovered that if political elites perceive their voters as showing "Ingroup Responsiveness", meaning a stronger partisan affect, the party's policies tend to lean more towards radical extremes. In essence, a heightened emotional polarization propels stronger elite polarization.

The discussion on mass polarization is a relatively novel subject. From debates over its very existence (Fiorina, 2014; Fiorina and Abrams, 2008; Abramowitz and Saunders, 2008) to explorations of its extent (Fiorina et al., 2008; Mason, 2015), academic dialogues surrounding mass polarization correspond to multiple distinct measurement methodologies. The variety in measurement techniques in turn reciprocates how we define mass polarization. Arguably, although consensus on many issues related to mass polarization remains elusive among scholars, relatively consistent measurement methods and definitions have emerged.

Discussions concerning polarization can generally be simplified by delineating two overarching measurement orientations. The first is the policy (issue)-based measurement approach. Typically, this method focuses on partisans' inclinations towards a specific policy and their perceptions of the other side's potential reaction to that policy. In essence, scholars adopting this method aim to address polarization issues through policy disagreements. The second is the affective-based measurement approach. This methodology doesn't predicate any specific issue or political figure. Instead, it usually probes in-group members about their sentiments towards a typical out-group member or their collective feelings towards the out-group as a whole.

#### 2.2 Issue-Based Measurement

The issue-based method of measuring polarization is among the most common and earliest approaches in mass polarization research (McCarty, 2019). By observing respondents' attitudes towards topics such as support for the African-American community, abortion, defense spending, and welfare expenditure, scholars aim to uncover evidence of polarization. Researchers employing this method often refer to their work using terms like "policy polarization" or "issue polarization."

Delving deeper, based on respondents' attitudes towards policies, scholars can quantify the public's degree of division on various policy matters, leading to mixed conclusions. One study by Lelkes (2016) used longitudinal data from ANES to analyze the extent of polarization among Americans. The results showed that, although party affiliates have become more ideologically consistent and their perceptions of polarization have increased, mass-level polarization has not significantly changed. Yet, another study Finkel et al. (2020) highlighted that, while hostility between parties has intensified, party members don't strongly perceive a dichotomy in policy views. They argue that the causal link between policy preferences and party loyalty has become distorted, as sometimes members adjust their policy preferences to align with their party affiliations. Overall, the intensity of political fights is growing, even if the actual policy disagreements aren't that big.

Consistency on policy matters can also shed light on the degree of polarization. For instance, Abramowitz and Saunders (2005) gathered data on participants' views on health insurance, abortion, aid to minorities, and ideology, investigating the relationship between these attitudes and party affiliation. Ideally, if an increasing alignment between these policy attitudes and party affiliation was discovered, it might indicate the presence of polarization. Although their study concluded that polarization is present and intensifying, the scale they employed faced criticism as it might be overestimates the level of polarization (Fiorina, 2014). Subsequent studies using similar methodologies have failed to find robust evidence of increasing polarization over the past decades (Baldassarri and Gelman, 2008).

Furthermore, explanations for polarization can sometimes be categorized under "partisan sort-

ing" (Mason, 2015; Luttig, 2018). For instance, party members with extreme positions on a given policy could either be due to intra-party polarization or could result from members choosing to identify with the Democrats or Republicans based on policy preferences. If the former is substantiated, it confirms the occurrence of polarization, while the latter would merely indicate partian sorting. The overlap between the two often blurs the lines in empirical research (McCarty, 2019).

Research on issue-based polarization heavily relies on several policy preference items provided by ANES. To measure this form of polarization, scholars have employed various methodologies. Among these, variance or standard deviation is most commonly used (Fiorina et al., 2008; Garner and Palmer, 2011; Bafumi and Shapiro, 2009). Additionally, researchers also use overlap coefficients to gauge issue disagreements (Bafumi and Shapiro, 2009; Lelkes, 2016). The intent of these methods is to capture whether public views on a particular issue diverge and whether such divergence increases over time. Through these techniques, scholars can gain a more precise understanding of how public political views and sentiments evolve over time.

In summary, while past research in this field can confirm increasing polarization among party affiliates and political elites (with the same measurement method also applied to elite polarization research), there's no sufficient evidence suggesting that the general public is becoming more ideologically polarized (Abramowitz and Saunders, 2008). Throughout this evolution, affective-based polarization is gaining increasing attention among scholars for various reasons. For example, growing research has found that party members' self-placement in politics is increasingly tied to their political attitudes. Scholars have also noted that the general public's political sophistication is often so low that they cannot comprehend policies (Miller, 2011; Lupton et al., 2015), making them passive recipients of media messages (Prior, 2013), or even simple comments from neighbors can easily trigger hostile emotions (Martin and Webster, 2020). Most crucially, the escalating hostility between party members, manifesting through social media and political movements, showcases the deepening rift to the world at large.

#### 2.3 Affective-Based Measurement

Differing from the issue-based polarization measurement method, affective- based measurement focuses on emotional distance between groups. This type of polarization is commonly referred to as "affective polarization." Iyengar and Westwood (2015) defines it as "the tendency of people identifying as Republicans and Democrats to view opposing partisans negatively and co-partisans positively" (p.691).

Affective polarization has gained increasing attention in recent years due to escalating conflicts between partisans. Past research has discovered that respondents who self-identify as affiliates of either party, or self-place as conservatives or liberals, do not necessarily possess adequate political sophistication or motivation to understand pertinent policy topics to assert their ideological position. Often, one's political stance originates from elusive concepts and does not waver based on specific policy disagreements (Iyengar et al., 2012).

There are several techniques for affective measurement, with the most common being the American National Election Study (ANES) time series' feeling thermometer (Gentzkow, 2016; Lelkes, 2016; Iyengar et al., 2019; Levendusky, 2009). ANES assesses public sentiments towards opposing party and same-party members, potentially based on the public's emotions toward both groups. This system requires respondents to rate various indicators on a scale from cold (0) to warm (100), with typical evaluations being for the Democratic and Republican parties. The affective polarization score is obtained by subtracting the absolute value from a respondent's score for their affiliated party from the score for the opposing party (Iyengar et al., 2019).

While the feeling thermometer measurement has been prominent in recent studies, it has its drawbacks. For instance, when ANES asks respondents to rate conservatives or liberals, they might perceive it as rating party members or a politically passionate figure. Furthermore, the questions posed by ANES sometimes lack comprehensiveness, making it challenging to cover all facets of affective polarization (Levendusky and Malhotra, 2016b).

The study of affective polarization has driven scholars to employ alternative methods and test more variables to understand its mechanisms. Martherus et al. (2021) utilized three extensive

online survey datasets spanning two presidential terms in four years to investigate the phenomenon of dehumanization between parties. Employing the classic "ascent of man" image, they tested respondents' dehumanization scores for in-groups and out-groups. Their findings revealed a strong correlation between affective polarization and dehumanization in the U.S., a conclusion supported by other studies (Harel et al., 2020; Moore-Berg et al., 2020). Garrett and Bankert (2020) also employed various survey datasets to measure moral beliefs and affective polarization. Their findings indicated that moral beliefs can predict biases towards political stances. Even after controlling for party and ideological impacts, moral beliefs influenced affective polarization. Ultimately, they concluded that individuals with strong moral beliefs tend to exhibit more political biases and hostility, further exacerbating affective polarization. Overall, numerous factors, including demographic factors, values, moral beliefs, trust in government, political participation, and social media usage, influence affective polarization (Garrett and Bankert, 2020; Yarchi et al., 2021; Enders and Lupton, 2021; Druckman and Levendusky, 2019; Iyengar et al., 2019).

Affective- based measurement offers a new perspective on understanding polarization. This method underscores the relationships among emotions, prejudices, and group dynamics. People often evaluate and judge others with opposing views based on emotions and personal experiences. These feelings and assessments are influenced not just by policy disagreements but largely by social identities, group affiliations, and other non-policy factors (Iyengar et al., 2019; West and Iyengar, 2022).

For example, when an individual harbors negative emotions toward a particular party or its members, it might not solely stem from policy disagreements but from prejudices related to other attributes of the party or its members, such as race, gender, religion, or cultural background (Lees and Cikara, 2021). Such identity and emotion-based polarization might be more entrenched (West and Iyengar, 2022) because it's not merely based on policy views but on holistic evaluations of people.

In conclusion, affective polarization measurement provides a novel lens to comprehend the intricacies of polarization. It highlights the role of public emotions, prejudices, and group affiliations in polarization and how these factors influence public political behaviors and attitudes. While this method has its challenges in measurement, it undoubtedly offers a more in-depth and holistic understanding of polarization dynamics.

#### 2.4 Perceived Polarization and False Polarization

Perceived polarization highlights a less discussed perspective—our perceptions. Does the information we receive daily, or the ways in which groups interact, lead to misguided perceptions? These questions might have been overlooked in earlier research, but they are crucial. Misconceptions about polarization, whether exaggerated or underestimated, influence partisan political behavior (Fernbach and Van Boven, 2022).

Measurement of perceptual polarization has almost invariably adopted an issue-based approach. Westfall et al. (2015) utilized 10 political issue questions from ANES. These queries required respondents to place themselves, both parties, and candidates of both parties on a 7-point scale. Depending on the wording of the issues, they coded -3 as the most liberal stance and 3 as the most conservative. If a participant happened to be a Democratic supporter, after placing herself, both parties, and their candidates on the 7-point scale, the authors derived perceived polarization by subtracting the rating for the Republican party (or Republican candidate) from that of the Democratic party (or Democratic candidate). Subsequently, the authors calculated actual polarization by subtracting the mean issue placement of those who identified as Democrats from that of those who identified as Republicans. This calculation was repeated for each year and each issue. Levendusky and Malhotra (2016b) employed a similar methodology, but utilized GfK Custom Research to ask respondents about how they believe a typical Democrat or Republican would rate. This step find a way around the ambiguity presented by the ANES questions. Enders and Armaly (2019) reverted to using ANES data, but their method of computing perceived polarization focused more on the distance between the individual and the opposing party. Using several issue items from ANES, Lelkes (2016) used overlap coefficients to compute perceived polarization and actual polarization, and then took the difference between the two.

These studies consistently indicate a significant discrepancy between public perceptions of

political polarization and its actual extent. According to Westfall et al. (2015), they found that people generally overestimate the degree of political polarization across several issues. Even though both actual and perceived polarization increased from 1968 to 2008, perceived polarization consistently surpassed the actual. They further noted that individuals tend to overestimate the polarization of groups holding opposing views. Similarly, Levendusky and Malhotra (2016), when surveying issues like taxation, immigration, trade, and public finance, found that people often perceive those with differing opinions as having more extreme stances. Enders and Armaly (2019) further traced the evolution of perceptual versus actual polarization from the 1970s to the 2010s. They observed that while both types of polarization increased over the past four decades, the gap between them widened significantly. Actual polarization remained relatively stable, but perceived polarization consistently rose. Lelkes (2016) reached similar conclusions using overlap coefficients to track perceived polarization. He measured perceived polarization of issues and found that from 1972 to 2012, the overlap coefficient between the two parties dropped substantially.

When scholars subtract perceived polarization from actual polarization to observe the gap, three scenarios can arise. The least common scenario is that respondents accurately perceive the actual state of polarization. Most of the time, respondents either exaggerate the existence of polarization or underestimate it. Therefore, while it might seem counterintuitive, the term "false polarization" is often used by scholars to emphasize the misjudgment of polarization. In short, what is referred to as "false polarization" or sometimes "mis-perceived polarization" is the distance between perceived and actual polarization.(Finkel et al., 2020)

Research on false polarization is still burgeoning. Most scholars follow the measurement methods of perceived polarization and test using an issue-based approach. This doesn't mean that false polarization and affective polarization are unrelated; it's more often due to limitations in data and research techniques (Fernbach and Van Boven, 2022). Lees and Cikara (2021) suggests that in addition to using existing measurement methods, one can also observe false polarization from a meta-perception perspective. That is, focusing on how "I" think others will evaluate my political standpoint.

In summary, the research on false polarization and perceived polarization largely overlaps, and the misjudgment of polarization has been proven to influence actual polarization (Enders and Armaly, 2019).

#### 2.5 Determinants of Polarization

#### **2.5.1** Political Values

Fernbach and Van Boven (2022) posits that the cognitive mechanisms leading to perceived polarization consist of three primary factors: categorical thinking, oversimplification, and emotional amplification. Categorical thinking is a natural human inclination for understanding the intricate world around us. This mode of thinking can induce biases towards certain category members, exaggerating differences between categories, and downplaying disparities within a category. For instance, simply labeling individuals as "Democrats" or "Republicans" might lead to an exaggerated perception of the differences between the two groups. Oversimplification suggests that individuals tend to distill complex issues or perspectives without delving into their inherent complexities and nuances, potentially causing misunderstandings and biases. Emotional amplification underscores how emotions, particularly anger, amplify and reinforce the tendencies of categorization and simplification.

Fernbach and Van Boven (2022) asserts that these three factors are also applicable to other forms of polarization. Indeed, behind the phenomenon of polarization, multiple factors often play a pivotal role. Values delineate the "good" or "bad" actions in the world and frequently guide human attitudes and behaviors across various domains. Simplifying the vast array of phenomena into basic binary terms, such as "good" versus "evil" or "light" versus "dark," is indeed a universal phenomenon transcending cultures. While this simplification aids in processing information, it also exacerbates polarization, with political values playing a crucial role.

In the U.S., dominant societal issues, such as abortion, LGBTQ+ rights, and welfare expenditures, not only expose America's divisions but also indirectly reveal the differing value dimensions among Americans. In fact, substantial research confirms the influence of values on political attitudes (Biernat et al., 1996), political behaviors (Schwartz et al., 2010), and political elites (Hardy, 2017).

In extensive research, egalitarianism and moral traditionalism have emerged as pivotal guiding frameworks for Americans' understanding of politics (Feldman, 2003). For instance, proponents of moral traditionalism believe that newer lifestyles are eroding traditional moral values, which in turn threatens the conventional American family way of life. In this light, it's not difficult to grasp why issues like same-sex marriage and abortion have become increasingly contentious (Brewer, 2003; Sherkat et al., 2011). Egalitarianism, on the other hand, with their support for same-sex marriage, advocacy for economic and opportunity equality, stand in stark contrast to moral traditionalists. Since our social identities are intrinsically tied to our values (Malka and Lelkes, 2010), we might perceive groups with differing values as adversaries.

The phenomenon is not isolated. Enders and Lupton (2021), employing panel data analysis, discovered a bidirectional causality between the value polarization and affective polarization. To be more precise, when individuals hold extreme views on a particular core value, they are more prone to have intense emotional reactions towards those with differing views, and vice versa. This implies that as our values become more extreme, we are also more susceptible to affective polarization against those holding divergent values.

In recent years, scholars have observed a declining favorability toward moderate political candidates, with those harboring extreme stances increasingly gaining electoral traction (Hall, 2015; Simas, 2013). The emphasis on extreme values during the 2016 presidential election was even more pronounced. Trump portrayed himself as a lone hero fighting against the liberal tide, galvanizing his supporters with the belief that by backing him, they gain the strength to confront those threatening the American way of life or faith (Abramowitz and Saunders, 2008). While 2016 was not the first instance of a candidate - whether Republican or Democrat - claiming to safeguard American values or morality, the partisan undertones of policy stances seemed to recede that year, with the personal brand and symbolism of the candidate taking an unprecedented forefront.

H1: Value polarization should be positively associated with false polarization.

#### 2.5.2 Political Participation

Does political participation amplify the perception of political polarization? When I recall political rallies seen through media, I vividly remember the chants, slogan-bearing individuals, and the occasional verbal or even physical altercation with dissenting passersby. Political participation seems inherently emotion-laden. Thus, it is not far-fetched to hypothesize that individuals frequently engaged in such activities might intensify their perception of political polarization or even exaggerate its existence.

However, within academic debates, the role of political participation in amplifying polarization remains unresolved. Argyle and Pope (2022) explored the relationship between political participation and polarization, finding that out of the five political participation scales provided by ANES, only "attempting to persuade others" might induce polarization. Simas and Ozer (2021) differentiated between voting and non-voting activities, deducing that while polarization between candidates mobilizes voters, it does not necessarily influence voting or other political behaviors. Abramowitz and Saunders (2008) classified 2004's political participation data into low, medium, and high, revealing that intensified false polarization between candidates boosts political participation.

Despite the varied opinions, I postulate that the level of political participation may have lead to exaggerated polarization in 2016. Numerous studies already attest to the significant influence of social media on political attitudes and behaviors, primarily voting (Gentzkow, 2016). And 2016 saw Trump's immense success with Twitter. Although ANES items on political participation do not encompass online participation, the transition from social media engagement to frequent political participation is universal (Bossetta et al., 2018; Alves and Mutsvairo, 2019).

H2a: Political participation should be positively associated with false polarization.

**H2b:** The interaction between political participation and value polarization should positively associated with false polarization.

#### 2.5.3 Political Sophistication

Compared to the contentious relationship between political participation and polarization, there's a broader consensus that higher political sophistication correlates with stronger political

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polarization (Miller, 2011; Zingher and Flynn, 2019; Taber et al., 2009). Taber et al. (2009) suggests that individuals with greater political sophistication are more prone to biased information processing. This is because when exposed to conflicting information, one is more likely to experience cognitive dissonance. And an individual with higher political sophistication, who is more familiar with and cares more about politics and possibly has clearer political beliefs, is likelier to counter these incongruent messages.

H3: Political sophistication should be positively associated with false polarization.

#### 2.5.4 Trust in Government

Over the past several decades, public trust in the U.S. government has been in steady decline. This decline is linked to various factors including governmental scandals, economic crises, and external conflicts. However, a pivotal reason might be the public's disappointment in the government's inability to address pressing issues. Concurrently, political polarization in the U.S. has been intensifying. The rift between the two parties is widening, with voices of the moderate faction increasingly marginalized. This polarization is not only evident within Congress but also palpable among the public (Jones, 2015).

The degree of trust in the government often aligns with the predominant concerns on the public agenda. When the government is perceived as failing to address issues deemed critical by the public, this distrust might intensify. This stems not just from a disappointment in specific governmental actions or decisions but from a sense that the government doesn't truly represent their interests and concerns (Meirick and Edy, 2022). Thus, when the public holds a high degree of trust in the government, false polarization might decrease, as differences against out-group party elites get mitigated by trust in the government.

H4: Trust in the government should be negatively associated with false polarization.

#### 2.5.5 Media Usage

The relationship between media consumption and polarization has garnered significant attention worldwide in recent years (Stern and Rookey, 2013). Bail et al. (2018) designed a Twitter bot that pushed opposing political views based on participants' party affiliations. They discovered that

exposure to contrasting political perspectives can intensify political polarization. Hawdon et al. (2020), utilizing data from 1,424 Virginia residents, delved into whether media exposure correlates with polarization. They identified stark differences between the two political extremes: polarized conservatives predominantly accessed news via broadcast and television, while polarized liberals leaned more towards newspapers, television, and various social media platforms. Yang et al. (2016) examined the relationship between social media use, traditional media consumption, and perceived polarization across ten countries, including the U.S. Although Their findings indicated a weak association between traditional media consumption and perceived polarization in the U.S, but the correlation between social media usage and perceived polarization was robustly positive.

**H5:** Social media usage is positively associated with false polarization.

#### **CHAPTER 3**

#### DATA AND METHODS

Scholars who study political polarization generally conduct their analyses using secondary data provided by the American National Election Study (ANES), a project that has continuously tracked the behavior and political views of the American electorate since 1948, spanning multiple election cycles, and providing data on party identification, candidate preferences, voting patterns, and political beliefs through cumulative face-to-face and online survey data. There are, of course, some drawbacks to ANES as a dynamically evolving database. For instance, it often experiences changes in question wording or omissions of certain survey questions, posing some challenges for scholars utilizing it for longitudinal studies, and these changes may potentially introduce inconsistencies in the analysis.

In this study, I explore the relationship between political values and so-called "false polarization" using data collected by ANES pre- and post-election in 2016. In addition, I use ANES data on political participation, social media usage, political Sophistication, and government trust to investigate their interaction with false polarization. This study also explores the extent to which these variables moderated the impact of values polarization on false polarization, with the aim of using the analysis of the moderating effect to reveal in more detail the intrinsic links and mechanisms of influence between political values and false polarization.

#### **3.1 Operationalizing Variables**

#### 3.1.1 Dependent Variable

The dependent variable for this study, false polarization, was calculated based on five questions provided by the ANES that focused on major social issues in the U.S. today, including government spending and services, defense spending, Medicare, guaranteed jobs, and aid to minorities (see Appendix C for the wording of the specific questions). Each of these questions utilized a 7-point scale. On the same topic, each respondent was required to respond three times: first, they were required to identify their position on the scale; next, they were required to position the two

presidential candidates-Hillary Clinton and Donald Trump-on the same scale.

For ease of data handling, I borrowed from Westfall et al. (2015), which categorizes responses into those with liberal and conservative attitudes based on each policy issue, and remapped the 7-point scale to a range of -3 to 3 (see Table 1 for details). Thus, -3 represents the most liberal view (e.g., the government should reduce defense spending), while 3 represents the most conservative view (the government should increase defense spending). The topic "government spending and services" was reverse coded to ensure consistency in ideological positioning with the other topics.

See Table 1 for detail.

The calculation of false polarization involves the dynamics of perceived polarization and actual polarization. Perceived polarization is constituted by the difference in respondents' attitudes towards the Republican and Democratic presidential candidates, so a higher score implies more pronounced perceived polarization. Actual polarization is derived by extracting the mean difference in policy positions between respondents who identify as Republicans and Democrats. All calculations, including the measurement of false polarization (obtained by subtracting actual polarization from perceived polarization), are conducted independently across the five issues. A positive score of false polarization reveals an exaggeration of perceived polarization, while a negative value indicates an underestimation. The false polarization scores across the five issues were averaged to simplify subsequent analyses, and the reliability of this method was acceptable (Cronbach's  $\alpha = 0.67$ ).

Compared to previous studies, this study was constrained by the 2016 ANES change in survey design, preventing the calculation of respondents' expected Democratic and Republican positions. However, there is still validity in using data on presidential candidates to study polarization, especially when observing presidential issue polarization or elite polarization. I argue that 2016 demonstrated a unique political landscape: both candidates occupied more prominent positions in the campaign than in previous presidential runs, and the public was more inclined to closely associate candidates with their parties. In additon, as Levendusky and Malhotra (2016b) criticized, much of the past research based on ANES issue based measurements has been somewhat inconsistent - respondents may have placed the two parties based on the behavior of specific political elites

rather than partisans when positioning themselves for the two parties. Thus, using respondents' evaluations of presidential candidates as a measurement tool not only achieves a more precise measurement to some extent, but also better fits the specific context of the 2016 presidential election.

#### 3.1.2 Core Independent Variable

I introduced eight key political value items from the American National Election Study (ANES) in order to provide insight into the variable of "values polarization." These items are configured on a 5-point scale and focus on revealing respondents' core tendencies toward egalitarianism and moral traditionalism. Specifically, the egalitarianism-related items focus on respondents' perceptions and positions on key issues such as equality of opportunity, while the items linked to moral traditionalism concentrate on respondents' attachment to and identity with the values of the past. It is important to note that the two value orientations were constructed from four detailed survey questions and reverse coded where necessary to ensure that higher scores consistently refer to the more conservative orientation.

In combining and calculating these key values items, I relied on Enders and Lupton (2021)'s method of combining these eight items by calculating their means into a single dimensional scale, the "values orientation", and confirming its relatively stable internal consistency after validating its Cronbach alpha score ( $\alpha = 0.81$ ). I calculated values polarization using a method similar to that used to calculate affective polarization, i.e., calculating the absolute distance between each respondent's values orientation and their opposing party's average score on values orientation. The implementation of this step allowed me to quantify the key variable of "values polarization".

#### 3.1.3 Moderators

*Political Sophistication.* The ANES provides a battery of questions inquiring about respondents' understanding of politics. Typically, the ANES provides 4 to 7 options for each question, with only one being the correct answer. I re-coded incorrect choices as 0 and correct ones as 1 to construct an additive scale, named the Political Sophistication Index. This index is composed of 10 questions, therefore ranging from 0 to 10, where higher scores indicate higher political sophistication. This

measurement has been adopted by numerous previous studies and is considered relatively stable (Zingher and Flynn, 2019; Luskin, 1987; Zaller, 1992).

*Trust in Government.* This variable is based on four closely related questionnaire items, wherein respondents are asked to score the government on aspects such as corruption levels and governance capabilities. Notably, since the number of answer options provided by ANES varies, I opted for a standardization strategy to facilitate comparison and integration across questions. All question responses were scaled to a range of 0 to 100, employing a widely-accepted standardization method (Miller et al., 2016), enabling quantitative analysis on a uniform scale.

In further operations, I computed the mean of these four items, constructing a comprehensive "Trust Index." This index integrates trust levels reflected in individual questions, in order to accurately depict respondents' overall trust level in the government. Full question wording and specific standardization methods can be found in Appendix B.

*Social Media Usage*. The use of social media, integral to analyzing news consumption patterns related to the presidential election, is incorporated into this study through a questionnaire item ranging from 0 (none) to 7 (seven days), asking respondents how many days they use social media to acquire news about the presidential election in a week. While relying on a single survey item may elicit concerns about measurement robustness, this method has actually been utilized and validated in multiple previous studies(Klein and Robison, 2020; Boxell et al., 2017).

Social media platforms not only create an echo chamber effect, deepening the divergence of political views, but also solidify similar political views through algorithmic recommendations, further exacerbating societal political polarization (Shillair et al., 2022). Thus, incorporating the frequency of social media usage as a moderator in the model can not only assist us in understanding how social media impacts the acquisition and processing of political information but also provides a bridge connecting key research dimensions such as information consumption, political attitudes, and behaviors.

*Political Participation*. Five survey questions are frequently utilized in previous researches to measure political participation (Argyle and Pope, 2022; Valentino et al., 2011; Lupton et al., 2015;

Pietryka and MacIntosh, 2013). These questions ask whether the respondent 1) wants to influence others' political views, 2) participates in political rallies, 3) displays campaign stickers on their car or in front of their house, 4) works for a party or candidate, and 5) donates to campaigns. I integrated these questions into an additive scale from 0 to 5, where the highest number indicates stronger political participation.

#### **3.1.4** Control Variables

Building on prior research, I incorporated several control variables: age, gender, church attendance, educational level, and income to provide a more robust framework for the primary analysis.

Age and Gender are included due to their consistent significant differences in political behavior and attitudes.

*Church Attendance* as a control for the potential influence of religious belief on individual behaviors and attitudes. This variable is reverse coded and subtracted by 1, so that 0 represents never attending and 4 signifies frequent attendance.

*Education* is also considered and is re-coded into two levels: "Below Bachelor's degree" (1) and "Bachelor's degree and above" (2), aiming to reflect the potential influence of higher educational levels on political participation and views.

#### 3.2 Considerations Before Model Building

This study will build 3 regression models to observe the relationship between value polarization and false polarization and the respective moderators. The only variation between the models is in the dependent variable: model 1 has false polarization as the dependent variable, model 2 has exaggerated polarization, and model 3 has underestimated polarization. Exaggerated polarization and underestimated polarization are derived from false polarization. Before standardizing the variables, I added a dummy variable called "SIGN" to label respondents with negative and positive false polarization score. When a respondent's false polarization score is positive, it is classified as exaggerated polarization; when a respondent's false polarization score is negative, it is classified as underestimated polarization. One possibly counterintuitive aspect of the matter is that when Model 3 in the regression analysis, i.e., underestimated polarization, has a negative coefficient, it actually means that underestimated polarization is unlikely to occur, which is caused by the value of the false polarization being negative.

#### **CHAPTER 4**

#### RESULT

#### 4.1 Descriptive Data Analysis

The data for this study were derived from the 2016 ANES time series study. Data on value polarization, age, false polarization, income, education, social media usage, political participation, political sophistication, church attendance (refer as religion in some cases), trust in government, and gender were either collected directly or obtained through multiple steps of manipulation.

After excluding ineligible data, including respondents who self-identified as independents, a total of 1,623 valid responses (N = 1,623) were gathered. Of these, 781 who identified as Democrats and 842 as Republicans. As shown in Table 2, the average score for false polarization was 1.11, while the score for value polarization was 1.165. This suggests that respondents may be inclined to exaggerate the presence of polarization and display a distinct value polarization. On average, respondents reported using social media 3.908 days per week and had an average age of 51. Respondents scored relatively high in political sophistication, with an average of 6.751 out of a maximum of 10. However, their average trust in the government (on a scale where 100 represents complete trust) was only 27.801. For a more detailed presentation of the descriptive statistics, refer to Table 2.

#### Table 2 here.

The present study also analyzed the percentages of false polarization under various conditions. Among all valid data, 1,351 respondents perceived an exaggeration of polarization, constituting approximately 83% of the sample, while 272 individuals underestimated the presence of polarization, representing roughly 17% of respondents. Within the group of 1,351 who perceived exaggerated polarization, the distribution between Democrats and Republicans was fairly even, with approximately 47% (N=637) identifying as Democrats and 53% (N=714) as Republicans. Among the 272 respondents who underestimated the degree of polarization, the distribution was almost identical: approximately 53% (N=144) were Republicans and about 47% were Democrats.

When the maximum number of values polarization is cut in dichotomies, within the high

value polarization group, there were 246 Democrats and 264 Republicans who overestimated the presence of polarization. Conversely, those who underestimated it consisted of 33 Democrats and 27 Republicans. Thus, the proportional distribution between Democrats and Republicans remained relatively consistent in the highly value polarized scenario.

#### 4.2 Bivariate Correlation Analysis and Multicollinearity Test

As a preliminary step, I wanted to analyze the data to see if there was a sufficient linear relationship between the variables before I started building the model. As such, a bivariate correlation analysis was appropriate for this task. Having removed some of the categorical variables, I ran a bivariate correlation analysis (see Table3).

A significant positive correlation of 0.42 was observed between false polarization and value polarization, suggesting that as false polarization increase, the likelihood of value polarization also rises. Social media consumption showed significant positive correlations with false polarization and value polarization, suggesting that greater consumption of information from social media sources may be associated with a greater misperception of polarization. Political participation shows a significant positive relationship with most of the other variables, meaning that more politically active individuals are likely to perceive more false polarization, consume more media, and have higher political sensitivities. The positive correlation of 0.57 between trust in the government and value polarization reveals that individuals with higher trust in the government might also perceive elevated value polarization. Additionally, trust in the government closely aligns with media consumption and political sophistication. Political sophistication bore strong positive correlations with nearly all other variables in the table, underscoring its pivotal role in shaping perceptions and behaviors related to polarization and political participation.

Figure 2 here.

Furthermore, age, education, and income all demonstrated significant positive correlations with the majority of the other variables. Church attendance had significant positive correlations with all other variables, suggesting that individuals attending church functions more frequently might also perceive more false polarization, possess sharper political insight, and consume media more extensively.

Table 3 here.

Subsequently, the Variance Inflation Factor (VIF) and Tolerance were employed as metrics to detect potential issues of multicollinearity (refer to Table 4). A VIF value of 1 indicates no multicollinearity among the variables. Generally, a VIF exceeding 10 is considered a clear indication of multicollinearity, signifying that the variable is highly correlated with other variables, which could influence regression analyses. In Table 4, all VIF values are below 10, suggesting no evident issues of multicollinearity.

Table 4 here.

Tolerance serves as another metric for detecting multicollinearity and is calculated as  $1 - R^2$ , where  $R^2$  represents the explanatory power of other variables over a specific variable. Tolerance values range between 0 and 1, with values close to 0 indicating high multicollinearity. Typically, a Tolerance value less than 0.1 is seen as an indication of multicollinearity. In Table 4, all Tolerance values are substantially greater than 0.1, further confirming the absence of multicollinearity issues.

#### 4.3 Regression Models

Three regression models were constructed to observe and compare the outcomes of false polarization at various degrees. The dependent variable for the first model is false polarization, meaning that this model measures the two scenarios within false polarization—those perceiving exaggerated polarization and those underestimating polarization. The second model excludes participants who underestimated polarization, aiming to investigate the outcomes associated with exaggerated polarization perceptions. The third model retains the data from those who underestimated polarization.

## 4.3.1 Model 1: False Polarization

The regression analysis of Model 1 incorporating 1,623 observations. This model explains 23.4% of the variance in the dependent variable.

The positive and significant coefficient for Value Polarization ( $\beta = 0.383, p < 0.01$ ) indicates that as value polarization intensifies, so does the dependent variable. Age ( $\beta = 0.005, p < 0.01$ ) and Education ( $\beta = 0.108, p < 0.05$ ) emerge as statistically significant predictors. Nevertheless, Gender and Church Attendance do not show significant relationships with the dependent variable.

The results underscore the influence of Social Media, showcasing its positive impact on the dependent variable ( $\beta = 0.077$ , p < 0.01). In contrast, Trust in Government is negatively associated ( $\beta = -0.172$ , p < 0.01), while Political Sophistication ( $\beta = 0.209$ , p < 0.01) stands out as a potent positive predictor.

While Political Participation isn't significant, its interaction with Value Polarization ( $\beta = 0.052, p < 0.05$ ) is noteworthy. This indicates that the influence of Political Participation on the dependent variable becomes more pronounced at different levels of value polarization.

Moreover, the interaction between Political Sophistication and Value Polarization ( $\beta = -0.093$ , p < 0.01) is significantly negative, suggesting that Value Polarization modulates the relationship between Political Sophistication and the dependent variable.

Interestingly, although Trust in Government has a significant negative effect ( $\beta = -0.172$ , p < 0.01), its interaction with Value Polarization ( $\beta = 0.061$ , p < 0.05) is positive and significant. This implies that the negative relationship between Trust in Government and the dependent variable might be attenuated at higher levels of value polarization.

Likewise, the effect of Social Media Usage is significant and positive ( $\beta = 0.077, p < 0.01$ ), and its interaction with Value Polarization ( $\beta = 0.077, p < 0.01$ ) remains significant.

Table 5 here.

#### 4.3.2 Model 2: Exaggerated Polarization

The regression analysis of Model 2, based on 1,351 observations, elucidates the determinants of exaggerated polarization. This model accounts for 44.5% of the variance.

Value Polarization in Model 2 manifests a positive and significant coefficient ( $\beta = 0.198, p < 0.01$ ), suggesting that as value polarization intensifies, exaggerated polarization increases. Age ( $\beta = 0.005, p < 0.01$ ) remains a significant predictor, consistent with Model 1. Education, however, exhibits a negative association with exaggerated polarization ( $\beta = -0.060, p < 0.1$ ), contrasting its positive influence in Model 1. Gender emerges as a marginally significant predictor ( $\beta = 0.055, p < 0.1$ ), unlike its non-significance in Model 1.

Church Attendance displays a significant positive influence on exaggerated polarization ( $\beta = 0.092, p < 0.01$ ), deviating from its non-significance in Model 1. Social Media's positive effect ( $\beta = 0.131, p < 0.01$ ) is consistent across models, but its magnitude is more pronounced in Model 2. Trust in Government continues its negative trend ( $\beta = -0.055, p < 0.05$ ), echoing its influence in Model 1.

The interaction between Political Participation and Value Polarization in Model 2 is significant with a coefficient of  $\beta = 0.056$ , p < 0.01. This interaction term underscores that the effect of Political Participation on exaggerated polarization is modulated by the levels of Value Polarization. Specifically, as value polarization increases, the relationship between Political Participation and exaggerated polarization becomes more apparent. This is particularly interesting when contrasted with Model 1, where the interaction was significant but less pronounced with a coefficient of  $\beta = 0.052$ , p < 0.05.

Similarly, the interaction effect between Social Media and Value Polarization in Model 2 is noteworthy with a coefficient of  $\beta = -0.054$ , p < 0.01. This suggests that the positive influence of Social Media on exaggerated polarization is somewhat diminished as value polarization intensifies. In Model 1, this interaction also remained significant but with a different direction, having a coefficient of  $\beta = 0.077$ , p < 0.01, indicating that as value polarization increased, the positive effect of Social Media on the dependent variable was accentuated.

It's also worth noting that the interaction between Political Sophistication and Value Polarization, which was significant in Model 1 ( $\beta = -0.093$ , p < 0.01), loses its significance in Model 2. This shift underscores the conditional nature of this relationship and suggests that the influence of Political Sophistication, when interacting with Value Polarization, differs when considering the false polarization (Model 1) versus exaggerated polarization (Model 2).

Table 6 here.

#### 4.3.3 Model 3: Underestimated Polarization

The regression analysis for Model 3, based on a relatively smaller sample of 272 observations, delineates the factors influencing the underestimation of polarization. This model captures 43.5%

of the variance in the dependent variable.

Value Polarization in Model 3 exhibits a positive and significant coefficient ( $\beta = 0.168, p < 0.05$ ), suggesting that as value polarization intensifies, the tendency to underestimate polarization increases. This effect is less pronounced than in Models 1 and 2. Age does not hold significance in this model, which deviates from its consistent positive effect observed in the prior models.

Education, although not significant in this model, had varied effects in the earlier models, being positive in Model 1 and negative in Model 2. Gender, not significant in Model 1, showed a marginal effect in Model 2 but returns to non-significance in Model 3.

Church Attendance does not exhibit a significant relationship in Model 3, consistent with Model 1, but contrasting the significant positive relationship observed in Model 2.

Social Media's influence is negative and significant ( $\beta = -0.102, p < 0.05$ ), contrasting its positive and significant effects in Models 1 and 2. Trust in Government continues its negative association with the dependent variable ( $\beta = -0.259, p < 0.01$ ), consistent with the previous models but with a stronger magnitude in Model 3.

Political Participation stands out in Model 3 with a significant positive effect ( $\beta = 0.164, p < 0.01$ ), deviating from its non-significance in Models 1 and 2. Its interaction with Value Polarization remains significant ( $\beta = 0.117, p < 0.01$ ), consistent with Model 2. Political Sophistication, though significant in Models 1 and 2, loses its significance in Model 3.

The interaction between Political Participation and Value Polarization in Model 3 is significant and positive ( $\beta = 0.117, p < 0.01$ ). This suggests that the effect of Political Participation on the dependent variable (underestimation of polarization) becomes stronger as the levels of value polarization increase. In other words, the role of Political Participation in underestimating polarization becomes more pronounced when value polarization is heightened. This interaction was also significant in Model 2, indicating a consistent moderating effect of Value Polarization across both models.

Though this interaction was significant in Model 1, it loses its significance in Model 3. This implies that while Value Polarization had a moderating effect on the relationship between Political

Sophistication and the dependent variable in Model 1, this interaction doesn't hold the same influence when it comes to underestimation of polarization in Model 3.

The interaction between Trust in Government and Value Polarization in Model 3 is not significant. This contrasts with Model 1, where the interaction was significant and positive. This suggests that the moderating role of Value Polarization on the relationship between Trust in Government and the dependent variable is context-specific and varies across the different facets of polarization.

While the interaction effect between Social Media and Value Polarization was significant in both Models 1 and 2, it is not significant in Model 3. This indicates that the combined influence of Social Media usage and Value Polarization on the dependent variable changes when focusing on the underestimation aspect of polarization.

In conclusion, the interaction effects in Model 3 emphasize the conditional nature of relationships between predictors and the dependent variable. They shed light on how certain variables modulate the effect of others, providing a more nuanced understanding of the intricacies involved in underestimating false polarization.

Table 7 here.

#### 4.4 Hypotheses Testing

Integrating the above, this study summarizes the testing of the five hypotheses.

See Table 8 for detail.

The positive association between values polarization and false polarization (Hypothesis 1) was supported with a statistically significant standardized coefficient of 0.383. It is worth noting that values polarization also received positively associated coefficients in the case of exaggerated polarization and underestimated polarization, an issue I will explore in the next chapter.

However, although the coefficient between political participation and false polarization is a coefficient of 0.022, their positive association (Hypothesis 2a) is not supported. In contrast, the positive prediction of false polarization (Hypothesis 2b) by the interaction between political participation and values polarization was supported with a statistically significant coefficient of 0.052. In addition, the positive effect of political literacy on false polarization (Hypothesis 3) was

similarly supported with a statistically significant coefficient of 0.209. The negative association between trust in government and false polarization (Hypothesis 4) was also supported with a standardized coefficient of -0.172, which is statistically significant. Finally, the positive association between social media use and false polarization (Hypothesis 5) was supported with a statistically significant coefficient of 0.077.

#### **CHAPTER 5**

#### DISCUSSION

This study focuses on exploring the relationship between value polarization and false polarization by analyzing ANES data from the 2016 U.S. presidential election. False polarization, that is, the situation in which respondents incorrectly assess the actual degree of (presidential) polarization, can be further categorized into two types: exaggerated polarization and underestimated polarization. The regression results show that there is a significant positive correlation between value polarization and false polarization; specifically, when value polarization increases, false polarization increases accordingly.

It is worth noting that although exaggerated polarization and underestimated polarization have slightly different relationships with value polarization, they also exhibit positive and statistically significant effects. Respondents who underestimated actual polarization ( $\beta = 0.168, p < 0.05$ ) had a slightly smaller effect size compared to those who exaggerated polarization ( $\beta = 0.198, p < 0.01$ ). Arguably, the degree of political values polarization is sufficiently robust to the positive effect of false polarization, even for respondents who underestimate actual polarization. This finding is partially consistent with past research on affective polarization(Enders and Lupton, 2021), which implies that there is a relatively stable relationship between political values and political polarization across levels and over time.

It should be noted, however, that underestimated polarization is presented as a negative number with my manipulation. Thus, the fact that values polarization has a positive and significant coefficient in the case of underestimated polarization implies, in fact, that values polarization leads to a situation where it is more likely to underestimate actual polarization. However, in the case of exaggerated polarization (Model 2), values polarization is equally likely to lead to situations of exaggerated polarization. This may seem somewhat contradictory. But regardless, overall, stronger values polarization tends to incorrectly estimate polarization, also known as false polarization.

Respondents with exaggerated polarization are more sensitive to value polarization than respondents with underestimated polarization. This difference may be related to an individual's cognitive biases and information processing approach. For example, when confronted with information that is inconsistent with their values, individuals may tend to exaggerate actual disagreements and conflicts, leading to exaggerated polarization. Conversely, underestimating polarization may be related to an individual's tendency to mitigate or ignore actual political disagreements, possibly in order to maintain a sense of cognitive consistency.

#### 5.1 Media Usage May Fuel the Rising False Polarization

The impact of social media use on false polarization exhibits varying patterns across all models. Notably, the frequency of social media use has a positive effect on false polarization ( $\beta = 0.077$ , p < 0.01), and this is also evident in Model 2 focusing on overestimation of polarization ( $\beta = 0.131$ , p < 0.01). However, for respondents underestimating polarization, social media usage displayed a negative influence ( $\beta = -0.102$ , p < 0.05).

As noted in Chapter 2, discussions of the relationship between social media use and political polarization have been common in a number of articles in recent years, and most of these articles point out that consumers who access political information through social media are indeed more likely to hold relatively extreme political views (Prior, 2013; Hawdon et al., 2020; Bail et al., 2018). Social media provides users with a wealth of political information and opinions, but it can also cause information bubbles and echo chamber effects, and personalized recommendation algorithms exacerbate cognitive biases and selective exposure, which can affect users' perceptions of political polarization.

ANES data were included around the presidential election, and it is entirely possible that heated discussions and extreme opinions on social media may exacerbate users' value polarization, which in turn affects their assessment of actual political polarization and leads to false polarization. Thus, the results of Models 1 and 2 are not surprising: more consumption of election information on social media contributes to false polarization and exaggerated polarization. And when social media interacts with value polarization, the potential for false polarization also rises.

Since the dependent variable of underestimated polarization is negative, the larger its exponent the closer it is to actual polarization (0), meaning that people tend to underestimate polarization

less as social media consumption increases. In other words, social media consumption seems to reduce people's tendency to underestimate polarization.

In summary, social media might influence false polarization through distinct mechanisms. Social media consumption appears to be positively associated with an overall tendency to false polarization. However, the effect of social media consumption on overestimated and underestimated polarization appears to be asymmetric. Specifically, social media consumption seems to lead more to an overestimation of polarization than to an underestimation.

#### 5.2 Government Trust Mitigating False Polarization

From the model data, it's evident that trust in the government has a significant negative impact on false polarization. Meanwhile, the interaction effect between trust in government and value polarization in Model 1 shows a positive relationship, with a coefficient of  $\beta = 0.061$ , p < 0.05.

The degree of trust in the government reflects an individual's satisfaction with and trust level in the current administration. The results indicate that the higher the trust in government, the lower the degree of false polarization – a trend consistent across all three models. This could be because individuals who trust the government are more likely to view the political system as fair and effective, thus less likely to perceive or exaggerate political polarization. In contrast, those distrustful of the government might lean more towards sensing political polarization, and might even be inclined to amplify its extent to mirror their discontent and skepticism towards the government or the political system.

The interaction effect between trust in government and value polarization further unveils how these two variables collectively influence false polarization. As the degree of value polarization escalates, the positive impact of trust in government on false polarization intensifies. This suggests that the influence of value polarization can make those trusting in the government prone to misjudging polarization. This might be because individuals who trust the government, when sensing the presence of value polarization, might be more inclined to perceive or exaggerate political polarization. However, for those distrustful of the government, they might already be disillusioned or skeptical about the political system, and therefore value polarization may not further augment their perception of false polarization.

#### 5.3 Interplay of Political Participation and Value Polarization in Fostering False Polarization

In Models 1 and 2, the coefficient for political participation is not significant. However, in Model 3, it presents a notable positive relationship ( $\beta = 0.164, p < 0.01$ ). This suggests that, in certain scenarios, individuals with higher levels of political participation might be inclined to underestimate the actual state of polarization.

The interaction effect between political participation and value polarization exhibits a positive significant impact across all three models. Specifically, in Model 1 ( $\beta = 0.052$ , p < 0.05), Model 2 ( $\beta = 0.056$ , p < 0.01), and Model 3 ( $\beta = 0.117$ , p < 0.01). This interaction effect may indicate that for those individuals with high political participation and polarized values, they are more likely to exhibit a greater extent of false polarization.

These findings might suggest that political participation and value polarization could jointly fuel individual cognitive biases regarding the actual state of political polarization. Particularly, individuals with high political engagement and polarized values might be more susceptible to false polarization, meaning, they might lean towards underestimating or exaggerating the real degree of political polarization.

## 5.4 Mixed Outcomes from the Interplay Between Political Sophistication and Value Polarization

In Models 1 and 2, political sophistication manifests a significant positive relationship ( $\beta = 0.209, p < 0.01$ ) and ( $\beta = 0.187, p < 0.01$ ), indicating that individuals with higher political sophistication are more likely to exaggerate the actual state of polarization. However, in Model 3, the influence of political sophistication is not significant.

The interaction effect between political sophistication and value polarization in Model 1 exhibits a significant negative relationship ( $\beta = -0.093$ , p < 0.01). In Models 2 and 3, this interaction effect is not significant. This might suggest that for individuals who exaggerate the actual state of polarization, as both their political sophistication and level of value polarization increase, the degree of false polarization might diminish. However, this interaction effect is not evident in contexts where the actual state of polarization is underestimated.

These findings might indicate that political sophistication and value polarization could influence individuals' perceptions of the actual polarization in diverse manners. Individuals with higher political sophistication might lean more towards exaggerating the real polarization, but this exaggeration could lessen when their values are also highly polarized. Yet, this interaction effect is not evident in contexts where the actual polarization is underestimated. In summary, the outcomes derived from investigations on political sophistication present challenges in drawing a consistent conclusion.

#### **CHAPTER 6**

#### CONCLUSION

This paper examines the interaction between value polarization and false polarization using data from the 2016 American National Election Study (ANES). The findings shed light on the important relationship between value polarization and an individual's tendency to misjudge the degree of polarization, a phenomenon known as false polarization.

The analysis shows that as value polarization increases, so does the tendency to false polarization. This correlation manifests itself in two different forms: one is exaggerated polarization, in which individuals overestimate the degree of polarization, and the other is underestimated polarization, in which individuals downplay the degree of polarization.

The implications of this study are threefold. First, although previous research has verified the relationship between polarization and value orientation (Enders and Lupton, 2021), as a relatively new perspective, whether false polarization also exhibits the same relationship has not been studied previously.

Second, the study reveals the complexity of polarization as a multifaceted phenomenon. The nuances between exaggerated and underestimated polarization and value polarization suggest that the relationship between individual values and perceived societal perceptions is not linear, but rather intricate and layered. Past research has focused more exclusively on exaggerated polarization and has often overlooked the effects of underestimated polarization.

Finally, the interaction of common variables with values polarization for multiple polarization studies is an exploration of the mechanisms between values and political perception. It can reveal how people construct connections between their values and the external world, and how these connections influence their political choices and behaviors.

In conclusion, this study contributes to a deeper understanding of polarization by focusing on the study of polarization and perception. It is not only a political and social phenomenon, but also a perceptual phenomenon that is strongly related to how people use "tools" such as values to understand the world. The insights gained from this study lay the groundwork for future research aimed at deciphering the complex mechanisms that drive false polarization and, ultimately, developing strategies to promote a more accurate and nuanced understanding of polarization.

#### 6.1 Limitations and Directions for Future Research

There are multiple limitations to this study. One, excessive data manipulation. Almost all variables, especially core IV and DV, were calculated in multiple steps, which may have distorted the data results. Future related studies should rely more on multiple secondary data or obtain them experimentally to avoid this problem.

Second, some of the variables require more analysis. This is partly a result of ANES not providing relevant data. For example, the ANES provides only one item for the frequency of social media exposure. Preferences in media channels and types of information, and how it's consumed, are also worth exploring. Future research would be improved if the frequency of social media exposure could be differentiated by specific social media platforms or even by YouTube channels or X IDs to examine in more detail the different outcomes of false polarization in the face of inconsistent and consistent information.

Third, during the modeling process, I did not incorporate interaction terms one by one into the model nor report their impact on other variables. Additionally, employing hierarchical regression may have been a preferable approach for this study.

Finally, the study only focuses on presidential issue polarization, i.e., asking respondents about their views on an issue in relation to internal and external partisan elites and themselves. However, as Lees and Cikara (2021) suggests, focusing on meta perception-i.e., asking respondents how they think the out-group will perceive them-is an equally interesting aspect.

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## **APPENDIX A**

## **TABLES**

## Table 1. Political Issues

Issue	Liberal Response (-3)	Conservative Response (+3)
Govt Spending & Services	Govt increase spending/ provide more services	Govt reduce spending/ fewer services
Defense Spending	Decrease defence spending	Increase defence spending
Aid to Blacks	Govt should help Blacks	Blacks should help themselves
Health Insurance	Govt insurance plan	Private insurance plan
Guaranteed Jobs	Govt should see to jobs and standard of living	Govt should let each person get ahead on his or her own

## Table 2. Descriptive Data of IVs and DVs

Variable	Mean	S.D.	Min	Max
False Polarization	1.11	1.374	-4.595	4.005
Value Polarization	1.165	0.593	0	2.838
Social Media Usage	3.908	3.063	0	7
Political Participation	1.073	1.07	0	5
Political Sophistication	6.751	2.123	0	10
Trust in Government	27.801	13.137	0	88
Income	17.76	7.374	1	28
Religion	3.95	1.946	0	6
Age	51	17.04	18	90
Education	1.535	0.499	1	2
N			1623	

	FP	VP	SM	Partic	Trust	PS	Age	Edu	Income	Church
False Polarization	1.0									
Value Polarization	0.42***	1.0								
Social Media	0.25***	$0.48^{***}$	1							
Political Participation	0.24***	0.47***	0.32***	1						
Trust in Gov	$0.19^{***}$	0.57***	0.44***	0.38***	1					
Political Sophistication	$0.40^{***}$	$0.71^{***}$	0.45***	$0.48^{***}$	0.64***	1				
Age	0.35***	0.54***	0.34***	0.36***	0.57***	0.70***	1			
Education	0.35***	0.61***	0.51***	$0.41^{***}$	0.64***	0.74***	0.63***	1		
Income	0.39***	0.66***	$0.48^{***}$	0.39***	0.64***	0.77***	0.63***	0.79***	1	
Church Attendance	0.26***	0.59***	0.41***	0.32***	0.59***	0.66***	0.60***	0.58***	0.62***	1

 Table 3. Bivariate Correlation Result

Variable	VIF	Tolerance
Value Polarization	1.48452	0.583572
Social Media	1.52002	0.657888
Political Participation	1.38706	0.72095
Trust in Govt	2.16907	0.461028
Political Sophistication	4.10836	0.243406
Age	3.14445	0.318021
Education	3.36752	0.296955
Gender	1.30295	0.76749
Income	3.63732	0.274928
Church Attendance	2.07041	0.482996

Table 4. Variance Inflation Factor(VIF) and Tolerance

Table 5. Regression Results for Model 1

Variable	Coefficient (SE)
Value Polarization	0.383*** (0.037)
Age	0.005*** (0.001)
Education	0.108** (0.043)
Gender	0.028 (0.041)
Church Attendance	-0.025 (0.031)
Social Media	0.077*** (0.027)
Trust in Government	-0.172*** (0.032)
Political Participation	0.022 (0.026)
Political Sophistication	0.209*** (0.044)
PS X Value Polarization	-0.093*** (0.031)
Trust in Gov X Value	0.061** (0.028)
Social Media X Value	0.077*** (0.025)
Political Partic X value	0.052** (0.024)
Constant	-0.514***
Observations	1,623
$R^2$	0.234
Adjusted $R^2$	0.227
Residual Std. Error	0.879
F Statistic	35.102***
Note:	*p<0.1; **p<0.05; ***p<0.01

 Table 6. Regression Results for Model 2

Variable	Coefficient (SE)
Value Polarization	0.198*** (0.029)
Age	0.005*** (0.001)
Education	-0.060* (0.033)
Gender	0.055* (0.032)
Church Attendance	0.092*** (0.025)
Social Media	0.131*** (0.022)
Trust in Government	-0.055** (0.025)
Political Participation	0.027 (0.021)
Political Sophistication	0.187*** (0.035)
PS X Value Polarization	-0.004 (0.025)
Trust in Gov X Value	0.024 (0.022)
Social Media X Value	-0.054*** (0.020)
Political Partic X value	0.056*** (0.020)
Constant	-0.176***
Observations	1,351
$R^2$	0.445
Adjusted $R^2$	0.439
Residual Std. Error	0.623
F Statistic	76.429***
Note:	*p<0.1; **p<0.05; ***p<0.01

 Table 7. Regression Results for Model 3

Value Polarization $0.168^{**}$ (0.067)Age $-0.001$ (0.002)Education $0.092$ (0.081)Gender $-0.028$ (0.062)Church Attendance $-0.070$ (0.049)Social Media $-0.102^{**}$ (0.049)Trust in Government $-0.259^{***}$ (0.063)Political Participation $0.164^{***}$ (0.048)Political Sophistication $0.059$ (0.073)PS X Value Polarization $0.030$ (0.057)Trust in Gov X Value $-0.017$ (0.051)Social Media X Value $0.023$ (0.046)Political Partic X value $0.117^{***}$ (0.040)Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Variable	Coefficient (SE)
Age $-0.001 (0.002)$ Education $0.092 (0.081)$ Gender $-0.028 (0.062)$ Church Attendance $-0.070 (0.049)$ Social Media $-0.102^{**} (0.049)$ Trust in Government $-0.259^{***} (0.063)$ Political Participation $0.164^{***} (0.048)$ Political Sophistication $0.059 (0.073)$ PS X Value Polarization $0.030 (0.057)$ Trust in Gov X Value $-0.017 (0.051)$ Social Media X Value $0.023 (0.046)$ Political Partic X value $0.117^{***} (0.040)$ Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Value Polarization	0.168** (0.067)
Education $0.092 (0.081)$ Gender $-0.028 (0.062)$ Church Attendance $-0.070 (0.049)$ Social Media $-0.102^{**} (0.049)$ Trust in Government $-0.259^{***} (0.063)$ Political Participation $0.164^{***} (0.048)$ Political Sophistication $0.059 (0.073)$ PS X Value Polarization $0.030 (0.057)$ Trust in Gov X Value $-0.017 (0.051)$ Social Media X Value $0.023 (0.046)$ Political Partic X value $0.117^{***} (0.040)$ Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Age	-0.001 (0.002)
Gender $-0.028 (0.062)$ Church Attendance $-0.070 (0.049)$ Social Media $-0.102^{**} (0.049)$ Trust in Government $-0.259^{***} (0.063)$ Political Participation $0.164^{***} (0.048)$ Political Sophistication $0.059 (0.073)$ PS X Value Polarization $0.030 (0.057)$ Trust in Gov X Value $-0.017 (0.051)$ Social Media X Value $0.023 (0.046)$ Political Partic X value $0.117^{***} (0.040)$ Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Education	0.092 (0.081)
Church Attendance $-0.070 (0.049)$ Social Media $-0.102^{**} (0.049)$ Trust in Government $-0.259^{***} (0.063)$ Political Participation $0.164^{***} (0.048)$ Political Sophistication $0.059 (0.073)$ PS X Value Polarization $0.030 (0.057)$ Trust in Gov X Value $-0.017 (0.051)$ Social Media X Value $0.023 (0.046)$ Political Partic X value $0.117^{***} (0.040)$ Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Gender	-0.028 (0.062)
Social Media $-0.102^{**}$ (0.049)Trust in Government $-0.259^{***}$ (0.063)Political Participation $0.164^{***}$ (0.048)Political Sophistication $0.059$ (0.073)PS X Value Polarization $0.030$ (0.057)Trust in Gov X Value $-0.017$ (0.051)Social Media X Value $0.023$ (0.046)Political Partic X value $0.117^{***}$ (0.040)Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Church Attendance	-0.070 (0.049)
Trust in Government $-0.259^{***}$ (0.063)Political Participation $0.164^{***}$ (0.048)Political Sophistication $0.059$ (0.073)PS X Value Polarization $0.030$ (0.057)Trust in Gov X Value $-0.017$ (0.051)Social Media X Value $0.023$ (0.046)Political Partic X value $0.117^{***}$ (0.040)Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Social Media	-0.102** (0.049)
Political Participation $0.164^{***}$ (0.048)         Political Sophistication $0.059$ (0.073)         PS X Value Polarization $0.030$ (0.057)         Trust in Gov X Value $-0.017$ (0.051)         Social Media X Value $0.023$ (0.046)         Political Partic X value $0.117^{***}$ (0.040)         Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Trust in Government	-0.259*** (0.063)
Political Sophistication $0.059 (0.073)$ PS X Value Polarization $0.030 (0.057)$ Trust in Gov X Value $-0.017 (0.051)$ Social Media X Value $0.023 (0.046)$ Political Partic X value $0.117^{***} (0.040)$ Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Political Participation	0.164*** (0.048)
PS X Value Polarization $0.030 (0.057)$ Trust in Gov X Value $-0.017 (0.051)$ Social Media X Value $0.023 (0.046)$ Political Partic X value $0.117^{***} (0.040)$ Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Political Sophistication	0.059 (0.073)
Trust in Gov X Value $-0.017 (0.051)$ Social Media X Value $0.023 (0.046)$ Political Partic X value $0.117^{***} (0.040)$ Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	PS X Value Polarization	0.030 (0.057)
Social Media X Value $0.023 (0.046)$ Political Partic X value $0.117^{***} (0.040)$ Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Trust in Gov X Value	-0.017 (0.051)
Political Partic X value $0.117^{***}$ (0.040)Constant $-1.033^{***}$ Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Social Media X Value	0.023 (0.046)
Constant $-1.033^{***}$ Observations272 $R^2$ 0.435Adjusted $R^2$ 0.404	Political Partic X value	0.117*** (0.040)
Observations $272$ $R^2$ $0.435$ Adjusted $R^2$ $0.404$	Constant	-1.033***
$R^2$ 0.435         Adjusted $R^2$ 0.404	Observations	272
Adjusted $R^2$ 0.404	$R^2$	0.435
	Adjusted $R^2$	0.404
Residual Std. Error 0.529	Residual Std. Error	0.529
F Statistic 14.126***	F Statistic	14.126***
Note: *p<0.1; **p<0.05; ***p<0.01	Note:	*p<0.1; **p<0.05; ***p<0.01

Table 8.	Hypotheses	Testing	Result
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Hypothesis	Statement	Coefficients (Standardized Parameters)	Testing Result
H1	Value polariza-	0.383***	Supported
	tion should be		
	positively asso-		
	ciated with false		
	polarization		
H2a	Political partici-	0.022	Not Supported
	pation should be		
	positively associ-		
	ated with false po-		
	larization		
H2b	The interaction	0.052**	Supported
	between political		
	participation and		
	value polarization		
	should positively		
	associated with		
	false polarization		
H3	Political sophisti-	0.209***	Supported
	cation should be		
	positively associ-		
	ated with false po-		
	larization		
H4	Trust in the gov-	-0.172***	Supported
	ernment should		
	be negatively		
	associated with		
	false polarization		
H5	Social media us-	0.077***	Supported
	age is positively		
	associated with		
	false polarization		

## **APPENDIX B**

#### **QUESTION WORDING**

#### Egalitarianism battery (\* reverse coding)

V162243: Our society should do whatever is necessary to make sure that everyone has an equal opportunity to succeed.

- 1. Agree strongly
- 2. Agree somewhat
- 3. Neither agree nor disagree
- 4. Disagree somewhat
- 5. Disagree strongly
- V162245: it is not really a big problem if some people have more of a chance in life than others.
- 1 Disagree strongly
- 2 Disagree somewhat
- 3 Neither agree nor disagree
- 4 Agree somewhat
- 5 Agree strongly
- V162244\*: This country would be better off if we worried less about how equal people are.
- 1 –Disagree strongly
- 2 Disagree somewhat
- 3 Neither agree nor disagree
- 4 Agree somewhat
- 5 Agree strongly

V162246: If people were treated more equally in this country we would have many fewer problems.

- 1. Agree strongly
- 2. Agree somewhat
- 3. Neither agree nor disagree

- 4. Disagree somewhat
- 5. Disagree strongly

## Moral traditionalism battery (\* reverse coding)

V162207\*: The newer lifestyles are contributing to a breakdown of society.

- 1 Disagree strongly
- 2 Disagree somewhat
- 3 Neither agree nor disagree
- 4 Agree somewhat
- 5 Agree strongly

V162207: The world is always changing and we should adjust our view of moral behavior to those changes.

- 1 Agree strongly
- 2 Agree somewhat
- 3 Neither agree nor disagree
- 4 Disagree somewhat
- 5 Disagree strongly

V162210\*: This country would have many fewer problems if there were more emphasis on traditional family ties.

- 1 Disagree strongly
- 2 Disagree somewhat
- 3 Neither agree nor disagree
- 4– Agree somewhat
- 5 Agree strongly

V162209: We should be more tolerance of people who choose to live according to their own moral standards, even if they are different from our own.

- 1 Agree strongly
- 2 Agree somewhat

- 3 Neither agree nor disagree
- 4 Disagree somewhat
- 5 –Disagree strongly



## FIGURES



Figure 1. Current Proposed Mechanism

				С	orrela	tion H	eatma	р				10
False Polarization	1.00	0.42	0.25	0.24	0.19	0.40			0.17	0.39	0.26	1.0
Value Polarization	- 0.42	1.00	0.48	0.47	0.57	0.71	0.54	0.61	0.30	0.66	0.59	- 0.9
Social Media	- 0.25	0.48	1.00		0.44	0.45		0.51		0.48	0.41	- 0.8
tical Participation	- 0.24	0.47	0.32	1.00	0.38	0.48	0.36	0.41	0.16	0.39	0.32	- 0.7
st in Government	- 0.19	0.57	0.44	0.38	1.00	0.64	0.57	0.64	0.35	0.64	0.59	0.7
cal Sophistication	- 0.40	0.71	0.45	0.48	0.64	1.00	0.70	0.74	0.29	0.77	0.66	- 0.6
Age	- 0.35	0.54		0.36	0.57	0.70	1.00	0.63	0.38	0.63	0.60	- 0.5
Education	- 0.35	0.61	0.51	0.41	0.64	0.74	0.63	1.00	0.38	0.79	0.58	- 0.4
Gender	- 0.17	0.30	0.33	0.16		0.29	0.38	0.38	1.00	0.31	0.33	
Income	- 0.39	0.66	0.48	0.39	0.64	0.77	0.63	0.79	0.31	1.00	0.62	- 0.3
nurch Attendance	- 0.26	0.59	0.41	0.32	0.59	0.66	0.60	0.58		0.62	1.00	- 0.2
	- Polarization -	: Polarization -	Social Media -	Participation -	Government -	ophistication -	Age -	Education -	Gender -	Income -	h Attendance -	

## Figure 2. Correlation Heatmap for Bivariate result