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How Self-Sentiments and Personal Networks Impact Political Polarization

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HOW SELF-SENTIMENTS AND PERSONAL NETWORKS IMPACT POLITICAL
POLARIZATION

by

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ABSTRACT

This project investigates how identities, self-sentiments, and personal network composition impact political polarization. I apply the framework of Affect Control Theory to capture how Democrats and Republicans feel about their political ingroup and outgroups (through evaluation, potency and activity ratings) and evaluate the likelihood of events involving these groups. In my first experiment, I study if self-uncertainty and self-affirmation primes impact political bias. I also apply Affect Control Theory-Self to measure self-sentiment change (self-evaluation, self-potency, and self-activity) from these primes as well. I predict that priming self-uncertainty should increase political bias (due to inflated self-sentiments) and that priming self-affirmation should decrease political bias (due to inflating self-sentiments). My results show that there is strong political bias in both Democrats and Republicans with each group rating their outgroup lower on EPA. When analyzing if psychological primes could influence this baseline bias, I find that self-uncertainty increased negative evaluations towards one's political outgroup. Finally, I found that I could detect self-sentiment change on the self-evaluation dimension from these psychological primes. Thus, Affect Control Theory could capture political polarization, self-sentiment change from psychological primes, and these primes did have an impact on political bias.

My second study analyzed how personal network composition influenced political bias. I predicted that increased political homogeneity in one's personal network would be associated with greater political bias (measured through feelings towards one's outgroup,

subjective likelihood of events involving political groups, and strength of political ideology). Increased homogeneity was associated with decreased evaluation and potency of the outgroup as well as biased information processing for evaluating the likelihood of events involving the political groups. Additionally, greater homogeneity was associated with increased strength in political ideology, but only in Republicans. Finally, I found that evaluating one's outgroup less negatively was associated with higher agreement with political beliefs associated with one's outgroup. The results of this project demonstrate that self-sentiments and personal networks can influence political bias.

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CHAPTER 1

INTRODUCTION

Do we process political information differently depending on how we feel about ourselves? Does who we associate with influence our processing of political information? These are the two main research questions of this dissertation. With political polarization growing rapidly in America, it is important for researchers to understand the social and psychological variables that influence political bias. Democrats and Republicans have steadily increased their dislike of each other over time and recent research shows that about 80% of partisans (committed members of a political party) dislike their political outgroup (Pew Research 2016). This strong partisan bias results in a heightened skepticism of information that is threatening to the ingroup (Clark et al 2019; Ditto et al 2017), thereby impeding efforts to undo this polarization. The growth of political polarization in the United States has resulted in significant interest from social psychologists, who have studied both the psychological traits (such as self-esteem) and social factors (such as the people we interact with) that contribute to this phenomenon. However, both the psychological and sociological literatures on polarization have inconsistencies and gaps that may benefit from applying a common underlying theory that offers greater precision and a framework for evaluating the subjective likelihood of intergroup behavior. Uniting insights from psychological and sociological literatures can provide an enhanced understanding of intergroup relations, identities, and components that affect polarization.

Unfortunately, much of the work on the self-sentiments that contribute to bias is conflicting because the literature often lacks a "common currency" that accounts for an

underlying explanatory mechanism (McGregor 2006). I argue that the formal structure and mathematical foundation of Affect Control Theory (ACT) will resolve some of these inconsistencies. Specifically, the methodology of ACT-self can better measure how self-sentiments impact information processing related to politics. I argue that the variables in ACT (evaluation, potency, and activity as well as deflection) more rigorously capture the phenomenon that influences affective polarization as well.

Additionally, I studied how those we associate with can mitigate or facilitate political bias. Sociologists typically measure an individual's closest associates through ego networks, which focus on the surrounding network of one individual (Marin and Wellman 2011). There have been conflicting results on how ego networks impact political beliefs with some studies finding that exposure to political outgroups can increase polarization (Bail et al 2018) and others finding exposure to political outgroups can decrease polarization (Visser and Mirabile 2004) These studies have excluded several important variables such as with whom the participant discusses "important matters." This can create an illusion that social exposure to conflicting worldviews does not reduce polarization, but I argue that the nature of the exposure does matter significantly.

My dissertation studied how self-sentiments and personal networks contribute to political bias across two separate experiments. Both experiments conceptualized Democrats and Republicans as subcultures within an Affect Control Theory framework. The first study measured the psychological impact of increasing or decreasing self-sentiments. The goal was to assess whether priming self-affirmation (causing an increase in self-sentiments) reduces partisan bias compared to priming self-uncertainty (causing a decrease in self-sentiments) which was hypothesized to increase polarized attitudes. Self-sentiments were conceptualized as the degree

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of goodness, potency, and activity people attribute to themselves. I used these experimental priming techniques to influence how people think about themselves, which in turn changed how open they were to identity challenging information (Sherman and Cohen 2006). I predicted that political groups should differ in their sentiments about the outgroup, but also on how they process the subjective likelihood of events involving political groups. This first study provides an important intersection between the self-priming and political identity literatures, and answers my first research question.

The second study assessed how discussion networks also impact polarization while introducing key variables to close gaps in the existing literature. I obtained a detailed account of my participants' ego networks via the "important matters" measure. This study reveals how homogeneity, when measured in a way that captures meaningful relationships, affects evaluation of political groups and subjective likelihood of intergroup behavior. Additionally, it analyzes how homogenous networks alter the emotions felt towards political groups, which in turn can impact political beliefs. This study answers my second research question.

Chapter 2 covers the background on political polarization, self-sentiments, and how ACT provides a helpful theoretical bridge. Chapter 2 also provides a background on the literature on social networks and political beliefs, inconsistencies and gaps in that literature, and how the present study will account for those inconsistencies and gaps. Chapter 3 describes the methods and results of Study 1 (how does self-sentiment change impact political bias). Chapter 4 describes the methods and results of Study 2 (how does network composition impact political bias). Chapter 5 provides a general discussion of Study 1 and Study 2's findings while providing ideas for future research as well.

CHAPTER 2

LITERATURE REVIEW

Theoretical Background on Political Polarization

Political polarization in the United States continues to rise to unprecedented levels (Iyengar et al 2018; Pew Research 2016). Democrats and Republicans have become more liberal and conservative respectively over time (see Figures 2.1 and 2.2; Pew Research Center 2017). Democrats and Republicans have also generated strong ingroup and outgroup identities, resulting in *affective polarization*, i.e., "the tendency of people identifying as Republicans or Democrats to view opposing partisans negatively and copartisans positively" (Iyengar & Westwood 2015 p. 691). Data from the American National Election Studies (Pew Research 2016) found a steady rise in Americans' negative feelings towards their political outgroup over the past 50 years. In 1964, around 30% of both Democrats and Republicans reported having negative feelings towards the opposing group. This negativity steadily rose over the decades and in 2012 nearly 80% of Democrats and Republicans had negative feelings towards their outgroup. Such polarization goes beyond just cold feelings: in 2016 it was found that 45% of Republicans believed Democrats threatened the nation's well-being and 41% of Democrats considered Republicans to be a threat (Pew Research 2016). Shockingly, Kalmoe and Mason (2019 p.17) found that about 42% of both Democrats and Republicans agreed that the outgroup was "not just worse for politics – they are downright evil." About 20% of Democrats and 16% of Republicans in this study admitted thinking occasionally that the country would

be better if large numbers of the opposition died.

1994

Median Democrat   Median Republican

Consistently liberal   Mixed   Consistently conservative
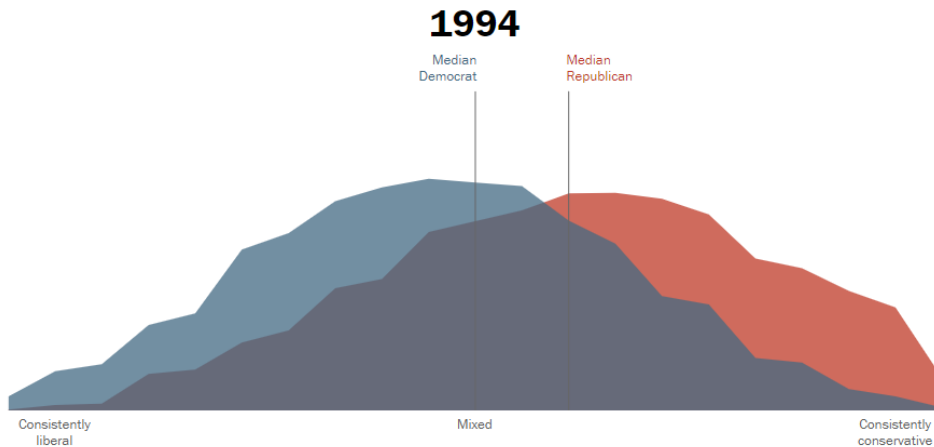
Figure 2.1. Ideological polarization from Democrats and Republicans in 1994 via Pew Research Center.

2017

Median Democrat   Median Republican

Consistently liberal   Mixed   Consistently conservative
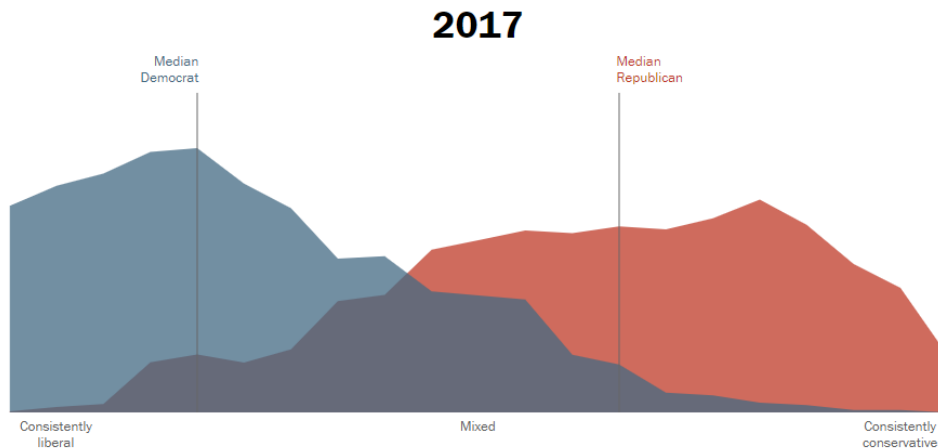
Figure 2.2. Ideological polarization from Democrats and Republicans in 2017 via Pew Research Center.

Affective polarization accounts for behaviors beyond reported dislike for the opposing political group in surveys or laboratory settings. Job resumes that signal an applicant's political affiliation are more likely to get callbacks in areas aligned with their politics (Gift and Gift 2015). Employees are more willing to accept lower compensation if their employer shares their political identity (McConnell et al. 2018). Doctors also give

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out different advice on political issues such as abortion and marijuana use depending on whether patients are Democrat or Republican (Hersh and Goldenberg 2016).

Despite political groups having strong negative attitudes towards their opponents, partisans do not always display explicit prejudice against the outgroup because partisan ideologies are not solely based on distaste for the outgroup, suggesting that affective polarization is driven more by ingroup love than outgroup hate (Lelkes and Westwood 2017). In Iyengar and colleagues' (2018) review of affective polarization, they argued that future research should better delineate under what conditions ingroup favoritism or outgroup prejudice would occur. This question is important given the growing polarization in the political climate because political ingroups often view the same information quite differently than the outgroup.

I argue that ingroup bias fundamentally changes how partisans view information. I predict bad behavior by ingroup members will be viewed as far less likely to occur, compared to outgroup members, as partisans will interpret the event differently depending on which political group engaged in the action. Identity Theory has offered a wealth of literature for explaining how partisans adhere to certain roles that shape their behavior (Burke and Stets 2009). However, I argue that the framework of Affect Control Theory (evaluation, potency, and activity as well as deflection) more rigorously captures the phenomenon that influences affective polarization. ACT offers an explicit framework that can test the subjective likelihood of intergroup behavior emergent from partisans' interpretations of social events, provides a standardized metric for comparing American political subcultures to other subcultures, and offers a theoretical bridge to connect the two types of social psychologies that do similar work, but are often in academic silos.

Identity Theories and Political Groups

Identity theories, including ACT, have been extremely useful for conceptualizing and studying the impact of political polarization because political scientists have consistently found that individuals think of political parties in terms of identity rather than a cumulation of attitudes about policy (Green, Palmquist, & Schickler 2004; Van Bavel & Pereira 2018). Consistent with these findings, Lelkes, Malka, and Bakker (2018, p.4) argue that partisans "desire to reach conclusions that are consistent with a valued identity."

Social identity theory (Tajfel and Turner 1979) suggests that once these political identities are formed, individuals will be motivated to protect their ingroup. Because party identities tend to be internalized, the group's failures and victories can be experienced as personal ones (Huddy et al. 2015). This creates a motivation to support one's ingroup and denigrate opposing groups (Mackie et al. 2009). Identities can also provide specific cultural expectations an individual is motivated to try and meet (Burke and Stets 2009). For example, Democrats and Republicans both have strong, contrasting attitudes regarding gun control and abortion access (Pew Research 2017), and defending these values would certainly be part of their roles. Importantly, how well one performs in their role can impact their self-esteem (Stryker 1980). If an individual enacts their role as they believe they are supposed to, then they will feel good about themselves (Hoelter 1986). Partisans may feel pressure to defend these values and act consistently with their political identities.

Individuals are motivated to confirm their identities with behaviors consistent with their identity meanings (e.g. supporting their political ingroup) while also avoiding

the discomfort that comes with any information that disconfirms their identities (e.g.

information that challenges their political ingroup). The more important an identity is to

an individual, the more pressure they feel to enact behaviors consistent with the roles of

their identity (Burke and Stets 2009). This finding is supported by research showing how

both Democrats and Republicans were motivated to interpret information regarding

abortion (Scurich, & Shniderman 2014) and gun control (Kahan et al 2017) in ways that

support their political values. Unsworth and Fielding (2014) found that when they

experimentally increased the identity salience of conservatives' identity, they became

more likely to reject the idea of anthropogenic climate change. Furthermore, even those

scoring high on general science intelligence tests can reject the scientific consensus on

issues when it conflicts with their political identities (Drummond & Fischhoff, 2017;

Kahan 2017). While Identity Theory can illustrate how political identities impact an

individual's behavior, I argue using the framework of Affect Control Theory offers three

advantages in studying the social psychology of politics: variables of EPA and deflection

that more rigorously capture the phenomenon that influences affective polarization, a

method for predicting the subjective likelihood of specific ingroup and outgroup

behaviors, and a connection to other subcultures from other cultural databases in order to

contrast political sentiments across countries.

Affect Control Theory

Affect Control Theory (ACT) posits that individuals are motivated to maintain

affective consistency between cultural meanings and social situations (Heise 2007).

Instead of only focusing on specific identity meanings, ACT measures different

components of social situations that can broadly include a variety of identities, behaviors,

and settings. The feelings an individual has about existing cultural information are called *fundamental sentiments*. The feeling that corresponds to the currently experienced social event is the *transient impression*. Discrepancies between the fundamental sentiments and transient impressions are called *deflection*. Deflection can also be easily related to the subjective likelihood of an event (and high deflection relates to a sense of unreality). Heise and MacKinnon (1987) found that subjective likelihood ratings and deflection scores have a significant and negative association. Individuals are motivated to avoid deflection and are assumed to do so using a feedback loop that processes the difference in their subjective rating of the preexisting fundamental sentiments compared to their transient impressions of unfolding events (Heise and MacKinnon 2010).

ACT breaks down social situations into the individual components of actor, behavior, and object. Each of these components is then measured on the dimensions of evaluation (goodness vs. badness), potency (powerfulness vs. powerlessness), and activity (active vs. inactive), which have been found to have universal relevance in social processing across cultures (Osgood 1962). Together these three measures are known as EPA. EPA is measured using semantic differential scales which give a simple numerical input for each social component. Thus, ACT can measure all social elements on the same quantitative scales. This allows for deflection to have a mathematical definition, which is the Euclidean distance between the EPA values of the fundamental sentiments for and transient impressions of a particular social element (squaring is used to account for negative values). Heise (2007) was inspired by the impression change equations from Gollob (1974) and created his own equations to determine how meanings can change where they are placed in a larger social context. For example, a culture may have a

fundamental sentiment of the "mother" identity that is quite positive on the evaluation dimension. However, if we see a "mother" who is "hurting" a "child" then this could change how we evaluate the mother because they are behaving in a way that is inconsistent from the cultural meanings (assuming that "hurting" has a negative evaluation in this culture as well). The disconnection from the fundamental sentiment of a mother and the situation sentiment would result in a high amount of deflection, motivating us to reduce such deflection. Using our "mother" example, we may re-frame the "mother" into "monster" because a situation where a "monster" hurts a "child wouldcreate less affective inconsistency. We could also re-frame the behavior into something less negative such as "discipline" that may be more consistent with our fundamental sentiments for "mother." When processing a highly deflecting event, we are more likely to reframe the behavior rather than the actor or object (Nelson 2006).

Affect Control Theory and Political Groups

ACT has been used to measure sentiment differences from a variety of subcultures including alcoholics (Thomassen 1992) and drug users (Thomas and Heise 1995), religious denominations (Smith-Lovin & Douglass 1992), online communities (King 2008), college fraternities (Boyle and Walker 2016), and music fans (Hunt 2008). Generally, these studies predict that subcultures have more positive sentiments toward concepts related to their group and more negative sentiments toward concepts that challenge their group (Heise 2010). ACT also allows for these differences on sentiment ratings to predict the amount of deflection a group may experience. For example, Smith-Lovin and Douglass (1992) collected EPA ratings on a variety of social elements for members of churches that were accepting versus unaccepting of homosexuals. As

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expected, sentiments related to "gay person" were much more negative among members

of the church that held negative views towards homosexuals. Similarly, the reported

likelihood of a "gay person" engaging in a bad behavior was more likely to members of

the anti-homosexual church as well. These findings successfully link the simulations of

ACT's deflection calculation to a real-world subculture.

While ACT has been applied to social movements (Brit & Heise 2000; shuster &

Campos-Castillo 2016), exploration of subcultural variation in sentiments has not been

extended directly to American political groups. Researchers interested in political groups

would benefit from applying ACT in their work (Troyer and Robinson 2006) because of

the additional depth EPA ratings of concepts provide and how those ratings help predict

the likelihood of intergroup behavior. Instead of only focusing on the evaluation

dimension, ACT measures potency and activity as well, which offers a more

comprehensive account for how threatening political groups are viewed. Furthermore,

ACT's deflection variable provides a single measure for the subjective likelihood of

social events. Thus, deflection scores from political group members allows for ingroup

favoritism and outgroup dislike to be captured on a single dimension of social event

likelihood.

Boyle and Meyer (2018) are one of the only studies to use EPA while studying

modern American political groups, finding that subgroups who had greater representation

of women in politics in their geographical area rated female Presidential candidates more

positively. Eriksson and Funcke (2015) found that participants rate political outgroups as

less warm, which largely overlaps with the evaluation dimension (Rogers, Schroder, and

Scholl 2013). As noted above, subcultures tend to rate concepts related to their group

more positively and are more negative towards concepts that challenge their group (Heise 2010). Furthermore, work by Crawford and colleagues (2015) found that both Democrats and Republicans rate their ingroup with higher competence, and competence has been found to relate to potency (Rogers, Schroder, and Scholl 2013). Warmth/goodness evaluations determine whether a group is friendly or hostile towards the goals of one's ingroup. Competence/potency evaluations determine how capable a group is at carrying out its goals and influencing others (Fiske, Cuddy, & Glick 2007). Republicans rate their ingroup even more competent compared to Democrats (Eriksson & Funcke 2015), but both political groups rate their ingroup as generally high warmth and high competence and their outgroup as low warmth and lower competence. However, Rogers and colleagues (2013) did not find a clear pattern of results for the role of activity for intergroup behaviors. Thus, evaluation and potency offer more depth beyond like/dislike measures of polarization while maintaining methodological rigor.

Using ACT to detect differences in political groups can also allow researchers to predict how members of these subcultures will respond to social information. If respondents rate their political ingroup identities more positively than their political outgroups, then this will change how they assess the likelihood of social events involving these identities. For example, a Republican may react to the idea of a "Democrat" who "bullied" a "child" with a small amount of deflection because they may have negative views of a Democrat. However, a Democrat may rate that same social event as much less likely (i.e. a greater amount of deflecting) because they have a much more positive evaluation rating of Democrats, so Democrats engaging in a "bad" behavior would be viewed as less likely. This aligns with research by Smith-Lovin and Heise (1988) that

found a "consistency effect" between evaluation of the actor and their behavior. Individuals are especially motivated to maintain consistency between how positive they rate an actor and the behavior they engage in.

Furthermore, individuals can also choose a less deflecting behavior to avoid affective inconsistency. Nelson (2006) had participants read high deflecting statements and then gave them a choice to change the actor, behavior, or object in the scenario. Participants overwhelmingly chose to change the behavior. When applied to politics, partisans may redefine the behavior in order to reduce the severity of poor behavior. This allows partisans to avoid challenging their pre-existing beliefs about the social world and questioning the goodness of their own political identity (e.g. Jost & van der Toorn 2012). For example, if a Republican heard an ingroup politician "lied" about their campaign, perhaps they would reframe "lie" into something less deflection-producing, such as "exaggerate." Using ACT for studying political groups could delineate quantitatively how Democrats and Republicans contrast their evaluations of different social events without relying on verbal theory and implicit assumptions.[1] Not only would ACT reveal precise subcultural differences on cultural sentiments, these ratings could help explain how each group processes the same social information with different levels of subjective likelihood. Deflection scores are negatively correlated with the perceived likelihood of

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[1] Smith-Lovin and Robinson (2006) discuss how Identity Theory's verbal format allows for a greater vulnerability of ambiguity and subsequent misunderstandings. Furthermore, the meanings of certain actions are often left implicit and the impact of social influence is not always specifically mapped out. Conversely, ACT involves affectively measuring the elements of a social situation from the perspective of an observer. The ratings are always on the same three dimensions of EPA, which makes it easy to compare across cultures. Finally, the affective inconsistency in ACT (i.e. deflection) can be mathematically calculated and even simulated.

different social events (Heise and MacKinnon 1987). Research has shown that ingroup bias often accounts for prejudice towards outgroups (Lelkes and Westwood 2017), but applying ACT allows researchers to assess how combinations of actors and object persons in the situation influence behavior and emotions (Rogers, Schroder, and Scholl 2013). Thus, instead of trying to attribute when an event is more likely due to ingroup favoritism or outgroup dislike, the deflection framework provides both a more precise and parsimonious quantification of ingroup bias.

Additionally, once a researcher obtains these subcultural data from Democrats and Republicans, they can be compared with other cultural databases with a standardized metric. Iyengar and colleagues (2018) note that there is an unfortunate schism between research on American politics and politics outside the United States. ACT's framework can be easily applied across cultures and already has several international databases (Heise 2007; Heise 2010). Identity Theory's focus on verbal theory increases specificity but lacks a framework that provides quantitative comparison across different identities. Using ACT as common sociocultural currency would allow future researchers to determine how bias among American political groups potentially differs from non-American political groups. These questions are beyond the scope of the current project, but the data from the current studies can be used by future ACT researchers since the data employ the same standardized metrics. In addition to these benefits, ACT may also provide a rigorous framework for conceptualizing factors that influence political polarization as well. How individuals feel about themselves (i.e. their self-integrity) has been shown to significantly influence how they process political information.

Finally, ACT offers a helpful bridge between experimental social psychology within psychology departments and Symbolic Interaction within sociology departments (Eagly and Fine 2010; Oishi, Kesbir, and Snyder 2009). Despite both fields having similar areas of focus, psychological social psychology and sociological social psychology rarely cite each other (as observed in the Thomson Reuter's Journal Citation Reports). ACT is a sociological theory that allows for mathematically modeling and experimentally testing how individuals process social events. This mathematical framework allows for the bridging of psychological social psychology concepts to be applied. In the next section, I describe how self-integrity primes (a concept largely found in psychology) 1) affect political bias and 2) can fit within and benefit from the ACT framework.

Self-Integrity's Impact on Political Polarization

Affective polarization certainly impacts how one feels about their opposing political group; however, how individuals feel about themselves can influence how strongly they enact their identities. Just as ACT can offer several advantages for understanding how subculture impacts behavior, ACT's rigorous framework and clearly defined variables can also better conceptualize the process of self-evaluations impacting behavior as well, as I will discuss towards the end of this section. Self-uncertainty and self-affirmation theory both can predict how self-evaluations affect how individuals process information. Individuals respond differently to political information depending on whether they feel uncertain or self-affirmed. Self-uncertainty and self-affirmation also appear to operate on the same compensatory mechanism, but their relationship is still not fully understood.

Both work in psychology (Hogg 2000; McGregor et al 2001) and sociology (Berger 1967; Facciani & Brashears 2019) describe how an individual's group membership can help alleviate uncertainty. Strong adherence to a group can provide a framework of meaning to an individual (Hogg et al 2007). Group membership can reduce uncertainty because the beliefs associated with the group redirect attention away from uncertainty (McGregor, Nash, & Prentice, 2010) by focusing on their framework for understanding the world. While the members of Democrat and Republican groups are certainly not monolithic, there are still clear differences in beliefs and boundaries between each group. Thus, because their identity provides a framework of meaning, individuals may adhere more closely to a political identity when facing uncertainty. Research by Hohman, Hogg, and Bligh (2010) confirmed this, showing that priming participants to feel uncertain made them align more strongly with their political identity. McGregor and colleagues (2001) found that priming uncertainty can also lead to stronger convictions on social issues such as capital punishment and abortion. A separate study found that both Democrats and Republicans thought their ingroup was more entitative (e.g. more distinct and defined by clear boundaries) when they were primed to feel uncertain (Sherman, Hogg, and Maitner 2009). These are important findings because they demonstrate that psychological factors (such as feeling uncertain) can impact how strongly one adheres to their political identity and the beliefs associated with it.

Decreasing one's self-evaluations through uncertainty can increase political bias, but research has also shown that increasing one's self-evaluations can reduce political bias. Sherman and colleagues (2009) have used the concept of *self-integrity* to measure an individual's self-evaluations. Self-integrity has been defined as the perception that an

individual is "adaptively and morally adequate, that is, … competent, good, coherent, unitary, stable, capable of free choice, capable of controlling important outcomes, and so on" (Steele, 1988, p. 267). Feeling uncertain would disrupt one's self-integrity, but according to self-affirmation theory, individuals are motivated to constantly maintain their self-integrity (Sherman and Cohen 2014). Thus, the meaning provided by one's political identity can restore their self-integrity when they are feeling uncertain; by behaving as a good Democrat or a good Republican, individuals reaffirm their own underlying goodness and worth. Political group membership can reduce subjective uncertainty, and so can explain why individuals become deeply entrenched in their political groups (Hogg et al 2007). Once they are entrenched in their political groups, it could make them more susceptible to polarization.

What happens when encountering new information makes individuals feel uncertain about their own political identity? According to the self-affirmation theory, information that makes one's political ingroup look bad can be psychologically uncomfortable because it is threatening to a component of their self-integrity (Sherman et al 2009). Thus, individuals use motivated reasoning (allowing pre-existing beliefs to emotionally bias one's judgements and conclusions) to ignore information that threatens their ingroup (Ditto et al 2017). However, if individuals use another source of self-integrity when their ingroup is threatened, they may process the information more objectively (Sherman and Cohen 2014). Having participants think about a time they enacted an important value is one method of inducing self-integrity in a laboratory setting. For example, "family" may be an important value to an individual and thinking about a time they helped their children may serve as a boost to their self-integrity.

Thinking about times individuals enacted personally important values are acts of self-affirmation.

Studies have shown that experimental primes of self-affirmation reduce political bias towards opposing candidates (Binning et al 2010), political issues (Cohen et al 2007), and outgroup derogation (McGregor, Haji, & Kang 2008). Self-affirmed participants are more equipped to handle identity-threatening information because their sense of self feels more secure (Klein et al 2011) and they can evaluate evidence more objectively (Correll et al 2004). Finally, self-uncertainty and self-affirmation appear to operate on the same compensatory mechanism. Several studies have found self-uncertainty and self-affirmation primes will cancel each other out (McGregor 2006). Thus, self-integrity appears to play a substantial role on political behavior and subsequent political polarization.

Despite the robust findings about the effects of self-integrity on attitudes (McQueen and Klein 2006), such findings are largely unintegrated under a common theoretical framework. Sherman and Cohen (2014) have pushed for their self-affirmation theory based on Steele's (1988) earlier work that individuals have a motivation to maintain their self-integrity. However, other researchers have argued the mechanism driving these effects is due to a wide range of phenomena including: self-clarity, morality salience, meaning, or self-transcendence (Boucher, Bloch, and Pelletier 2016; Heine, Proulx and Vohs, 2006; Fritsche et al., 2008; Crocker, Niiya, and Mischkowski 2009). McGregor (2006) argues that this multitude of findings using self-uncertainty and self-affirmation primes could benefit from a "common currency."

Sherman and colleagues (2009) argue that self-integrity accounts for individuals changing their behavior after they are self-affirmed. Sherman and colleagues (2009) created a self-integrity scale to support their claims. They found a medium effect size (d = .495) for self-affirmation on their self-integrity scale compared to a control. However, there is a dearth of research that tests how self-uncertainty primes affect scores on the self-integrity scale. There are many kinds of manipulation checks that capture self-affirmation and other variables of interest depending on the focus of the study (McQueen & Klein 2006; Napper, Harris, & Epton 2009). Instead of trying to capture nebulous concepts involved with the self that can apply to some primes and not others, it is more parsimonious to focus the well-studied three dimensions of meaning (evaluation, potency, and activity) that also can connect to the self (as I describe in detail below).

I argue that ACT's framework could provide that "common currency" for self-integrity primes as well as their intersection with political bias. Additionally, ACT's simple and straightforward self-sentiment scales (Mackinnon 2015) could reduce the likelihood of adding unwanted bias because manipulation checks that try to measure self-integrity primes could accidentality create unwanted priming effects (McQueen & Klein 2006; Schwinghammer, Stapel, & Blanton 2006). Thus, the ACT framework potentially allows for a variety of priming effects to be detected on the same self-sentiment measurement scales. While I am applying this mechanism for self-sentiments and political identities, I also argue that it can be a useful framework for other identities and events related to the self.

Connecting ACT and Self-Integrity Theories

  Affect Control Theory of Self (ACT-Self) explains how different identities and self-evaluations impact behavior. Just like individuals have fundamental sentiments about their social environments, they have fundamental sentiments about themselves. The fundamental self-sentiment deals with a static, overall view of one's self. The transient self-sentiment is the particular state that individuals currently find themselves in. If an individual behaves in a way that is personally inappropriate (creating a mismatch between fundamental and transient sentiments), that personal affective inconsistency is termed *inauthenticity* (Heise and MacKinnon 2010). These fundamental self-sentiments are also measured on the dimensions of evaluation, potency, and activity. Evaluation measures if individuals consider their self as worthy or unworthy, potency deals with one's self-competence, and activity deals with feelings of liveliness regarding one's self (these correspond to self-esteem, self-efficacy, and self-activation respectively). ACT-Self argues that people are motivated to maintain their fundamental levels of self-esteem, self-efficacy, and self-activation (Heise and MacKinnon 2010). The motivational mechanism of ACT-Self is the desire to maintain affective consistency (MacKinnon 2015) between the fundamental and situation self-sentiments. Maintaining these levels predicts how well individuals confirm their personal identities through their behaviors.

  ACT-self posits that people enact identities that are similar to their fundamental self-sentiments in order to avoid inauthenticity (MacKinnon 2015). Thus, individuals are motivated to seek out identities and subsequent behaviors that confirm their sentiments about themselves. If individuals think of themselves as "good" people and they do a "bad" behavior, then this creates inauthenticity and they are motivated to correct it.

When mismatches between the fundamental self and the situational self occurs, an individual locates a proximate behavior in EPA space and enacts it to reduce their inauthenticity. They can do this by behaving in a way that would mathematically cancel out the previous behavior. For example, if someone rates themselves positively on evaluation, but performs a behavior that is culturally considered to be bad, then they will be motivated to do something good to return their self-sentiments to their more positive baseline. It does not matter if someone has high or low EPA, ACT-Self predicts they will tend to behave in a way that supports their sentiments wherever they are in EPA space. For example, Robinson and Smith-Lovin (1992) found that participants with low self-esteem thought negative feedback was more accurate and preferred to spend time with those who gave them negative feedback. Additionally, those who view themselves negatively prefer negative feedback, even though it made them feel unhappy (Swann et al 1992).

More experimental evidence of the inauthenticity process is supported by a classic study by Wiggins and Heise (1987). Wiggins and Heise (1987) tested if mismatches between one's global and situational self-sentiments could affect consequent behavior. They first had student participants rate themselves on self-evaluation and found that the mean response was positive. They then experimentally induced one group of participants to feel embarrassed due to the negative actions of a secretary who was a confederate in the study. The group of participants who felt embarrassed had the opportunity to engage in a nice behavior towards another student and they did so (resolving the inauthenticity they previously experienced with the secretary by doing a positive action). However, a separate group of students who felt embarrassed had the

opportunity to engage in a nice behavior to a person who appeared to be a delinquent and did not do so (because doing a nice thing to a "bad" person does not result in an overall positive action). A more recent study by Boyle (2017) found that fundamental self-sentiments measured by EPA predict how participants rate themselves on a variety of traits including identities and emotions.

Similar to the ACT findings, self-affirmation primes could cause inauthenticity in an individual because they are viewing themselves as more positive or as more potent than they typically do. This deflects the individual upwards in their transient self-sentiments. Objectively assessing personally threatening information (such as information that challenges an important political identity) should deflect them downwards by confirming a "skeptical" identity, reduce inauthenticity, and return the individual to their self-sentiment baseline. Instead of relying on the concept of self-integrity that is not connected to other types of self-primes, ACT-Self offers a clear metric for measuring changes in positive or negative self-sentiments. This leads to my first theoretical proposition:

P1) Priming self-affirmation leads to inflated self-sentiments.

P1a) Inflated self-sentiments increase feelings of inauthenticity.

P1b) Inauthenticity provokes identity confirming actions.

Furthermore, self-uncertainty could cause inauthenticity in an individual by having them think of themselves more negatively and less potently than they typically do. This inauthenticity caused by deflated self-sentiments would create motivation to engage in a behavior that would elevate one's self-sentiments (such as confirming a political identity). ACT-self provides a common theoretical currency for both self-affirmation and

self-uncertainty processes (see Figure 2.3). This leads to my second theoretical

proposition:

P2) Priming self-uncertainty leads to deflated self-sentiments.

P2a) Deflated self-sentiments increase feelings of inauthenticity.

P2b) Inauthenticity provokes identity confirming actions.
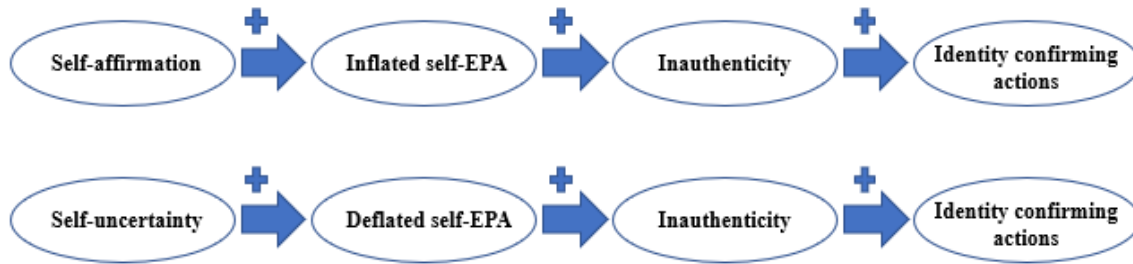
Figure 2.3. Conceptual Model Combining Self-Affirmation and Self-Uncertainty Into ACT-Self.

The further away one's self-sentiments are from the impact of the prime, the

greater motivation an individual will have to engage in a behavior to self-correct. This is

consistent with research that found those with high self-esteem are impacted more by

self-uncertainty primes (Boucher, Bloch, and Pelletier 2016) and those with low self-

esteem are impacted more by self-affirmation primes (Düring and Jessop 2015). Low

self-esteem could approximate those with lower fundamental self-evaluations and there

would be greater distance for lower self-esteem individuals and a self-affirmation prime

that creates a highly positive situational self-sentiment; thereby making them more likely

to accept identity threatening information.

ACT allows for self-affirmation, self-uncertainty, and self-esteem[2] to be measured

on the same dimensions (evaluation, potency, and activity) while also assessing the

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[2] In ACT-Self, self-esteem can be measured by one's fundamental self-sentiments.
MacKinnon (2015) argues that measuring self-esteem on these three dimensions through

conflict they create in the self (through inauthenticity). Previous research does not categorically state whether self-uncertainty and self-affirmation influence psychological states equally, but in opposite directions. However, ACT-Self keeps it simple by measuring both priming effects on an individual's self-EPA to account for differences between one's fundamental self and their situational self. As mentioned above, the enacting of identities can resolve inauthenticity regardless if the deflection was positive or negative. If one is deflected downward (i.e. self-uncertainty), confirming a positively rated identity reduces inauthenticity. If one is deflected upward (i.e. self-affirmation), confirming a negatively rated identity reduces inauthenticity.

I contend that self-affirmation and self-uncertainty create a discrepancy between fundamental self-sentiments and situational (transient) self-sentiments (experienced as inauthenticity). I summarized this mechanism with my propositions 1 and 2. This process causes individuals to enact identities that in a way that helps reaffirm their fundamental self-sentiments and reduce the feelings of inauthenticity. Figure 2.3 shows the conceptual map that illustrates the link between transient changes in self-sentiments and the motivation to return to fundamental self-sentiments by identity confirming actions. Importantly, I do not think this mechanism is unique to politics, as it should occur with any identities and events related to the self. My dissertation approaches the identity processes on political bias as well as social network effects. In the next section, I will describe the theoretical background and arguments for how social networks impacts political bias.

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semantic differential scales reduces ambiguity and conceptual confusion found in more traditional self-esteem scales.

Theoretical Background of Social Networks on Political Bias

Studying social network structure can help explain the causes of political polarization. Individuals can obtain novel information from those in their network who disagree with them (e.g., Aral & Van Alstyne 2011; Burt 1992; Granovetter 1973). Some research suggests exposure to different ideas can lead to weaker adherence to existing attitudes (Bienenstock, Bonacich, and Oliver 1990; Druckman and Nelson 2003), but others do not (Kahan 2012; Taber and Lodge 2006). I argue that the specifics of the relationships an individual has within their network is a crucial variable that can account for these inconsistencies in the literature.

Homophily, the principle that individuals with similar characteristics associate with each other more frequently, is a well-studied phenomenon is sociology (McPherson, Smith-Lovin, and Cook 2001). The characteristics subject to homophily can include demographics such as age, sex, race, and education, but also more abstract concepts like emotions (Kramer, Guillory, and Hancock 2014) and media preferences (Christakis and Fowler 2009). Below I briefly review some of the research showing how the composition of our social networks can also influence the nature of our ideological beliefs as well.

How Social Network Homogeneity Increases Polarized Beliefs

Effects of network homogeneity appear in studies looking at both religious and political ideologies, suggesting that any strongly held belief system can be influenced by those with whom we interact. Religious individuals who have greater shared agreement in their social network are more likely to maintain their beliefs on abortion (Petersen 2001), premarital sex, and creationism (Hill, 2014). Bienenstock, Bonacich, and Oliver (1990) found that heterogeneity of religiosity, gender, education, and racial identification

among an individual's close ties can reduce the likelihood of the respondent holding certain socially conservative beliefs. Likewise, results from national adult and student samples show decreased conviction in political beliefs with greater political heterogeneity in one's social network (Visser and Mirabile 2004). Consistent with these findings, network heterogeneity is also associated with a decreased partisan identity salience (Lupton, Singh, and Thorton 2014).

Research by Jost and colleagues (2018) found that both Democrats and Republicans have preferences to maintain politically homogeneous social networks and Boutyline and Willer (2015) found the preference for homogenous networks may be more pronounced in conservatives. Additionally, a Pew Research Poll (2014) found that 35% Democrats and 50% of Republicans prefer to live in places with people who mostly share their political beliefs. Other work (Facciani and Brashears 2019; Parsons 2015) has shown that network homogeneity is linked to greater ideological polarization.

Recent work by Boutyline and Willer (2017) found that the most extreme partisans had the most politically homogenous networks on social media. Williams and colleagues (2015) found that Twitter communities with mixed political attitudes were less likely to hold a strongly polarized view towards climate change. An experiment by Keating and colleagues (2016) went beyond correlational measures and found that political attitudes become more extreme after a group discussion with those who share one's political beliefs. Additionally, respondents also tend to overestimate how much their network shares their political beliefs (Goel, Mason, and Watts 2010) and political echo-chambers tend to become more homogeneous over time (Hutchens et al 2019). While causality is difficult to parse out in these studies, a longitudinal study by Lazer and

colleagues (2010) found that individuals do shift their political views to conform with their associates. While these findings suggest homogeneity increases polarization, the studies in the following section provide conflicting results.

Why Social Network Homogeneity Does Not Increase Polarized Beliefs

Findings by both Bloom and Levitan (2011) and Robinson, Leeper & Druckman (2016) suggest that network homogeneity has little or no effect on partisan beliefs. This could be because individuals often find political conflict to be unpleasant and prefer to avoid it if they can (Mutz 2006; Rosenberg 1954; Ulbig and Funk 1999). Druckman (2016) also found that network homogeneity has little or no effect on partisan beliefs. Instead, individuals often prefer to discuss politics with like-minded others (Cowan & Baldassarri 2018; Gerber et al. 2012; Huckfeldt 2007).

Complicating matters even further are the results that suggest that being confronted with opposing views can strengthen existing ideas (Kahan 2012; Sunstein 2002). Taber and Lodge (2006) describe how partisans are psychologically motivated to reject information that challenges their political beliefs. Even exposure to online criticism towards one's political group can increase affective polarization (Suhay, Bello-Pardo, & Maurer 2018). If humans are psychologically motivated to reject information that conflicts with their ideology, how can some exposure result in polarization and others result in depolarization? The answer may be in the strength of the relationship from where the challenging information is coming.

Bail and colleagues (2018) paid Democrat and Republican participants to follow Twitter accounts of their political outgroup for one month. They found that following these outgroups on Twitter induced greater polarization. However, social media accounts

from political figures hardly have a meaningful association with the participant. Results

by Robison, Leeper, & Druckman (2016) did not provide much support for heterogeneity

reducing strength of political attitudes. However, their study used discussion partners

with whom the respondent talks about "government and elections." Importantly, such

individuals may not be especially close to the participant. The closeness of one's

associates in their network appears to be crucial for determining the impact of

homogeneity on beliefs.

The Specifics of the Relationships Matter

If closeness of relationship could influence political beliefs, then it is necessary to

understand how the closeness of relationships are measured. The "important matters"

question is one of the most studied measures of obtaining close ties of a respondent (Burt

1984). This item simply asks participants to name individuals they know with whom they

discuss "important matters." The names listed from this question often include

individuals who are close enough to the respondent where they would provide social

resources like offering a loan or meaningful social interaction (Brashears 2014). In short,

this item captures the associations an individual has that are most meaningful in terms of

social support.

Importantly, the studies mentioned above that failed to find a positive association

between homogeneity and belief strength either did not measure personal networks with a

name generator (Bail et al, 2018; Robison, Leeper, & Druckman 2016) or did not include

social relationships at all, simply relying on the presentation of political arguments

(Kahan 2012; Sunstein 2002; Taber and Lodge 2006). The studies that did find a positive

association between homogeneity and ideological belief strength used the important

matters question to capture close ties (Bienenstock, Bonacich, and Oliver 1990; Facciani and Brashears 2019; Visser & Mirabile 2004).

If an individual does not have a meaningful relationship with an associate with whom they disagree, then such interactions might have no effect on political bias or could only increase the awareness of their own political identity (which may even increase polarization as illustrated by Bail and colleagues' (2018) Twitter study). Individuals who deactivated their Facebook account for four weeks had significantly decreased political polarization compared to a control group, suggesting that reduced exposure from political disagreement among superficial ties is associated with less polarization (Allcott et al 2019). The average user on Facebook has 377 "friends" which provides plenty of exposure to non-intimate social connections (Brailovskaia and Margraf 2019).[3] This is consistent with research showing how increasing awareness to and focusing on one's political ingroup identity can increase belief polarization (Guilbeault and Centola 2018; Unsworth and Fielding 2014). This suggests that the nature of the relationship could influence political attitudes.

Bienenstock, Bonacich, and Oliver (1990) found a link between network homogeneity among close ties (via the important matters question) and ideological strength, but focused on religious beliefs and did not measure one's feelings towards an outgroup. Specifically, they looked at how religious intensity and strongly religious associates can increase likelihood of holding certain beliefs; however, their data did not include whether someone shares the same religious denomination with their close

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[3] Phua & Ahn (2016) only included college students in their study and found the average Facebook user had 585 "friends."

associates. Facciani and Brashears (2019) included shared religious and political identity in their homogeneity measurement to capture if respondents share the same political and religious identity as their close ties. They found that having just one close tie (from the "important matters" name generator) who did not identify as Christian increased the likelihood of holding positive attitudes towards abortion access and homosexuality. Additionally, when looking at political identities, they found that Democrats whose reported close ties were all Democrats had more favorable views towards government assistance. Furthermore, Republicans who reported close ties who were all Republicans had less favorable views towards government spending. Thus, to best capture the effect of social networks on political polarization, researchers should include 1) a measurement of close ties using the "name generator" technique and 2) whether those names given share the same identity with the respondent.

Theoretical Connection Between Network Composition and Political Polarization

The importance of close ties for belief strength is consistent with early theorizing by Cooley (1902) who argued that social feedback from other people is more influential if those people are deemed relevant by the individual receiving the feedback. Berger (1967) argued shared ideological agreement from associates can help maintain our belief structure. Smith and Emerson (1998) argued that those who are especially close to us are most necessary to maintain these beliefs. While Smith and Emerson (1998) and Berger (1967) theorized about religiosity in particular, I argue the same mechanism can be applied to political ideology. Both political and religious ideologies provide people with meaning (Kay et al 2008). Thus, I contend that one's close ties (when measured correctly) do impact one's political beliefs. This leads me to my third proposition:

P3) Political homogeneity among one's close ties increases polarized beliefs

Thus far, I have focused on the link between shared political agreement in one's personal network and the strength of political beliefs (Facciani and Brashears 2019; Visser and Mirabile 2004). However, it is important to also consider homogeneity effects on feelings towards the outgroup and ingroup to capture affective polarization as well. As mentioned above, political differences appear to be rooted in identity (Green, Palmquist, & Schickler 2004) and emotion toward one's ingroup (Iyengar et al 2018). Parsons (2015) did find support for political homogeneity effects on affective polarization, but did not use the "important matters" question and only had a simple like/dislike measure of the outgroup in his study.

Studying both evaluation and potency would better capture how one feels about their political ingroups and outgroups. Both Democrats and Republicans rate their ingroups higher on warmth and competence (Eriksson & Funcke 2015; Crawford et al 2013). This suggests that partisans both like their ingroup more and believe they are more likely to carry out goals. Once these sentiments are altered, the likelihood of behaviors involving these groups would also be changed. As referenced above when discussing Affect Control Theory, individuals are motivated to maintain consistency between how positive they rate an actor and the behavior they engage in (Smith-Lovin and Heise 1988). This leads to my 4th and 5th propositions:

P4) Political homogeneity among one's close ties produces more positive and empowered sentiments for the ingroup

P4a) The more positive sentiments one has for their ingroup, the more likely they will rate their ingroup engaging in positive behavior

P5) Political homogeneity among one's close ties produces less positive and empowered sentiments for the outgroup

P5a) The more negative sentiments one has for their outgroup, the more likely they will rate their outgroup engaging in negative behavior

Beyond rating outgroups and social events, research on network homogeneity could benefit from including how political groups evaluate information that conflicts with their ideology. Self-affirmation primes have been well established to make individuals more open to identity threatening evidence (Cohen and Sherman 2006), but would individuals be more open to identity threatening evidence if they had heterogenous personal networks? Heterogeneity in one's personal network should decrease affective polarization and negative evaluations of the outgroup. Importantly, reduced negative feelings towards the outgroup is an important mediator between intergroup contact and a reduction of prejudice (Pettigrew and Tropp 2008). If an individual has more positive feelings towards their outgroup, then they view that group as less threatening (Smith and Mackie 2015). Less negative feelings towards a political outgroup is associated with less extreme political beliefs (Lelkes 2018; Webster and Abramowitz 2015). Thus, positive and meaningful interactions with a political outgroup could reduce negative affect and increase agreement with goals of the political outgroup.

I have described above the conflicting results on how personal networks impact political beliefs. Some research suggests additional exposure to conflicting worldviews can lead to weaker adherence to existing attitudes (Bienenstock, Bonacich, and Oliver

1990; Druckman and Nelson 2003), but others do not (Kahan 2012; Taber and Lodge 2006). This can sometimes result in the perception that exposure to opposing views does not reduce polarization, but I argue the specifics of ties matter when determining how our associates influence our feelings towards political groups. I argue that including the variable with whom the participant discusses "important matters" is crucial for accounting for these inconsistencies. I will include this measure of "important matters" in my second study to capture a specific account of one's homogeneity in their political network.

Overview of Studies

My dissertation aims to study micro- and meso-level processes that influence political polarization. In this literature review, I described how political polarization is a growing problem in the United States. Such political polarization can be thought of in terms of identity and applying the exogenous variables of self-integrity primes provide a meaningful intersection with this process. I also argue that applying Affect Control Theory allows for the combination in a rigorous and parsimonious manner.

In my first study, I evaluated whether a self-uncertainty prime would increase political polarization and if self-affirmation could decrease political polarization within Democrat and Republican participants. To measure political polarization, I had my participants rate their political ingroup and outgroup on evaluation, potency, and activity. I also had them rate the likelihood of social events involving their political ingroups and outgroups. This measurement allows for social scientists to apply ACT when studying polarization. The framework of Affect Control Theory (evaluation, potency, and activity, as well as deflection) allows researchers to more rigorously, and parsimoniously capture

the phenomena that influence affective polarization. ACT also offers an explicit framework which can test the subjective likelihood of intergroup behavior, provides a standardized metric for comparing American political subcultures to other subcultures, and offers a theoretical bridge to connect the two types of social psychologies.

In my second study, I moved to the meso level and evaluated how homogeneity in one's personal networks would impact political bias. I collected ego network data from Republican and Democrat participants using the "important matters" measure. Participants also indicated if the individuals listed shared their political identity or not, which allowed me to calculate the degree of political homogeneity in my participant's personal networks. I predicted that greater political homogeneity would be associated with increased political bias regarding the feelings of ingroups and outgroups, as well as the subjective likelihood of social events involving those groups. Both Study 1 and Study 2 apply ACT's framework in their outcome variables capturing political polarization. Thus, I isolate how different social factors (self-integrity manipulation or personal network homogeneity) influence my measures of political polarization.

CHAPTER 3

STUDY 1

Methods

Project and Measures Description

Study 1 aimed to evaluate how self-integrity primes influence self-sentiments and if this change in self-sentiments will impact political bias. The self-integrity primes are self-uncertainty, self-affirmation, and neutral primes (for the control group). The self-uncertainty prime was adopted from McGregor and colleagues (2001) self-uncertainty prime asked participants to write a time when they felt uncertain about themselves and their future. The self-affirmation prime was adopted from Sherman and colleagues' (2009) study where they asked participants to pick a value that was important to them and then write about a time when they enacted this value. The control condition (McQueen & Klein 2006) had participants write about a value that was important to someone else and write about how someone may find it important to them when enacted (see Appendix A). Finally, at the end of the study, I had measures of demographics (age, race, sex, education) and how important one's political identity was to them (Appendix C).

My first measure of political bias had participants rate political ingroups and outgroups on evaluation, potency, and activity using the ACT framework. Additionally, participants rated how likely events were to happen that involved the political groups doing good and bad behaviors. Because I had participants record EPA ratings of the

groups and behaviors, I can calculate deflection scores and determine if they correlate with subjective likelihood ratings.

Finally, because I kept the entire study on the metrics of the ACT framework, I had participants evaluate their fundamental and transient self-sentiments. Thus, I had participants record their EPA for "myself as I really am" at the start of the experiment. Then I had participants record "myself as I currently feel" after they completed their prime. In order to be able to connect self-integrity primes to the ACT framework, I should detect a change in self-sentiments depending on the condition the participant is in. To detect if this change in self-sentiments occurred, I conducted a pre-test only evaluating self-uncertainty and self-affirmation effects on transient self-sentiments.

Pre-test for Study 1

I conducted a pre-test evaluating whether the self-affirmation and self-uncertainty primes significantly impacted any self-sentiments before collecting data for Study 1. Participants were recruited from Mechanical Turk's online population. Mechanical Turk has provided a reputable outlet for researchers to post studies for participants to sign up for and receive payment (Mason and Suri 2012). Previous work on self-integrity primes (McQueen and Klein 2006) suggests that at least 30 subjects per condition are necessary to achieve a power of .90 at the .05 alpha level. Participants were paid $0.50 each to complete this quick experiment (estimated 5-minute completion time or less).

After 30 participants were randomly assigned into a self-affirmation or self-uncertainty condition, they read a consent form in order to participate. Participants then rated themselves on evaluation, potency, and activity for "myself as I currently feel" as well as "myself as I really am." After that, participants completed either the self-

affirmation or self-uncertainty prime (see Appendix A). Then, participants completed a

brief filler task (see Appendix B) to reduce demand characteristics. This filler task was

the self-integrity scale by Sherman and colleagues (2009) and has traditionally been used

as a manipulation check for the self-affirmation prime. Finally, participants were asked to

again rate themselves on EPA for "myself as I currently feel" and complete a few

demographic questions before they were debriefed (see Appendix C). To test my first

hypothesis, I completed a series of t-tests on the self-sentiment ratings after the prime

between the two conditions for EPA. If there was a significant difference on these self-

sentiment ratings between conditions, then this suggested the priming effects could be

measured using ACT methodology. While I predicted that each sentiment could be

impacted by the primes, the evaluation sentiment seems to have the most overlap with

self-affirmation and self-uncertainty.

Self-affirmation Higher EPA Hypothesis: Self-affirmation prime will yield higher self-
sentiments on EPA compared to self-uncertainty prime

Study 1 Hypotheses

  Study 1 evaluated whether self-affirmation and self-uncertainty primes influenced

political polarization. As a baseline, I predict both Democrats and Republicans will rate

their ingroup much more positively than the outgroup on the evaluation and potency

dimensions (EP). Previous work (Eriksson and Funcke 2015; Crawford et al. 2013) has

shown both Democrats and Republicans rate their ingroups higher than outgroups on

warmth and competence, suggesting that they both like them more and believe they are

more likely to carry out goals. As mentioned in my theory section, the activity dimension

does not have as much theoretical support to make predictions about intergroup attitudes.

H1: Ingroup EP Bias Hypothesis: Individuals who self-identify with a political subgroup (*p*) will rate outgroup political identities significantly lower on EP than ingroup political identities

Beyond the evaluation and potency ratings, I predict Democrats and Republicans should have a partisan bias consistent with their ingroup favoritism/outgroup dislike as well. Ingroup members should rate the likelihood of their group engaging in a good behavior as more likely than the outgroup doing the same behavior. Additionally, ingroup members should rate the likelihood of their outgroup engaging in bad behavior as more likely compared to their ingroup.

H2a: Ingroup helping likelihood bias hypothesis: Individuals who self-identify with a political subgroup (*p*) will rate their ingroup engaging in a good behavior as more likely than the outgroup

H2b: Outgroup bullying likelihood bias hypothesis: Individuals who self-identify with a political subgroup (*p*) will rate their outgroup engaging in a bad behavior as more likely than the ingroup

While political ingroups and outgroups should differ in their EP ratings, I predict using self-integrity primes can impact this difference. I predict that participants who are self-affirmed will rate the outgroup with less negativity and with higher competence, because higher competence relates to how threatening a group is (and self-affirmation has been shown to buffer against threat). However, I also predict that self-uncertainty will increase their ingroup's EP ratings while decreasing their outgroup's EP ratings because the defensive feeling from the prime will motivate individuals to cling to the safety of their political group's goodness and effectiveness. Because my theoretical argument is based in ACT-Self, I argue that self-uncertainty and self-affirmation primes create a discrepancy from fundamental self-sentiments (experienced as inauthenticity). This then

causes individuals to form impressions of all types of events (including those that involve

political actors) which reaffirm their self-sentiments and reduce their feelings of

inauthenticity.

*H3a: Self-uncertainty increase ingroup EP hypothesis***:** Deflated self-sentiments via self-uncertainty will cause individuals who self-identify with a political subgroup (*p*) to increase the EP of their political ingroup

H3b: Self-uncertainty decrease outgroup EP hypothesis: Deflated self-sentiments via self-uncertainty will cause individuals who self-identify with a political subgroup (*p*) to decrease the EP of their political outgroup

*H4a: Self-affirmation decrease ingroup EP hypothesis***:** Inflated self-sentiments via self-affirmation will cause individuals who self-identify with a political subgroup (*p*) to decrease the EP of their political ingroup

*H4b: Self-affirmation increase outgroup EP hypothesis***:** Inflated self-sentiments via self-affirmation will cause individuals who self-identify with a political subgroup (*p*) to increase the EP of their political outgroup

In addition to the self-integrity primes impacting the evaluation ratings of

ingroups and outgroups, I predict they will influence how individuals respond to the

likelihood of claims that reflect opportunities for both ingroup favoritism and outgroup

animus. The control group should show an increased likelihood of expecting the ingroup

to engage in good vs. bad behavior and the outgroup to engage in bad vs. good behavior.

Ingroup favoritism will be demonstrated by a reduction in subjective likelihood of bad

behavior by the ingroup and an increased likelihood of good behavior. Outgroup hostility

will be demonstrated by an increase in subjective likelihood of bad behavior and a

decreased likelihood of good behavior from the outgroup.

Self-affirmation will cause positive deflection in an individual such that

objectively assessing threatening information could return them to their self-baseline.

Furthermore, self-uncertainty will cause negative deflection in an individual and

demonstrating greater ingroup commitment will direct a return to baseline. Thus, self-

affirmation will reduce ingroup bias while evaluating the behavior of their ingroup and outgroup. Self-uncertainty will create more ingroup bias when evaluating intergroup behavior. This prediction is aligned with the "consistency effect" (Smith-Lovin and Heise 1988) that suggests lower deflection occurs when the evaluation of the actor and the behavior are close to each other mathematically.

H5a: Self-uncertainty increase ingroup helping likelihood hypothesis: Self-uncertainty will increase likelihood ratings of ingroup doing good behavior

H5b: Self-uncertainty increase outgroup bullying likelihood hypothesis: Self-uncertainty will increase likelihood ratings of outgroup doing bad behavior

H6a: Self-affirmation decrease ingroup helping likelihood hypothesis: Self-affirmation will decrease likelihood ratings of ingroup doing good behavior

H6b: Self-affirmation decrease outgroup bullying likelihood hypothesis: Self-affirmation will decrease likelihood ratings of outgroup doing bad behavior

Subjects

Participants were recruited from *Prolific's* online population and political database. Prolific is very similar to Mechnical Turk as it provides a reputable outlet for researchers to recruit participants for online studies (Palan and Schitter 2018). However, perhaps due to its size, Mechanical Turk has been a hotbed for computer scripts pretending to be human participants (Kennedy et al 2018). Additionally, there are concerns with overall "carelessness" found in data (Aruguete et al 2019), perhaps due to low pay structure. Prolific is a newer platform that stresses higher minimum payments which may produce higher quality data, but researchers are still determining which platform is better. In the first study, there were three conditions, and each condition had 50 Democrats and 50 Republicans. My power analysis suggests that I needed at least 30 subjects per condition to achieve a power of .90 at the .05 alpha level. Because this experiment is online, I add 20 participants per group to account for potential data loss and

additional random error such as participants incorrectly listing their political affiliation. Thus, I recruited 300 total participants for the main experiment of this study (50 Democrats + 50 Republicans * 3 conditions = 300). Participants were paid $1.40 to complete this experiment, which is $8.40 an hour, since Study 1 should take 10 minutes to complete.

Procedure

Study 1 begins by asking for consent to participate. Participants then rated themselves on evaluation, potency, and activity as they did in the pre-test. After the self-evaluation measures, participants completed the priming part of the experiment and they were told they had to answer questions about their past experiences as well as social situations. Participants were then randomly assigned into a self-affirmation, self-uncertainty, or control condition (see Appendix A).

After completing the prime, participants rated the evaluation, potency, and activity of two political identities and one neutral identity. The political identities were Democrat and Republican. The neutral identity was "person" because they are positive and powerless identities that should cause high deflection if a bad behavior is done to them. Participants also rated the behaviors "bully" and "help," so deflection of each social event could be calculated for each group. After rating the identities, participants read eight short stories about a social event involving different political and neutral identities. They then rated the likelihood of this event as described using a 7-point Likert scale from "not at all likely" to "extremely likely." For example, participants read the following text: "You overhear someone saying that someone they call a "Democrat" has "bullied" someone they call a "Republican." Then they answered: "how likely do you

think this event occurred as it was described above?" (see Appendix D). After collecting this data, participants rated themselves on EPA and answered demographic questions regarding their religiosity, political ideology (liberalism to conservatism scale), gender, age, and education (see Appendix C). The participant was then debriefed at the end of the study.

Political ingroup members should rate their political outgroup significantly lower on evaluation and potency compared to their ingroup. Identities rated negatively (the outgroup identities) should be rated more likely to do bad behavior and less likely to do good behavior. Conversely, identities rated positively (the ingroup identities) should be rated less likely to do bad behavior and more likely to do good behavior. Consistent with ACT, deflection levels should positively correlate with likelihood ratings.

Planned Analyses to Test Hypotheses

For my pre-test, I conducted t-tests on evaluation and potency to determine if there was a significant difference between the self-uncertainty and self-affirmation conditions (*Self-affirmation higher EPA hypothesis*). In Study 1, I used a series of t-tests to determine if participants significantly rated their own political group (combining Democrats and Republicans) higher on evaluation and potency than their outgroup (*H1: Ingroup EP bias hypothesis*). I also used t-tests to determine if participants rated the likelihood of their ingroup doing a good behavior (*H2a: Ingroup helping likelihood bias hypothesis*) and their outgroup doing a bad behavior (*H2b: Outgroup bullying likelihood bias hypothesis*).

Ordinary least squares regression models evaluated whether the priming influenced political bias. Self-uncertainty was contrasted against the control group as the

independent variable, and ingroup and outgroup sentiment ratings were the outcome

variables to test *H3a: Self-uncertainty increase ingroup EP* and *H3b: Self-uncertainty*

decrease outgroup EP. To test *H4a: Self-affirmation decrease ingroup EP hypothesis* and

H4b: Self-affirmation increase outgroup EP, self-uncertainty was contrasted against the

control group again, and the ratings of the social events of the different groups were the

outcome variables.

In a similar process, I contrasted self-affirmation against the control group as the

independent variable in my regression modeling, and the ingroup and outgroup ratings

were the outcome variables to test *H5a: Self-uncertainty increase ingroup helping*

likelihood and *H5b: Self-uncertainty increase outgroup bullying likelihood*. To test *H6a:*

Self-affirmation decrease ingroup helping likelihood hypothesis and *H6b: Self-*

affirmation decrease outgroup bullying likelihood, self-affirmation was contrasted

against the control group again and the ratings of the social events of the different groups

were the outcome variables. In these regression models, I also included party

identification to test for any significant differences between Democrats and Republicans.

Table 3.1 summarizes all the hypotheses for Study 1.

Table 3.1. Summary List of Study 1 Hypotheses

Study 1 Hypotheses List
Self-affirmation Higher EPA (pre-test)
H1: Ingroup EP Bias
H2a: Ingroup helping likelihood bias
H2b: Outgroup bullying likelihood bias
H3a: Self-uncertainty increase ingroup EP
H3b: Self-uncertainty decrease outgroup EP
H4a: Self-affirmation decrease ingroup EP
H4b: Self-affirmation increase outgroup EP

H5a: Self-uncertainty increase ingroup helping likelihood
H5b: Self-uncertainty increase outgroup bullying likelihood
H6a: Self-affirmation decrease ingroup helping likelihood
H6b: Self-affirmation decrease outgroup bullying likelihood

In addition to the contrasts of the two priming conditions against the control condition, I will also contrast the self-affirmation prime against the self-uncertainty prime. Because I hypothesize that self-affirmation inflates self-sentiments and self-uncertainty deflates self-sentiments, contrasting the two conditions should provide the most power for detecting an effect if one exists.

Study 1 Results

The Impact of Self-Uncertainty and Self-Affirmation on Transient Self-Sentiments

I collected data until there were 30 participants in each the self-affirmation and self-uncertainty conditions who completed the task entirely.[4] The goal of the pre-test was to determine if the "myself as I currently feel" question could capture transient self-sentiment rating differences between the self-affirmation and self-uncertainty prime. Means of self-evaluation, self-potency, and self-activity were recorded for both conditions (see Table 3.2). The evaluation of the self-affirmation group rating was higher

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[4] I did not include data from participants who completed the writing task in under 60 seconds and/or did not write an essay related to their prompt. To increase the likelihood of longer essays for study 1, I used the wording from Sherman and colleagues (2009) where they ask participants in the self-affirmation condition to write three reasons why their most important value was important to them and then provided an example demonstrating its importance. This should also increase power of the priming effect, although the "dosage" of how much writing is necessary for self-affirmation to work is still understudied.

than the self-uncertainty group; however, it only approached significance (t = 1.20; p =

.11) according to t-tests. The effect size for self-evaluation differences was in the small-

medium range (d = .309).

Table 3.2. Pre-test means and standard deviations of "myself as I currently feel" ratings
for each self-sentiment between conditions.

Self-Sentiment Dimension	Self-affirmation mean and SD	Self-uncertainty mean and SD
Evaluation	2.33 (1.50)	1.89 (1.27)
Potency	0.802 (1.61)	0.611 (1.58)
Activity	0.312 (1.83)	0.191 (1.58)

Note: Possible ratings are from -4 to 4.

Effect sizes in this range are not uncommon for self-affirmation studies (see

McQueen & Klein 2006) and that includes many studies completed in the laboratory

whereas mine was completed online (which potentially increases error). Due to the small

sample size in the pre-test (30 subjects per condition) as well as the limited effect size,

there is a lack of statistical power which may explain the lack of significance. Thus, it

seems plausible that these primes are creating a disruption in one's transient self-

evaluation (causing some detectable inauthenticity as predicted). However, the activity

and potency dimensions were not discernibly higher and were not close to significance.

These results provide partial support for the *Self-affirmation Higher EPA hypothesis* as

only self-evaluation seems most likely to capture the effect. Study 1 investigated the

impact of self-uncertainty and self-affirmation on political beliefs.

Study 1: Evaluation, Potency, and Activity Ratings of Political Ingroups vs Outgroups

Table 3.3. Comparison of ingroup and outgroup sentiment ratings in control condition via t-tests.

Sentiment	Ingroup	Outgroup
Evaluation	1.58 (1.32) **	-1.05 (1.74)
Potency	1.14 (1.511) ~	0.79 (1.77)
Activity	0.668 (1.61) **	- 0.567 (2.15)

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

First, a series of t-tests were used to determine if there was a baseline difference between political ingroup and outgroup evaluation and potency in the control condition (see Table 3.3). Individuals in the control group rated the ingroup higher on evaluation ($t(186) = 11.67$; $p <.001$; $d = 1.70$), potency ($t(186) = 1.45$; $p = .035$, one tailed; $d = 0.212$), and activity ($t(186) = 4.45$; $p <.001$; $d = 0.650$) compared to the outgroup (see Table 3.3). This supports *H1: Ingroup EP bias*. However, only the differences on evaluation had a high magnitude of effect. Potency had a small effect and activity had a medium effect according to effect size measures (Cohen 1992). The weaker effect for potency is not surprising, as an individual can dislike a group and still consider them moderately competent. These sentiment ratings can be used to detect a baseline affective polarization for Democrat and Republican participants. Now that this baseline difference has been established, I can evaluate if my priming conditions influenced these effects.

Likelihood Ratings of Political Group Behavior in Social Events

Table 3.4. Comparison of ingroup and outgroup likelihood ratings in control condition via t-tests.

Social Event	Ingroup Likelihood Rating	Outgroup Likelihood Rating
Helping a Person	6.10 (0.921) **	4.85 (1.67)
Helping an outgroup (ingroup) member	5.39 (1.11) **	4.10 (1.92)
Bullying a Person	4.31 (1.71) **	5.75 (1.34)

Bullying an outgroup (ingroup) member	4.50 (1.63) **	5.78 (1.42)

Beyond rating ingroup and outgroup members differently, my study also tested if participants would rate the likelihood of social events differently depending on the behavior done by the ingroup or outgroup (see Table 3.4). Ingroup members rated the likelihood of their group helping a person as significantly more likely than outgroup members helping a person (t (186) = 6.35; p <.001; d = 0.927)). Ingroup members also rated the likelihood of their group helping an outgroup member as significantly more likely than outgroup members helping an ingroup member (t (186) = 5.61; p <.001; d = 0.819)) Additionally, both have large magnitudes of effects. This provides support for *H2a: Ingroup helping likelihood bias.*

Additionally, ingroup members rated the likelihood of their outgroup bullying a person as significantly more likely than ingroup members bullying a person (t (186) = 6.38; p <.001; d = 0.931). Ingroup members also rated the likelihood of their outgroup bullying an ingroup member as significantly more likely than ingroup members bullying an outgroup member ((t (186) = 5.74; p <.001; d = 0.837)). As with the helping bias, these bullying bias assessments have large magnitudes of effects. Thus, *H2b: Outgroup bullying likelihood bias* was also supported. These results show that likelihood ratings do capture significant political bias for participants who belong to political groups.

Manipulation Check of Self-Uncertainty and Self-Affirmation Primes

Table 3.5. Comparison of self-sentiments (and self-integrity scale) after self-uncertainty, self-affirmation, and control primes.

Self-sentiment	Self-uncertainty condition	Control	Self-affirmation condition
Self-evaluation	1.27(1.68)	1.36 (1.73) *	1.78 (1.60)
Self-potency	0.46 (1.71)	0.42 (1.81)	0.41 (1.77)
Self-activity	-0.08(1.66)	0.24 (1.70)	0.31 (1.59)
Self-integrity scale mean	5.54 (0.956)	5.57 (.982)	5.64 (0.886)

Note: T-tests revealed that only self-evaluation was significantly different (* = p <.05) when contrasted against self-uncertainty and the self-affirmation condition.

I began by running several ANOVAs to evaluate whether there were significant differences on self-rating measures as a manipulation check (Table 3.5). I predicted that these conventional self-uncertainty and self-affirmation primes could be measured by my new transient self-sentiment scale. My pre-test results suggested that I should see a significant difference on self-evaluation, but I am interested if a larger sample size could reveal differences between potency and activity as well.

An ANOVA revealed a significant difference between the three conditions on self-evaluation (F= 2,279) 2.49; p = .0425; one tailed). However, the Bonferroni post-hoc test only approached one-tailed significance between the self-uncertainty and self-affirmation conditions (p = .111). The Bonferroni also showed nonsignificant differences between self-affirmation and control (p = .266) and self-uncertainty and control (p < .999). The F test is a global test and is not as conservative as the Bonferroni tests, which could cause this discrepancy. A protected t-test on self-evaluation between the self-uncertainty and self-affirmation conditions was significant ((t (186) = 2.134; p = .034; d = 0.311)). A t-test on self-evaluation between the control and self-affirmation conditions

was also significant ((t (189) = 1.171; p = .044, one-tailed; d = 0.249)). Thus, the largest

effect is between the two treatment conditions on self-evaluation ratings, but there is also

a borderline effect for the self-affirmation group compared to the control as well.

While self-evaluation produced some borderline significant differences, ANOVAs

revealed that self-potency (F= 2,279) 0.02; p = .9801) and self-activity (F= 2,279) 1.45; p

= .236) did not even approach significance between the three conditions. The self-

integrity scale was also not significant between the conditions either (F= 2,279) 0.28; p =

.756). This suggests that the self-evaluation scale could better capture changes in

transient self-sentiments than the self-integrity measure.

Consistent with my pre-test findings, self-uncertainty does reduce self-evaluation

ratings compared to the self-affirmation group, but this is a small effect. While this effect

lacks a large magnitude, it still suggests that the contrast between the two treatment

conditions could produce significant differences in an individual's transient self-

evaluation. Self-affirmation appears inflate one's self-evaluation sentiments and self-

uncertainty appears to deflate one's self-evaluations. Next, I will determine if these small

shifts in self-sentiments (and subsequent inauthenticity) could influence how Democrats

and Republicans feel towards their respective political ingroup and outgroup.

Impact of Self-Uncertainty and Self-Affirmation on Political Group Ratings

Table 3.6: Ordinary Least Squares Regression models showing the contrast of self-uncertainty and control conditions on ingroup and outgroup ratings.

	Ingroup Evaluation	Ingroup Potency	Outgroup Evaluation	Outgroup Potency
Self-Uncertainty	-0.371 (-1.29)	0.109 (0.35)	-0.804* (-2.40)	0.435 (1.28)
Democrat Identification	-0.018 (-0.06)	-0.293 (-0.96)	-0.918** (-2.80)	1.00** (3.03)
Democrat Identification and Self-Uncertainty Interaction	0.546 (1.37)	-0.367 (-0.85)	0.596 (1.28)	0.056 (0.12)
Constant	1.598** (7.94)	1.291** (5.91)	-0.581* (-2.48)	0.275 (1.16)
N	188	188	188	188

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

I first tested if the self-uncertainty condition contrasted against the control group would yield any significant differences on the ratings of political group sentiments. A regression analysis did not reveal a significant impact on ingroup evaluation, ingroup potency, or outgroup potency (see Table 3.6). However, being in the self-uncertainty condition compared to the control condition had a significant negative effect on outgroup evaluation ($p = .018$). Despite the manipulation check not yielding significance between these two groups, there was still a significant impact on at least one group rating in this contrast.

I also wanted to assess any differences between Democrats and Republicans and found that identifying as a Republican was significantly associated with higher outgroup evaluation (p = .006) and identifying as a Democrat was significantly associated with higher outgroup potency (p = .003). These results were unexpected, but they could be explained by previous research that revealed differences in how Democrats are rate themselves slightly higher on warmth and Republicans rate themselves slightly higher on competence (Eriksson and Funcke 2015).

Table 3.7: Ordinary Least Squares Regression models showing the contrast of self-affirmation and control conditions on ingroup and outgroup ratings

	Ingroup Evaluation	Ingroup Potency	Outgroup Evaluation	Outgroup Potency
Self-Affirmation	0.334 (1.29)	0.252 (0.86)	-0.017 (-0.05)	0.141 (0.40)
Democrat Identification	-0.018 (-0.07)	-0.293 (-1.00)	-0.918* (-2.43)	1.00** (2.29)
Democrat Identification and Self-Uncertainty Interaction	-0.559 (-1.50)	-0.614 (-1.48)	0.030 (0.06)	0.004 (-0.01)
Constant	1.598** (8.45)	1.291** (6.15)	-0.581* (-2.15)	0.275 (1.11)
N	188	188	188	188

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

Next, I tested the effect self-affirmation had against the control condition. Self-affirmation contrasted against the control condition did not have a significant effect for ingroup evaluation, ingroup potency, outgroup evaluation, or outgroup potency. This null result occurred despite there being a slight difference in the manipulation check between the self-affirmation and control conditions. As seen in Table 3.6, identifying as a Republican was significantly associated with higher outgroup evaluation ($p = .016$). and identifying as a Democrat was significantly associated with higher outgroup potency ($p = .004$).

Table 3.8. Ordinary Least Squares Regression models showing the contrast of self-uncertainty and self-affirmation conditions on ingroup and outgroup ratings

	Ingroup Evaluation	Ingroup Potency	Outgroup Evaluation	Outgroup Potency
Self-Uncertainty vs Self-affirmation	-0.716* (-2.59)	-0.142 (-0.49)	-0.786* (-2.15)	0.294 (0.88)
Democrat Identification	-0.577* (-2.14)	-.9077** (-3.18)	-0.887* (-2.49)	1.00** (3.08)
Democrat Identification and Self-Uncertainty Interaction	1.106** (2.88)	0.246 (0.61)	0.556 (1.11)	0.060 (0.13)
Constant	1.943** (10.12)	1.523** (7.61)	-0.598* (-2.36)	0.924~ (5.42)
N	188	188	188	188

* *p*<0.05; ** *p*<0.01, ~ *p*<0.05, one-tailed

Finally, I contrasted the group sentiment ratings between the self-affirmation and self-uncertainty conditions. This should create the largest effect if one exists, as the primes are both creating inauthenticity in different directions. Participants in the self-uncertainty condition were more likely to rate the outgroup as less good compared to the self-affirmation condition (p = .032). This is consistent with the manipulation effect showing a significant contrast on self-evaluation. However, no other sentiment was impacted by condition, except for ingroup evaluation, which was influenced in the opposite direction as predicted. Thus, my results did not find support for *H3a: Self-uncertainty increase ingroup EP*. However, there was partial support for *H3b: Self-uncertainty decrease outgroup EP* as outgroup evaluation did decrease from self-uncertainty. For self-affirmation, I also did not find any support for *H4a: Self-affirmation decrease ingroup EP* or *H4b: Self-affirmation increase outgroup EP*.

Identifying as a Democrat was negatively associated with ingroup evaluation (p = .034), ingroup potency (p = .002), and outgroup evaluation. (p = .014) Identifying as a Democrat was also positively associated with outgroup potency (p = .002). While the self-uncertainty prime did not produce a significant difference compared to the control on the manipulation check, there was a significant difference observed in the outgroup evaluation ratings. Additionally, contrasting self-affirmation and self-uncertainty conditions also revealed differences in the outgroup evaluation rating. Despite participants having strongly negative evaluation ratings of their outgroup, self-uncertainty was shown to create even stronger negative feelings of the outgroup (but no effect was found on the ingroup). This suggests that participants derogated their outgroup to reduce inauthenticity.

Next, I used Structural Equation Modeling (SEM) to determine whether self-evaluation acted as a mediator between self-uncertainty and outgroup evaluation. According to my theory, self-uncertainty priming should create deflated self-sentiments. This deflation of self-evaluation should be observed in my transient self-evaluation measure when contrasted against self-affirmation. Once an individual's sentiments are deflated, they will be motivated to adjust them, which could be done by derogating an outgroup (which was found for outgroup evaluation ratings).

SEM results (see Figure 3.1) revealed that self-evaluation acted as a mediator between self-uncertainty and outgroup evaluation scores because it had significant a direct effect ($p = .032$) and indirect effect ($p = .027$; one tailed). Self-uncertainty did appear to cause inauthenticity in participants (as observed by decreased self-evaluation scores) and they denigrated the outgroup as an attempt to reduce such inauthenticity (as seen by reduced outgroup evaluation scores).
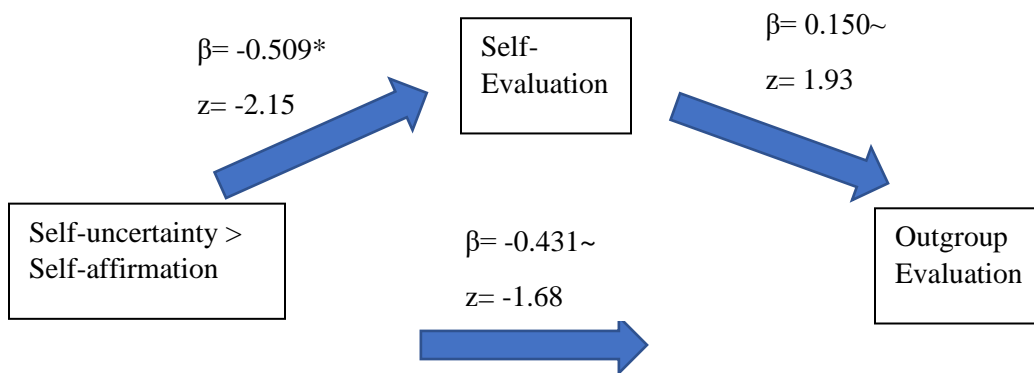
Figure 3.1. SEM coefficients and z-scores for the relationship between the self-uncertainty and self-affirmation contrast and outgroup evaluation scores as mediated by self-evaluation scores.

The Impact of Self-Uncertainty and Self-Affirmation on Likelihood Ratings of Social Events

Table 3.9: Ordinary Least Squares Regression models showing self-uncertainty's impact on ingroup and outgroup behavior likelihood ratings contrasted against the control condition.

	Ingroup Help Person Bias	Ingroup Help Outgroup Bias	Outgroup Bully Person Bias	Outgroup Bully Ingroup Bias
Self-Uncertainty	-0.320 (-0.96)	-0.259 (-0.77)	0.165 (0.41)	0.596 (1.50)
Democrat Identification	0.585~ (1.80)	0.009 (0.03)	0.598 (1.51)	0.307 (0.79)
Democrat and Self-Uncertainty Interaction	0.084 (0.18)	-0.072 (-0.15)	-0.669 (-1.19)	-0.891 (-1.61)
Constant	0.956** (4.12)	1.282** (5.42)	1.130** (3.99)	1.130** (4.06)
N	188	188	188	188

* *p*<0.05; ** *p*<0.01, ~ *p*<0.05, one-tailed

Table 3.10. Ordinary Least Squares Regression models showing self-affirmation's impact on ingroup and outgroup behavior likelihood ratings contrasted against control condition.

	Ingroup Help Person Bias	Ingroup Help Outgroup Bias	Outgroup Bully Person Bias	Outgroup Bully Ingroup Bias
Self-Uncertainty	-0.190 (-0.57)	-0.367 (-1.11)	0.124 (0.33)	0.146 (0.39)
Democrat Identification	0.585~ (1.74)	0.009 (0.03)	0.598 (1.58)	0.307 (0.82)
Democrat and Self-Uncertainty Interaction	-0.517 (-1.09)	-0.194 (-0.42)	-0.583 (-1.09)	-0.458 (-0.87)
Constant	0.956** (3.99)	1.282** (5.43)	1.130** (4.18)	1.130** (4.23)
N	188	188	188	188

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

Table 3.11. Ordinary Least Squares Regression models showing self-uncertainty's impact on ingroup and outgroup behavior likelihood ratings contrasted against self-affirmation.

	Ingroup Help Person Bias	Ingroup Help Outgroup Bias	Outgroup Bully Person Bias	Outgroup Bully Ingroup Bias
Self-Uncertainty	-0.129 (-0.45)	0.107 (0.35)	0.040 (0.11)	0.450 (1.29)
Democrat Identification	0.067 (0.24)	-0.185 (-0.61)	0.015 (0.04)	-0.151 (-0.44)
Democrat and Self-Uncertainty Interaction	0.602 (1.49)	0.122 (0.28)	-0.086 (-0.17)	-0.432 (-0.89)
Constant	0.765** (3.80)	0.914** (4.21)	1.255** (4.89)	1.276** (5.26)
N	188	188	188	188

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

I ran several regressions to evaluate whether the different primes would impact the likelihood ratings of group behaviors. Self-uncertainty's effect contrasted against the control group did not have a significant effect on any of the social event likelihood biases (see Table 3.9). Self-affirmation's effect contrasted against the control group also did not have any significant effects on the likelihood biases (see Table 3.10). Contrasting self-uncertainty against self-affirmation did not have a significant effect either (see Table 3.11). Political party and the interaction term between political party and self-uncertainty were also not significant.

Despite the outgroup evaluation being influenced by self-uncertainty, this did not translate into changes from the likelihood ratings of social events. Thus, neither self-uncertainty nor self-affirmation altered how participants viewed the likelihood of social events regarding their political ingroups and outgroups. Thus, I failed to find support for *H5a: Self-uncertainty increase ingroup helping likelihood, H5b: Self-uncertainty increase outgroup bullying likelihood*, *H6a: Self-affirmation decrease ingroup helping likelihood*, and *H6b: Self-affirmation decrease outgroup bullying likelihood*. Table 3.12 summarizes the results of the hypotheses for Study 1.

Table 3.12. Summary of Hypotheses Outcomes for Study 1

Study 1 Hypotheses	Result
Self-affirmation Higher EPA (pre-test)	PS. Approached significance for E, but not on P&A
H1: Ingroup EP Bias	✓
H2a: Ingroup helping likelihood bias	✓
H2b: Outgroup bullying likelihood bias	✓
Self-integrity Prime EPA Manipulation Check	PS. SU decreased E compared to SA. SA higher on E compared to control.
H3a: Self-uncertainty increase ingroup EP	✗
H3b: Self-uncertainty decrease outgroup EP	PS. Only decreased outgroup evaluation
H4a: Self-affirmation decrease ingroup EP	✗
H4b: Self-affirmation increase outgroup EP	✗
H5a: Self-uncertainty increase ingroup helping likelihood	✗
H5b: Self-uncertainty increase outgroup bullying likelihood	✗
H6a: Self-affirmation decrease ingroup helping likelihood	✗
H6b: Self-affirmation decrease outgroup bullying likelihood	✗

Note: ✗ = not supported. ✓ = fully supported. PS = Partially supported.

Supplemental Analyses

      I evaluated whether my significant effects (Tables 5a and 5c) would still hold while controlling for political identity prominence (how important the participant's political identity was to them). Overall, my participants felt like their political identity was fairly important to them (mean = 2.95; SD = 1.08) when using a 1 (not at all important) to 5 (very important) scale. When including this identity importance variable in my models, the self-uncertainty effects still held as significant (see Tables 3.13 and 3.14).

Table 3.13: Ordinary Least Squares Regression models showing the contrast of self-uncertainty and control conditions on outgroup evaluation while controlling for political identity importance.

	Outgroup Evaluation
Political Identity Importance	0.062 (0.59)
Self-Uncertainty	-0.785* (-2.33)
Democrat Identification	-0.906** (-2.75)
Democrat Identification and Self-Uncertainty Interaction	0.574 (1.23)
Constant	-0.775~ (-1.91)
N	188

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

Table 3.14. Ordinary Least Squares Regression models showing the contrast of self-uncertainty and self-affirmation conditions on outgroup evaluation while controlling for political identity importance

	Outgroup Evaluation
Political Identity Importance	0.180 (1.56)
Self-Uncertainty vs Self-affirmation	-0.761* (-2.09)
Democrat Identification	-0.880* (-2.47)
Democrat Identification and Self-Uncertainty Interaction	0.529 (1.05)
Constant	-1.132** (-2.66)
N	188

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

Additionally, I tested if fundamental self-sentiments could act as a moderator for the self-uncertainty and self-affirmation effects. Regression analysis (Table 3.15) found that fundamental self-sentiments of evaluation ($p < .001$), potency ($p < .001$), and activity ($p < .001$) were all positively associated with transient self-sentiments after the prime. This suggests that participants with higher fundamental self-sentiments also had higher transient self-sentiments. The lack of main effect for self-uncertainty in this model is

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because fundamental self-sentiments are heavily related to the transient self-sentiments, which accounts for a substantial amount of the variance.

Table 3.15: Ordinary Least Squares Regression models showing Fundamental Self-Sentiments as a Moderator for Self-Uncertainty Contrasted with Control Group

	Transient Self-Evaluation	Transient Self-Potency	Transient Self-Activity
Fundamental Self-Evaluation	0.699** (7.49)		
Fundamental Self-Potency		0.775** (11.96)	
Fundamental Self-Activity			0.757** (10.66)
Self-Uncertainty vs Control	0.143 (0.42)	0.107 (0.63)	-0.116 (-0.66)
Self-Uncertainty vs Control and self-sentiment interaction	-0.124 (-0.86)	-0.129 (-1.42)	-0.208* (-2.13)
Constant	0.044 (0.19)	0.198** (1.65)	0.0001 (0.001)
N	188	188	188

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

The interaction term was not significant for self-uncertainty vs control and self-evaluation or self-uncertainty vs control and self-potency. However, the interaction term

of self-uncertainty vs self-affirmation and self-activity was significant and negative (p < .035). This suggests that those with higher fundamental self-activity were impacted more strongly by the self-uncertainty prime on their transient self-activity.[5]

This is consistent with previous research that found individuals with high self-esteem are impacted more by self-uncertainty primes (Boucher, Bloch, and Pelletier 2016) One's fundamental self-sentiments can serve as a proxy for traditional self-esteem measures (MacKinnon 2015). Thus, there could be greater distance for higher self-esteem (higher self-EPA) individuals when exposed to a self-uncertainty prime that creates a highly negative situational self-sentiment. Activity may have a unique meaning for approximating self-esteem in this moderation process. Although, greater statistical power could yield significant findings for evaluation and potency as well.

Table 3.16. Correlations between Likelihood Rating of Social Scenario and Deflection Scores in Control Group

Social Scenario Involving Ingroups or Outgroups	Correlation with Deflection and Likelihood
Ingroup Help Person	0.038
Ingroup Help Outgroup	-0.053
Ingroup Bully Person	-0.418**
Ingroup Bully Outgroup	-0.359**
Outgroup Help Person	-0.494**

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[5] When analyzing possible moderator effects for self-affirmation, I found that the self-affirmation vs control interaction terms were not significant for any of the self-sentiments.

Outgroup Bully Person	0.029
Outgroup Help Ingroup	-0.316**
Outgroup Bully Ingroup	0.020

* *p*<0.05; ** *p*<0.01, ~ *p*<0.05, one-tailed

Finally, I also assessed if the deflection scores (calculated from the EPA ratings of each social event component) were significantly associated with likelihood ratings of the events. I found that 4/8 of the social event likelihood ratings had a significantly negative association with calculated deflection scores (see Table 3.16). Heise and MacKinnon (1987) found that the correlations decrease when there is vagueness introduced into the social event. Because the identities used in my scenarios are somewhat vague, it could explain why only half (4/8) of the social events had significant correlations.[6]

Discussion: Study 1

Participants rated their political ingroups as more positive, potent, and active than their political outgroups. Participants also rated the likelihood of their ingroup doing a helping behavior as more likely than the outgroup; as well as the likelihood of their outgroup doing a bullying behavior. Thus, political polarization was found as a baseline with both EPA and the subjective likelihood of processing events involving political groups.

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[6] On an exploratory level, I was interested if party identification could influence the neutral words in my study (person, bully, help). I only included the control group to avoid priming biases. I found that identifying as a Republican was associated with rating "person" more positive (p = .005) and more powerful (p = .036) Additionally, identifying as a Democrat was associated with rating "bullying someone" as more active (p = .049).

The self-uncertainty prime did decrease participants' transient self-evaluation. This is consistent with the pre-test and the larger sample size may have helped reach significance. Thus, the measure of "myself as I currently feel" does seem to capture inauthenticity created by the prime. Inauthenticity does seem most likely to be captured by the evaluation dimension, though the activity dimension was also higher in the self-affirmation condition, but not significant.

To reduce this inauthenticity, I predicted participants would both derogate the outgroup and support their group, which would be measured on the same sentiment scales. Self-uncertainty did reduce outgroup evaluation. However, outgroup potency, ingroup evaluation, and ingroup potency were not significantly impacted by the primes. Additionally, SEM revealed that transient self-evaluation was a significant mediator between self-uncertainty prime and outgroup evaluation. Thus, it does seem that self-uncertainty caused inauthenticity, which was measured by decreased self-evaluation, which then resulted in a reduced outgroup evaluation (a behavior used to resolve inauthenticity by derogating the outgroup). Subsequent analyses revealed that self-activity acted as a moderator for the self-uncertainty prime. In other words, those with higher self-activity at the start of the experiment were more likely to be impacted by the self-uncertainty prime (which is consistent with previous research finding self-esteem as a moderator for self-uncertainty).

Despite outgroup evaluation being influenced by self-uncertainty, there were no significant changes between likelihood ratings of social events by condition. Participants in the self-uncertainty and self-affirmation conditions did not rate the likelihoods significantly different.

Democrats and Republicans are already heavily polarized as previous research and my baseline findings show. Thus, increasing or decreasing polarization in any degree is a challenging task. However, my results show that the contrast between affirming oneself and feeling uncertain results in more negative self-evaluations. Additionally, these more negative self-evaluations result in participants rating their political outgroup even more negatively than they normally would. While this did not impact how participants rated the likelihood of events, it does open up future research to applying a mathematical framework to self-sentiment change and intergroup feelings.

CHAPTER 4

STUDY 2

Methods

Project Description

       Study 2 measures how ego network homogeneity influences political polarization. Using the "important matters" measure, I collected ego network data from Republican and Democrat participants. This required participants to list up to six individuals they discuss "important matters" with and also indicate if the individuals listed shared their political identity or not. This allowed me to calculate the degree of political homogeneity in my participants' personal networks. Like Study 1, I applied the ACT framework in my outcome variables capturing political polarization. This included the same EPA ratings for ingroups and outgroups as well as subjective likelihood judgements of events involving those groups. Additionally, I had measures of political extremism (how politically liberal or conservative my participants were) and also their agreement with certain political beliefs (climate change and socialism). Finally, I had measures of demographics (age, race, sex, education) and personality (openness and agreeableness).

Study 2 Hypotheses

       There should be a strong partisanship bias for evaluation and potency of ingroups/outgroups as well as the likelihood of events for these groups, replicating the findings of Study 1. Thus, I should find support again for the *Ingroup EP bias hypothesis*,

Ingroup helping likelihood bias hypothesis, and *Outgroup bullying likelihood bias*

hypothesis in Study 2 since I will have the same measures as Study 1.

H1: Ingroup EP Bias: Individuals who self-identify with a political subgroup (*p*) will rate outgroup political identities significantly lower on EP than ingroup political identities

H2a: Ingroup helping likelihood bias: Individuals who self-identify with a political subgroup (*p*) will rate their ingroup engaging in a good behavior as more likely than the outgroup

H2b: Outgroup bullying likelihood bias: Individuals who self-identify with a political subgroup (*p*) will rate their outgroup engaging in a bad behavior as more likely than the ingroup

Despite these existing strong partisanship biases, I predict that network

homogeneity will increase these biases even further. To calculate ego network

homogeneity, I applied Facciani and Brashears' (2019) method of defining a

homogeneous network as one that contains the shared political party between the

respondent and all alters listed. The alters listed will be obtained from the name generator

task where participants list up to six people they discuss "important matters" with. A

heterogeneous network is defined as having at least one close tie identify as a political

party different than the respondent. I predict that homogeneity will increase the

evaluation and potency for one's ingroup while decreasing it for their outgroups.

H7a: Homogeneity increases ingroup EP*:* When one's ego network has greater homogeneity of shared political ideology then there will be an increase of EP for ingroups

H7b: Homogeneity decreases outgroup EP: When one's ego network has greater homogeneity of shared political ideology then there will be a decrease of EP for outgroups

Additionally, homogeneity should increase the likelihood ratings of the ingroup

doing a good behavior as well as the likelihood of the outgroup doing a bad behavior.

H8a: Homogeneity increase ingroup helping likelihood: Homogeneity will make
ingroup rate situation more likely when ingroup is engaging in good behavior compared
to outgroup

H8b: Homogeneity increase outgroup bullying likelihood: Homogeneity will make
ingroup rate situation more likely when outgroup is engaging in bad behavior compared
to ingroup

I also predict that network homogeneity will increase the extreme level of

liberal/conservative ideology. Again, these self-reported Democrats and Republicans

should already have quite different levels of social and economic ideology (which I

combined into one measure of overall political ideology), but I predict that homogeneity

should still have a significant positive impact.

H9: Homogeneity increases extremism hypothesis: When one's ego network has greater
homogeneity of shared political ideology then there will be an increase of strength in
polarized political beliefs.

Finally, I predict that feelings towards the outgroup and ingroups should impact

how much agreement individuals have towards policies towards their outgroup. For

example, Republicans who have more favorable views towards Democrats will be

associated with greater agreement with climate change. Likewise, Democrats who have

more favorable views towards Republicans will be associated with less support for

socialism.

H10a: Outgroup evaluation increases agreement hypothesis: Increased outgroup
evaluation increases agreement with outgroup beliefs

H10b: Ingroup evaluation decreases agreement hypothesis: Increased ingroup
evaluation rating decreases agreement with outgroup beliefs

While homogeneity of one's network could influence how partisans process information, it is important to control for personality traits that could be driving an effect. Openness and disagreeableness are positively associated with higher degrees of network turnover (Centellegher et al. 2017). Those who are open to new experiences and those who are disagreeable tend to be quicker with removing existing ties and creating new ones. Additionally, openness is associated with intellectual humility ("a willingness to recognize the limits of one's knowledge and appreciate others' intellectual strengths" p.140), which has been found to reduce political bias (Porter and Schumann 2018). The present study will also control for these variables and examine how the network composition of close ties impacts political polarization. Additional control variables include the number of alters reported and strength of ideology. These analyses will also be included in the supplemental results section.

Subjects

Study 2, which also recruited participants from *Prolific's* political database, required 200 participants (100 Democrats and 100 Republicans). Based on my analysis of General Social Survey (1985) data, I found that Democrats and Republicans are roughly split into homogeneous and heterogenous networks (Facciani & Brashears 2019). Thus, having 100 participants in each group provided sufficient network diversity. Study 2 took about 15 minutes to complete and participants were paid $2.10 for their time (also creating an $8.40 hourly rate).

Procedure

In addition to the same self-sentiments questions used in Study 1, participants answered six questions about their openness to experience and their agreeableness (see

Appendix E) that were counterbalanced to avoid any unwanted priming effects.

Participants then listed up to six people with whom they discuss "important matters."

Once they listed these people, the participant also reported more information about the

person named including their political affiliation and the type of relationship with the

participant (see Appendix F). Network homogeneity was measured by shared political

affiliation within one's personal network.

After completing the ego network questions, participants completed the same

questions as Study 1 regarding ingroup/outgroup evaluation and likelihood ratings of

intergroup behavior. However, Study 2 added two questions. The first, adopted from

Nisbet, Cooper, and Garret (2015), measures how much the participant agrees with the

science supporting human-caused climate change. The second, based on Newport's

(2012) finding that Democrats and Republicans significantly differ in their feelings

towards socialism, asks how much the respondent supports socialist policies (see

Appendix G). These questions measure two specific issues that are polarizing between

Democrats and Republicans beyond general fiscal and social ideology measures. This

allowed me to analyze potential links between feelings towards political groups and

specific political beliefs. Finally, the participants completed the same demographic

questions as in Study 1 and then were debriefed at the end of the study.

As with Study 1, political ingroup members should rate their political outgroup

significantly lower on evaluation compared to their ingroup. Identities rated negatively

(the outgroup identities) should be rated as more likely to exhibit bad behavior and less

likely to enact good behavior. Conversely, identities rated positively (the ingroup

identities) should be rated as less likely to do bad behavior and more likely to do good

behavior. I also predict that feelings towards the outgroup and ingroup should impact

how much agreement individuals have towards policies towards their outgroup. While

Study 2 is not able to evaluate casual links with this design, the analyses will still reveal

if there are meaningful associations between my measures of homogeneity, political bias,

and political beliefs.

Planned Analyses to Test Hypotheses

Consistent with Study 1, I used a series of t-tests to determine if participants

significantly rate their own political group (combining Democrats and Republicans)

higher on evaluation and potency than their outgroup (*H1: Ingroup EP bias hypothesis*). I

will also use t-tests to determine if participants rate the likelihood of their ingroup doing a

good behavior (*H2a: Ingroup helping likelihood bias*) and their outgroup doing a bad

behavior (*H2b: Outgroup bullying likelihood bias*). Next, I will use a series of ordinary

least squared regression models to assess whether homogeneity was associated with an

additional increase of political polarization.

Homogeneity will be the main independent variable and will be generated as a

contrast between having a fully homogenous personal network and having at least one

member of one's network have a different political identity than the participant. To

evaluate *H7a: Homogeneity increases ingroup EP* and *H7b: Homogeneity decreases*

outgroup EP, homogeneity will be the independent variable and the ingroup and

outgroup sentiment ratings will be the outcome variables. To evaluate *H8a: Homogeneity*

increase ingroup helping likelihood and *H8b: Homogeneity increase outgroup bullying*

likelihood, homogeneity will be the independent variable and the likelihood ratings of

social events will be the outcome variables. To avoid additional statistical analyses (and

the risk of increasing alpha error), I computed difference scores between the likelihood ratings of the ingroup and outgroup performing the same behavior. This allowed me to have a single difference score for helping and bullying behavior (which I labeled likelihood bias). For testing *H9: Homogeneity increases extremism*, homogeneity will be the dependent variable and political extremism will be the independent variable. Political extremism was measured by the combined social and economic scales of political belief (see Appendix C).

H10a: Outgroup evaluation increases agreement and *H10b: Ingroup evaluation decreases agreement* will use outgroup evaluation and ingroup evaluation as the dependent variables respectively. Regression models will reveal if one's ingroup/outgroup evaluation will be associated with holding beliefs common to political identity (climate change and socialism). I will also include party identification in my model to assess potential party effects via interactions between party identification and homogeneity. Finally, I will control for number of alters given, political ideology, and personality measures in all my models. Table 4.1 summarizes all the hypotheses for Study 2.

Table 4.1. Hypothesis Summary List for Study 2.

Study 2 Hypothesis
H1: Ingroup EP Bias
H2a: Ingroup helping likelihood bias
H2b: Outgroup bullying likelihood bias
H7a: Homogeneity increases ingroup EP
H7b: Homogeneity decreases outgroup EP

H8a: Homogeneity increase ingroup helping likelihood
H8b: Homogeneity increase outgroup bullying likelihood
H9: Homogeneity increases extremism
H10a: Outgroup evaluation increases agreement
H10b: Ingroup evaluation decreases agreement

Study 2 Results

Evaluation, Potency, and Activity Ratings of Political Groups

Study 2 also had participants rate their feelings towards political ingroups and outgroups on evaluation, potency, and activity. A series of t-tests confirmed if there was the same baseline difference between ingroup and outgroup evaluation, potency, and activity ratings found in Study 1. Individuals in the control group rated the ingroup higher on evaluation ($t(382) = 20.31$; $p < .001$; $d = 2.07$), potency ($t(382) = 3.18$; $p < .01$; $d = 0.324$), and activity ($t(382) = 6.28$; $p < .001$; $d = 0.413$) compared to the outgroup (see Table 4.2). Consistent with Study 1, only the differences on evaluation had a high magnitude of effect. Potency had a small effect and activity had a medium effect. Thus, Study 2 also finds support for *H1: Ingroup EP Bias hypothesis*, that individuals will rate their political outgroup lower on evaluation and potency compared to their ingroup.

These findings confirm that the measure of polarization is found in study 2's sample. Now that this baseline polarization is established, I will check if network homogeneity could significantly change feelings between the groups.

Table 4.2. Comparison of ingroup and outgroup sentiment ratings in control condition via t-tests.

Sentiment	Ingroup	Outgroup
Evaluation	1.93 (1.28) **	-1.32 (1.81)
Potency	1.38 (1.40) **	0.84 (1.85)
Activity	0.658 (1.68) **	- 0.589 (2.17)

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

Likelihood Ratings of Political Group Behavior in Social Events

Table 4.3. Comparison of ingroup and outgroup likelihood ratings in control condition via t-tests.

Social Event	Ingroup Likelihood Rating	Outgroup Likelihood Rating
Helping a Person	6.13 (0.916) **	5.03 (1.64)
Helping an outgroup (ingroup) member	5.51 (1.21) **	4.33 (1.75)
Bullying a Person	4.40 (1.56) **	5.78 (1.27)
Bullying an outgroup (ingroup) member	4.41 (1.61) **	5.92 (1.26)

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

In addition to measuring differences on evaluation, potency, and activity, Study 2 also had participants rate the likelihood of social events involving political ingroup and outgroup members (Table 4.3). Ingroup members rated the likelihood of their group helping a person as significantly more likely than outgroup members helping a person (t (384) = 8.09; p <.001; d = 0.826)). Ingroup members also rated the likelihood of their group helping an outgroup member as significantly greater than outgroup members helping an ingroup member (t (384) = 7.68; p <.001; d = 0.784)) Additionally, both have somewhat large magnitudes of effects.

Ingroup members rated the likelihood of their outgroup bullying a person as significantly more likely than ingroup members bullying a person (t (384) = 9.43; p

<.001; d = 0.962). Ingroup members also rated the likelihood of their outgroup bullying an ingroup member as significantly more likely than ingroup members bullying an outgroup member (t (384) = 10.21; p <.001; d = 1.042)). As with the helping bias, these bullying bias assessments have large magnitudes of effects. These findings are consistent with Study 1 and find that individuals rate their ingroup as more likely to engage in helping behaviors and the outgroup as more likely to engage in bullying behaviors (supporting *H2a: Ingroup helping likelihood bias* and *H2b: Outgroup bullying likelihood bias* again). This shows that these likelihood ratings do capture significant political bias between Democrats and Republicans. As with the sentiment ratings between groups, I will measure if network homogeneity significantly changes this baseline polarization between the groups as well.

The Influence of Network Homogeneity on Political Group Ratings

Table 4.4. Ordinary Least Squared Regression models predicting ingroup and outgroup ratings as a function of network homogeneity.

	Ingroup Evaluation	Ingroup Potency	Outgroup Evaluation	Outgroup Potency
Network Homogeneity	0.820** (2.96)	0.555~ (1.84)	-0.843* (-2.26)	-0.758* (-1.99)
Number of Alters	-0.074 (-1.20)	-0.074 (-1.09)	0.129 (1.53)	0.099 (1.15)
Higher Conservatism	-0.106 (-1.23)	-0.195* (-2.08)	-0.030 (-0.26)	0.081 (0.69)

Democrat Identification	-0.660 (-0.18)	-1.06** (-2.71)	-0.938~ (-1.93)	1.408** (2.84)
Democrat and Homogeneity Interaction	-0.991** (-2.63)	-0.124 (-0.30)	0.010 (0.02)	0.614 (1.17)
Constant	2.624** (4.45)	2.816** (4.39)	-0.996 (-1.25)	-0.483 (-0.60)
N	192	192	192	192

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

Regression analyses revealed the impact of having a completely homogenous network on evaluation and potency ratings of ingroups and outgroups (see Table 4.4). Those with a completely homogenous network were significantly more likely to rate their ingroup more positively ($p = .003$). The interaction term had a significant negative association with the ingroup evaluation score ($p = .009$). This suggests Republicans with increased homogeneity favor their own group more than Democrats. This does not necessarily suggest that Democrats do not have an ingroup favoritism effect however.

Network homogeneity was associated with a higher rating of ingroup potency ($p = .034$; one tailed). Identifying as a Democrat is negatively associated with ingroup potency ($p = .007$). This suggests that being a Republican is associated with rating one's ingroup higher on potency and this is consistent with previous work showing that Republicans favor competence. These findings support *H7a: Homogeneity increases ingroup EP*.

Moving along to outgroup ratings, I find that outgroup evaluation was negatively associated with having a completely homogeneous network ($p = .025$). Outgroup potency was also negatively associated with network homogeneity ($p = .048$). Identifying as a Democrat was also associated with higher outgroup potency ratings ($p = .005$). These

results support *H7b: Homogeneity decreases outgroup EP*. Next, I will test if

homogeneity also influenced the likelihood ratings of social events involving political

groups.

The Influence of Network Homogeneity on Likelihood Ratings of Social Events

Table 4.5. Ordinary Least Squared Regression models predicting likelihood ratings of ingroup and outgroup social events as a function of network homogeneity.

	Ingroup Help Person Bias	Ingroup Help Outgroup Bias	Outgroup Help Person Bias	Outgroup Bully Ingroup Bias
Network Homogeneity	0.537** (2.88)	0.657** (3.65)	0.124 (0.32)	-0.163 (-0.39)
Number of Alters	-0.097* (-2.31)	-0.078~ (-1.91)	-0.064 (-0.73)	-0.117 (-1.24)
Higher Conservatism	-0.003 (-0.06)	0.011 (0.20)	0.230~ (1.88)	-0.016 (-0.12)
Democrat Identification	-0.153 (-0.60)	0.935 (0.234)	0.874~ (1.72)	0.179 (0.33)
Democrat and Homogeneity Interaction	0.190 (0.79)	-0.446~ (-1.80)	0.610 (1.14)	0.696 (1.20)
Constant	0.743~ (1.87)	0.707~ (1.84)	0.168 (0.20)	1.947* (2.17)
N	192	192	192	192

* *p*<0.05; ** *p*<0.01, ~ *p*<0.05, one-tailed

Regression analyses revealed (see Table 4.5) that having a homogenous network

was associated with having a higher ingroup helping person bias (p = .004). The number

of alters given was also significant and negatively associated with ingroup bias (p = .022)

suggesting that bigger networks make a difference. This could be because as more people are added, it is more likely there will be diversity. The interaction effect between party identification and homogeneity was not significant, suggesting that neither party is significantly more likely to be affected by this effect.

Ingroup bias for helping an outgroup member was also positively associated with having a homogenous network (p <.001) suggesting that ingroup members rate their ingroup as more likely to help an outgroup member with a completely homogenous network. The interaction term was also significant with a one-tailed test and negative (p = .037), suggesting Republicans with a homogeneous network think it is more likely their ingroup would help the outgroup more than Democrats. However, this is only one-tailed suggesting a weak effect. Homogeneity for this variable had a weaker effect for Democrats than Republicans.

Network homogeneity was significantly associated with both ingroup bias for helping a person as well as an outgroup member. Thus, *H8a: Homogeneity increase ingroup helping likelihood* is supported.

Having a homogenous network was not associated with having higher outgroup helping a person bias (p = .751). However, both higher conservatism (p <.061) and identifying as a Democrat (p = .087) approached significance. When control variables were dropped in a reduced model (see Table 4.6), network homogeneity and outgroup bullying a person bias was significant (p = .041). This suggests that political beliefs may overwhelm the network effects due to a lack of statistical power.

Table 4.6. Reduced Ordinary Least Squared regression model predicting likelihood ratings of outgroup helping a person bias social events as a function of network homogeneity.

	Outgroup Bully Person Bias
Network Homogeneity	0.544* (2.06)
Constant	1.156** (6.91)
N	192

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

Finally, having a homogenous network was not associated with having higher outgroup bullying an ingroup member bias (p = .700). This effect still was nonsignificant even after dropping control variables (p = 0.278). Thus, ingroup members with homogenous networks were more likely to have a bias for the outgroup bullying a person, but not an ingroup member. Thus, *H8b: Homogeneity increase outgroup bullying likelihood* is only partially supported.

The Impact of Network Homogeneity on Extreme Conservative and Liberal Beliefs

Table 4.7. Ordinal Logistic Regression models predicting extreme conservative (or liberal) beliefs and network homogeneity for all participants, Republicans only, and Democrats only.

	Higher Conservative Ideology	Higher Conservative Ideology (Republicans)	Higher Liberal Ideology (Democrats)
Network Homogeneity	1.031* (2.55)	0.980* (2.41)	0.502 (1.37)
Number of Alters	-0.058 (-0.66)	-0.142 (-1.05)	-0.005 (-0.05)
Democrat vs Republicans Identification	-4.849** (-8.49)		
Democrat vs Republican and Homogeneity Interaction	-1.530** (-2.83)		
Cut 1	-6.485	-4.31	1.33
Cut 2	-5.951	-3.601	0.874
Cut 3	-4.728	-3.363	-0.381
Cut 4	-4.265	-2.296	-0.874
Cut 5	-3.489	-1.759	-1.883
Cut 6	-3.168	-1.288	-2.384
Cut 7	-1.881	-0.744	-4.395
Cut 8	-1.302	0.990	
Cut 9	-0.838	1.421	
Cut 10	-0.301		
Cut 11	1.417		
Cut 12	1.847		
N	192	95	97

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

So far, my measures of political bias included group sentiment ratings and social event likelihood ratings. I also wanted to assess if different political beliefs were influenced by network composition as well. Table 4.7 reveals how ingroup members have higher conservatism with a completely homogenous network (p = .011). Democrats also rated themselves significantly less conservative (p <.001) than Republicans. The interaction term between Democrats and homogeneity is also significant in the negative direction (p <.001), suggesting that Democrats with homogenous networks tend to be even less favorable to conservatism than Democrats without homogenous networks.

Next, I separated Democrats and Republicans (Table 4.7) to see if homogeneity increased polarized beliefs for both political groups. For Democrats, network homogeneity was positively associated with more extreme liberal ideology, however, it did not reach significance (p = 0.172). For Republicans, network homogeneity was significantly positively associated with higher conservativism (p = 0.016). Thus, having a homogenous network increased general ideological strength for Republicans, but not for Democrats. Because this was significant in Republicans only, *H9: Homogeneity increases extremism* is partially supported.

The Impact of Ingroup and Outgroup Evaluation on Political Beliefs

In addition to network homogeneity, I tested if feelings towards one's political ingroup and outgroup could impact their political beliefs (see Table 4.8). Regression analysis revealed that outgroup evaluation had a significant positive association with agreeing with climate change (p =.005). Identifying as a Democrat also was positively associated with agreeing with climate change (p <.01) and the interaction was negatively associated and significant (p < .05). This indicates that Democrats who evaluate

Republicans more favorably are less likely to agree that climate change is caused by

humans. This also means that Republicans who view Democrats more favorably were

associated with a high likelihood of agreeing with human-caused climate change. The

marginal plot in Figure 4.1 illustrates how Republicans agree more with climate change

when they have more positive views of Democrats.

Table 4.8. Ordinal Logistic Regression models predicting outgroup evaluation as a
function of ideological beliefs.

	Climate Change Agreement	Socialism Agreement	Higher Conservatism
Network Homogeneity	0.382 (1.17)	0.025 (0.09)	0.322 (1.15)
Number of Alters	-0.014 (-0.14)	-0.116 (-1.24)	-0.044 (-0.50)
Higher Conservatism	-0.146 (-1.05)	-0.372** (-2.88)	
Outgroup Evaluation	0.425** (3.94)	0.161 (1.61)	-0.297** (-2.81)
Democrat Identification	2.004** (3.56)	1.305* (2.55)	-4.455** (-7.81)
Democrat and Outgroup Evaluation Interaction	-0.436* (-2.41)	-0.271 (-1.57)	0.878** (5.05)
Cut 1	-3.12	-3.92	-6.84

Cut 2	-2.558	-3.43	-2.55
Cut 3	-2.179	-2.998	-4.917
Cut 4	-1.721	-2.307	-4.388
Cut 5	-0.758	-0.867	-3.521
Cut 6	0.620	0.149	-3.173
Cut 7			-1.847
Cut 8			-1.247
Cut 9			-0.758
Cut 10			-0.201
Cut 11			1.536
Cut 12			1.969
N	192	192	192

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed
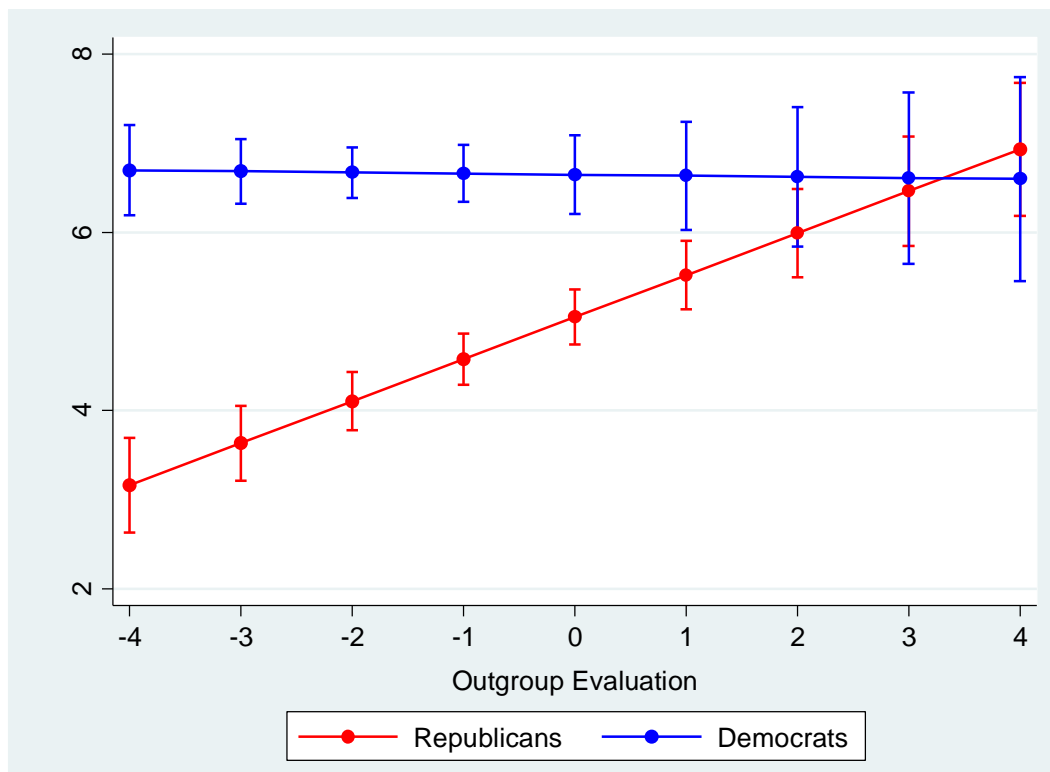
Figure 4.1. Marginal plot of climate change agreement and outgroup evaluation between Democrats and Republicans. 95% CI

Next, I find that socialism is positively associated with identifying as a Democrat ($p = .011$) and negatively associated with conservatism ($p = .004$). Outgroup evaluation ($p = .107$) and the interaction term between Democrat identification and outgroup evaluation ($p = .107$) both approached significance for their impact on socialism. To

increase my statistical power, I removed political ideology in a separate model (see Table

4.9). I found that both outgroup evaluation (p = .034) and the interaction term (p = .011)

became significant. This provides support that Democrats who evaluate Republicans

more favorably are less likely to agree that socialism can be beneficial.

Table 4.9. Reduced Ordinal Logistic regression models predicting outgroup evaluation as
a function of socialism agreement.

	Socialism Agreement
Network Homogeneity	-.0359 (-0.13)
Number of Alters	-0.095 (-1.02)
Outgroup Evaluation	0.209* (2.11)
Democrat Identification	2.281** (5.85)
Democrat and Outgroup Evaluation Interaction	-0.420* (-2.53)
Cut 1	-1.78
Cut 2	-1.30
Cut 3	-0.875
Cut 4	-0.201
Cut 5	1.181
Cut 6	2.164
N	192

* *p*<0.05; ** *p*<0.01, ~ *p*<0.05, one-tailed

For ideological extremism, outgroup evaluation (p < .001) and identifying as a Democrat (p < .001) were negatively associated with conservatism. The interaction term was significant and positively associated with higher conservatism (p <.001). Because I used Democrat identification in my interaction term with outgroup evaluation, this indicates that Democrats who evaluate Republicans more favorably are more likely to have stronger conservative beliefs. This also means that Republicans who view Democrats more favorably will have weaker conservative beliefs.

Table 4.10. Ordinal Logistic Regression models predicting ingroup evaluation as a function of ideological beliefs.

	Climate Change Agreement	Socialism Agreement	Higher Conservatism
Network Homogeneity	0.160 (0.51)	-0.036 (-0.13)	0.142 (0.53)
Number of Alters	0.659 (0.64)	-0.093 (-1.01)	-0.079 (-0.89)
Higher Conservatism	-0.282* (-2.21)	-0.423** (-3.44)	
Ingroup Evaluation	-0.038 (-0.28)	0.163 (1.19)	0.184 (1.30)
Democrat Identification	1.297* (1.98)	1.832* (2.83)	-4.548** (-6.71)
Democrat and Ingroup Evaluation Interaction	0.334 (1.39)	-0.189 (-0.85)	-0.449~ (-1.94)

Cut 1	-3.138	-3.665	-6.515
Cut 2	-2.641	-3.188	-5.986
Cut 3	-2.308	-2.757	-4.764
Cut 4	-1.889	-2.058	-4.300
Cut 5	-0.995	-0.605	-3.517
Cut 6	0.3205	0.405	-3.191
Cut 7			-1.900
Cut 8			-1.335
Cut 9			-0.883
Cut 10			-0.356
Cut 11			1.312
Cut 12			1.736
N	192	192	192

* *p*<0.05; ** *p*<0.01, ~ *p*<0.05, one-tailed

The above findings show that feelings towards one's political outgroup significantly influenced climate change agreement, socialism agreement, and ideological extremism. This supports *H10a: Outgroup evaluation increases agreement.* I also wanted to evaluate whether feelings for one's own political ingroup could influence these beliefs as well (see Table 4.10). Ingroup evaluation was not significantly associated with any climate change (p = .782) socialism (p = .233), or conservatism (p = .194). For ideological belief, there was a significant effect for the interaction term between identifying as a Democrat and ingroup evaluation (p =.026; one-tailed). Because this was negative, it means that Democrats who evaluate Democrats more favorably are less likely to have stronger conservative beliefs. This also means that Republicans who view Republicans more favorably will have stronger conservative beliefs. However, ingroup evaluation was not a significant mediator between network homogeneity and ideological beliefs. Thus, *H10b: Ingroup evaluation decreases agreement* was not supported. Table 4.11 displays results summary of hypothesis outcomes.

Table 4.11. Summary of Hypotheses Outcomes for Study 2

Study 2 Hypothesis	Result
H1: Ingroup EP Bias	✓
H2a: Ingroup helping likelihood bias	✓
H2b: Outgroup bullying likelihood bias	✓
H7a: Homogeneity increases ingroup EP	✓
H7b: Homogeneity decreases outgroup EP	✓
H8a: Homogeneity increase ingroup helping likelihood	✓
H8b: Homogeneity increase outgroup bullying likelihood	PS. Only significant for outgroup bullying person
H9: Homogeneity increases extremism	PS. Only significant for Republicans
H10a: Outgroup evaluation increases agreement	✓
H10b: Ingroup evaluation decreases agreement	✗

Note: ✗ = not supported. ✓ = fully supported. PS = Partially supported.

Supplemental Analyses

  The above results show how network homogeneity (as a binary variable) was associated with various measures of polarization. However, these subsequent analyses include network homogeneity as a matter of proportion (percentage of alters sharing the respondent's political identity).[7] Because this does not separate homogeneity into all or nothing categories, the results may not be as strong, but they should still yield similar findings.

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[7] Overall, 40% of my sample had completely homogeneous networks. There was not a significant difference in homogeneity between Democrats and Republicans.

Table 4.12. Ordinary Least Squared Regression models predicting ingroup and outgroup ratings as a function of proportional network homogeneity.

	Ingroup Evaluation	Ingroup Potency	Outgroup Evaluation	Outgroup Potency
Proportional Network Homogeneity	1.265* (2.57)	0.858 (1.60)	-1.181~ (-1.76)	-1.232~ (-1.83)
Number of Alters	-0.080 (-1.28)	-0.090 (-1.33)	0.159~ (1.87)	0.111 (1.30)
Higher Conservatism	-0.085 (-1.00)	-0.192* (-2.05)	-0.035 (-0.30)	0.071 (0.61)
Democrat Identification	0.736 (1.17)	-0.705 (-1.03)	-1.097~ (-1.28)	0.587 (0.68)
Democrat and Homogeneity Interaction	-1.525** (-2.07)	-0.5354 (-0.67)	0.206 (0.21)	1.380 (1.37)
Constant	1.927** (2.91)	2.467** (3.42)	-0.575 (-0.64)	0.120 (0.13)
N	192	192	192	192

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

Proportion homogeneity was associated with higher ingroup evaluation, lower outgroup evaluation, and lower outgroup potency (see Table 4.12). Ingroup potency was not significant, but the means were in the predicted direction. Each of the standardized t-values were smaller than the results using the binary homogeneity measure. Thus, proportion homogeneity still can produce significant effects, but they effects are weaker.

To help visualize this proportional effect, I included a marginal plot between the outgroup evaluation rating and network homogeneity (Figure 4.2). This illustrates how

both Republicans and Democrats have decreased outgroup evaluations associated with

increased network homogeneity.
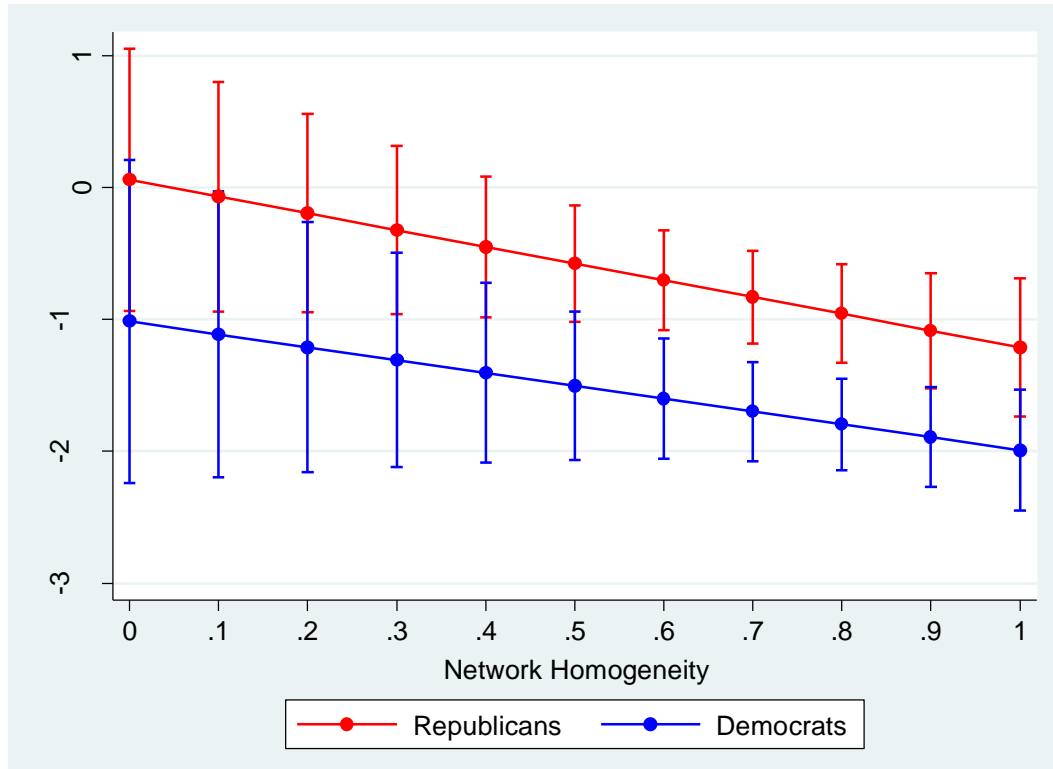
Figure 4.2 Marginal plot of outgroup evaluation and proportional network homogeneity.
95% CI

Table 4.13 Ordinary Least Squared Regression models predicting likelihood ratings of
ingroup and outgroup social events as a function of proportional network homogeneity.

	Ingroup Help Person Bias	Ingroup Help Outgroup Bias	Outgroup Bully Person Bias	Outgroup Bully Ingroup Bias
Proportional Network Homogeneity	0.620~ (1.85)	0.685* (2.10)	-0.183 (-0.53)	-0.567 (-0.76)
Number of Alters	-0.113* (-2.65)	-0.092* (-2.22)	-0.043 (-0.98)	-0.129 (-1.37)

Higher Conservatism	0.005 (0.09)	0.028 (0.50)	-0.115~ (-1.90)	-0.020 (-0.16)
Democrat Identification	0.290 (0.68)	0.292 (0.70)	0.117 (0.26)	-0.719 (-0.75)
Democrat and Homogeneity Interaction	-0.180 (-0.36)	-0.425 (-0.87)	0.601 (1.16)	1.545 (1.39)
Constant	0.521 (1.15)	0.424 (0.97)	0.285 (0.61)	2.371* (2.37)
N	192	192	192	192

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

As with ingroup and outgroup sentiments, proportion homogeneity had weaker effects on the ingroup biases for likelihood of social events as well (see Table 4.13). Proportion homogeneity was still associated with an ingroup help and ingroup help person and ingroup help outgroup bias. However, the outgroup bully person bias was not significant, even when removing controls. The t-values were also slightly smaller using the proportion homogeneity measure. Thus, proportion homogeneity still has significant effects for political bias, but they are not as strong.

While network homogeneity increased the likelihood ratings of ingroup helping an outgroup, I also tested if homogeneity influenced how participant's felt about political groups, which subsequently produced this bias. SEM analyses (see Table 4.14) revealed that outgroup evaluation acts as a mediator between (binary) homogeneity and ingroup help person bias because it has both a significant indirect (p <.001) and direct effect (p <.001).

Table 4.14. Mediation results for outgroup evaluation and ingroup potency on ingroup help outgroup bias.

	Path A (direct) Network homogeneity → Ingroup Help Outgroup Bias	Path B (indirect) Network Homogeneity →Outgroup Evaluation	Path C Network (indirect) homogeneity → Ingroup Evaluation	Path D Outgroup (direct) Evaluation → Ingroup Help Outgroup Bias	Path E Ingroup (direct) Evaluation →Ingroup Help Bias	Constant
	0.513* (2.25)	-1.002** (-3.92)	0.299 (1.60)	-0.440** (-7.14)	0.242* (2.88)	-0.157 (-0.74)
N	192	192	192	192	192	192

* *p*<0.05; ** *p*<0.01, ~ *p*<0.05, one-tailed

Ingroup evaluation did not act as a mediator because it had a nonsignificant indirect effect (p = .110) but a significant direct effect (p =.025). Homogeneity did not have a significant effect on the ingroup bullying the outgroup I did not run mediation tests. Thus, for the ingroup helping an outgroup measurement, outgroup evaluation acted as a mediating variable between homogeneity and the likelihood bias.

Table 4.15. Ordinal Logistic Regression models predicting extreme conservative beliefs and proportional network homogeneity for all participants, Republicans only, and Democrats only.

	Higher Conservative Ideology	Higher Conservative Ideology (Republicans)	Higher Liberal Ideology (Democrats)
Proportional Network Homogeneity	1.002 (1.43)	0.933 (1.33)	0.789 (1.13)

Number of Alters	-0.068 (-0.77)	-0.179 (-1.35)	-0.021 (-0.18)
Democrat Identification	-4.005** (-4.45)		1.645
Republican Identification		-4.117	
Democrat and Homogeneity Interaction	-1.819** (-1.84)		1.187
Republican and Homogeneity Interaction		-3.399	
Cut 1	-6.099	-3.162	-0.072
Cut 2	-5.563	-2.099	-0.561
Cut 3	-4.336	-1.568	-1.553
Cut 4	-3.877	-1.105	-2.047
Cut 5	-3.112	-0.579	-4.052
Cut 6	-2.795	1.082	
Cut 7	-1.512	1.503	
Cut 8	-.9399		
Cut 9	-.4852		
Cut 10	0.0315		
Cut 11	1.669		
Cut 12	2.088		
N	192	95	97

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

Proportion homogeneity had a nonsignificant effect on ideological extremism (see Table 4.15). This was true for both Democrats and Republicans (for the binary homogeneity measure, this effect was significant in Republicans). The means are in the predicted directions, so this suggests that the effect is again weaker, but a larger sample size could yield significance.

Mediation Results Between Political Group Sentiments and Political Beliefs

       I also wanted to check if political group ratings also had mediating effects for extreme political beliefs. This would show if homogeneity influenced feelings towards the outgroup, which then in turn influenced political beliefs. I used SEM to identify if outgroup evaluation were mediators between (binary) homogeneity[8] and extreme beliefs for Democrats and Republicans.

       For Republicans only (Table 4.16), outgroup evaluation had both significant direct ($p < .05$) and indirect effects ($p < .01$). This suggests that outgroup evaluation acts as a mediator between network homogeneity and conservatism. In order words, Republicans who have a completely homogeneous network have less favorable feelings towards Democrats, which in turn also is associated with stronger conservative beliefs.[9]

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[8] I used the binary measure of homogeneity here since that was the method used in my main analyses.

[9] Using the same SEM process, I tested if outgroup evaluation was a significant mediator for socialism and climate change beliefs. For Republicans, outgroup evaluation was a significant mediator between homogeneity and political beliefs. This shows that Republicans who had homogenous networks had more negative views towards Democrats, and those negative views were associated with being less likely to agree with climate change and socialism beliefs. Outgroup evaluation did not act as a significant mediator for Democrats for climate change and socialism beliefs.

Table 4.16. Mediation results for outgroup evaluation on extreme ideological beliefs for Republicans.

	Path A (direct) Network homogeneity → Conservative Beliefs	Path B (indirect) Network Homogeneity →Outgroup Evaluation	Path C Outgroup (direct) Evaluation → Conservative Beliefs	Constant
	0.463~ (1.76)	-0.915* (-2.19)	-0.171** (-2.67)	5.286** (24.00)
N	95	95	95	95

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

Table 4.17. Mediation results for outgroup evaluation on extreme ideological beliefs for Democrats.

	Path A (direct) Network homogeneity → Conservative Beliefs	Path B (indirect) Network Homogeneity →Outgroup Evaluation	Path C Outgroup (direct) Evaluation → Conservative Beliefs	Constant
	0.032 (0.18)	-0.900 (-3.17)	0.233 ** (3.87)	2.70** (13.48)
N	97	97	97	97

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

For Democrats only (Table 4.17), outgroup evaluation also had both significant direct ($p < .01$) and indirect effects ($p < .01$). However, network homogeneity did not have significant effect on conservative beliefs ($p > .05$), so outgroup evaluation does not act as a mediator between network homogeneity and conservatism. Because the mean

was in the predicted direction for homogeneity, it is possible that with a larger sample

size it would have statistically significant.

Controlling for Personality Differences and Political Identity Prominence

Table 4.18. Ordinary Least Squared Regression models predicting ingroup and outgroup ratings as a function of network homogeneity; while controlling for openness and agreeableness.

	Ingroup Evaluation	Ingroup Potency	Outgroup Evaluation	Outgroup Potency
Network Homogeneity	0.775** (2.81)	0.510~ (1.70)	-0.857* (-2.28)	-0.785* (-2.04)
Number of Alters	-0.082 (-1.33)	-0.082 (-1.22)	0.124 (1.47)	0.095 (1.11)
Higher Conservatism	-0.109 (-1.28)	-0.200* (-2.15)	-0.035 (-0.31)	0.081 (0.69)
Democrat Identification	-0.668 (-0.19)	-1.04** (-2.67)	-0.887~ (-1.81)	1.383** (2.75)
Democrat and Homogeneity Interaction	-0.994** (-2.63)	-0.127 (-0.31)	-0.331 (-0.06)	0.628 (1.19)
Openness	0.135~ (1.66)	0.134 (1.51)	0.037 (0.34)	0.082 (0.73)
Agreeableness	0.129 (1.41)	0.168~ (1.69)	0.164 (0.188)	0.018 (0.15)
Constant	1.286** (1.57)	2.816** (4.39)	-2.033~ (-1.82)	-0.989 (-0.86)
N	192	192	192	192

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

Table 4.19. Logistic Regression model showing Party Identification Effects on Openness and Agreeable

	Democrat vs Republican Identification
Openness	0.364* (2.54)
Agreeableness	-0.510** (-3.18)
Constant	0.751 (0.73)
N	192

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

While controlling for openness and agreeableness, I found that the network homogeneity remained significant (Table 4.18). Neither openness nor agreeableness had a significant effect (p >.05) on ingroup or outgroup scores.[10] Identifying as a Democrat was associated with higher openness scores (see Table 4.19), which is consistent with previous work (McCann 2014). Agreeableness is associated with being a Republican, which is consistent with work finding Republicans having higher politeness (Hirsh et al 2010).[11]

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[10] Frequency of discussion and type of relationship did not have a significant impact on my results either. However, a larger sample may be required to account for these types of effects given the variance in responses.

[11] I also tested if party identification could influence sentiment rating for my neutral concepts (and had double the sample of Study 1's control condition). I found that person was no longer rated more positively, but was still rated more powerful (p = 0.48) when the participant is a Republican. Additionally, Bully was no longer rated more active when the participant was a Democrat. However, Democrats rated "bully" significantly more

I also checked if the importance of one's political identity was different between Democrats and Republicans. There was not a significant difference in political identity importance (p > .05) with both groups having moderate identity importance (Democrats = 2.75; Republicans 2.97) on a scale of 1-5 (5 being very important and 1 being not important at all). Interestingly, regression analysis showed that network homogeneity was significantly associated with higher political identity prominence (p = .015), suggesting those with politically homogenous networks have higher political identity prominence. Finally, as an exploratory bridge between Study 1 and Study 2, I measured the relationship between fundamental self-EPA and network homogeneity. Using OLS regression, I found that self-potency (p = .033) and self-activity (p = .026) were positively associated with having a more homogenous network for Republicans. For Democrats, only self-evaluation approached significance with being positively associated with network homogeneity (p = .099). This suggests a possible link between self-sentiments and network composition, though causality will need to be determined in future research.

Table 4.20. Correlations between Likelihood Rating of Social Scenario and Deflection Scores in Control Group

Social Scenario Involving Ingroups or Outgroups	Correlation with Deflection and Likelihood
Ingroup Help Person	0.108
Ingroup Help Outgroup	0.034

negatively than Republicans (p = .007). These findings are largely similar to those of Study 1. These results are exploratory and offer a potential avenue for future research.

Ingroup Bully Person	-.288**
Ingroup Bully Outgroup	-0.214**
Outgroup Help Person	-0.195**
Outgroup Bully Person	-0.061
Outgroup Help Ingroup	-0.268**
Outgroup Bully Ingroup	-0.002

* $p<0.05$; ** $p<0.01$, ~ $p<0.05$, one-tailed

As in Study 1, I tested the correlation between the computed deflection score and the likelihood ratings. Consistent with Study 1, I found that 4/8 were significantly associated (see Table 4.20). Importantly, the same four social events were significant in both studies. This suggests these social events are specific enough to capture how likely an event is to occur from deflection scores alone.

Discussion: Study 2

As found in study 1, the ingroup ratings of evaluation, potency, and activity were significantly different compared to the political outgroup. The likelihood ratings of the ingroup doing a good behavior and the outgroup doing a bullying behavior were also significantly different. Study 1 focused on individual emotions influencing political polarization. Study 2 investigated how having a homogenous personal network would impact the same measures.

Participants with completely homogenous ego networks rated their political ingroup as more positive and more potent. Participants with completely homogenous ego networks also rated their political outgroup as less positive and less potent. Thus, network homogeneity did influence how participants felt about ingroups and outgroups. The

feelings of goodness/badness reflect how warm participants feel about these groups and the potency reflects how competent they are (i.e. how likely are they to carry out goals).

Network homogeneity also increased the likelihood that ingroup members would rate their ingroup as more likely to help a person and help an outgroup member. Outgroup evaluation was a significant mediator between network homogeneity and likelihood ratings. Thus, having a completely homogenous network decreased one's feelings of the outgroup, which in turn impacted how likely they thought they were to engage in helping behaviors.

Additionally, network homogeneity increased the likelihood of participants rating the outgroup bullying a person, but not an ingroup member. Consistent with helping behavior likelihood, outgroup evaluation was a significant mediator between homogeneity and likelihood rating bias. It is possible that ingroup bullying outgroup vs outgroup bullying ingroup were seen as more likely behaviors and thus homogeneity did not have as strong of an impact since there was less separation between the two events.

I also found that network homogeneity also increased conservative beliefs. However, once I separated my participants into Democrats and Republicans, I only found that Republicans had significantly stronger ideological beliefs with a homogeneous network. Democrats also had slightly stronger liberal beliefs in a homogenous network, but the effect did not reach significance.

Next, I measured if outgroup evaluation would impact how individuals felt about different outgroup beliefs. I found that climate change and socialism beliefs both were more likely to be agreed with when Republicans had more positive views of Democrats. Conversely, climate change and socialism beliefs were less likely to be upheld by

Democrats when they have more positive views of Republicans. Additionally, Republicans were less likely to have stronger conservative beliefs when they had more positive views towards Democrats and that Democrats were more likely to have conservative beliefs when they have positive views towards Republicans. For climate change and general ideological belief, outgroup evaluation was a mediator between homogeneity and these beliefs. Thus, having just one close tie of a different political identity than an individual increases your evaluation towards the political outgroup; which in turn makes it more likely one support beliefs against their party. Finally, I found that ingroup evaluation did not have a significant effect on political beliefs.

Overall, network homogeneity does seem to have robust effects for political beliefs. My results show that having just one personal connection who is of a different political party can have significant impacts on feelings towards the outgroups, likelihood of processing events, and holding political beliefs. Importantly, measuring network homogeneity among one's close associates (with the "important matters" item) does capture an influence on political polarization. This provides more evidence regarding how researchers measure an individual's personal networks could influence their findings. Finally, these results show that even with high baseline polarization levels, homogeneity can increase polarization even further.

CHAPTER 5

MAIN DISCUSSION

How do self-sentiments and discussion networks impact polarization? My dissertation tested if self-sentiments and personal networks influence political polarization across two experiments. In the first experiment, I tested if self-uncertainty and self-affirmation primes would create inauthenticity, which could be reduced by affirming an important identity.

My first study found that that Democrats and Republican participants rated their outgroups as less positive, less potent, and less active than their ingroup. This demonstrates how political groups do not just dislike each other, but also includes a broader polarization that includes rating the outgroup as less potent and less active Additionally, participants rated social events as more likely to occur when their ingroup was doing a helping behavior and their outgroup doing a bullying behavior. Study 1 demonstrates that the framework of Affect Control Theory can measure additional elements of political polarization. By incorporating EPA and viewing political bias towards situations in terms of ACT's event likelihood, researchers could capture the effects of both ingroup favoritism and outgroup dislike in one parsimonious metric.

Self-affirmation did elevate one's transient self-evaluation score compared to the control group. Additionally, the self-uncertainty condition was significantly lower on self-evaluation compared to the self-affirmation condition. The effect was small, but still illustrated that self-priming effects could be captured using a new transient self-sentiment

measure. However, self-uncertainty did not significantly differ from the control group on any self-sentiment dimension. The primes had the strongest effects on self-sentiment change when contrasted against each other. Despite weak effects, there was measurable self-sentiment change was produced from these primes, allowing this self-priming process to be measured in the Affect Control Theory framework. This reveals how both self-uncertainty and self-affirmation can be captured in the same metric of self-evaluation, which provides a more parsimonious explanation of their relationship to the self-integrity prime literature.

The significant distance on the transient self-evaluation dimension between the self-uncertainty and self-affirmation conditions suggests that the primes did cause self-deflection in a predicted manner. Again, the effect was subtle, yet still detectable in the self-sentiment measure. While self-uncertainty failed to change self-sentiments contrasted against the control, self-uncertainty did produce a significant difference on outgroup evaluation contrasted against the control.

My results only found an effect for the self-uncertainty vs control and self-uncertainty vs self-affirmation contrasts. In these contrasts, subjects did rate their outgroup significantly worse on evaluation in the self-uncertainty group, suggesting that the uncertain feeling motivated them to affirm an important identity by derogating an outgroup. Despite the self-uncertainty prime not producing a significantly different effect in the manipulation check, the outgroup variable was still influenced as predicted. Again, these are subtle effects and any significant movement from such strong baseline polarization is meaningful.

Interestingly, a common manipulation check, the self-integrity scale, did not yield a significant difference across conditions. This could suggest that a simpler method of self-evaluation could better detect changes from priming effects across self-affirmation as well as self-uncertainty. Subsequent analyses also revealed that self-activity acted as a moderator for the self-uncertainty prime. This could be because self-activity uniquely captures these moderating effects or other sentiments may be involved, but lacked statistical power to be detected.

In summary, it appears that the self-uncertainty prime slightly inflated sentiments and the self-affirmation prime slightly elevated sentiments. This slight change in sentiments also resulted in significant differences with outgroup evaluation, where the self-uncertainty condition rated the outgroup significantly lower on evaluation. Finally, transient self-evaluation was a significant mediator between self-uncertainty and outgroup evaluation. The self-uncertainty prime did cause significant distance on self-evaluation compared to the self-affirmation prime, which then resulted in identity confirming action (more negatively evaluating the outgroup).

My first study shows how ACT's mathematical framework can be used to measure political subcultures' feelings towards their outgroup as well as the likelihood of events involving those political groups. This finding alone offers a theoretical bridge for American politics to connect to politics outside the United States as a shared metric. While the priming effects were small and limited, they still provided some evidence that self-integrity primes can influence transient self-sentiments on a new measure. Additionally, this mild inauthenticity was found to result in identity confirming behaviors (derogating the outgroup in order to elevate self-esteem). This also provides a potential

common currency for self-affirmation, self-uncertainty, and self-esteem that can help better measure and understand how these processes operate.

My second study also found that political ingroup members rated their political outgroup lower on evaluation, potency, and activity. Additionally, Study 2 found that ingroup members rated the likelihood of their ingroup engaging in a helping behavior as more likely and the bullying behavior of an outgroup member as more likely.

It was predicted that ingroup members in homogenous networks would rate their ingroups as more positive and potent (suggesting higher warmth and ability to carry out goals). My results supported these predictions. Ingroup participants with homogenous networks also rated situations where their ingroup was helping as even more likely than those without homogeneous networks. Ingroup participants also rated events as more likely when the outgroup bullied another person when they had homogenous networks. Despite very strong baseline polarization for ingroup and outgroup differences, those with homogeneous networks were even more polarized in their negative feelings towards the outgroup and the likelihood of those outgroups engaging in behaviors that confirm their feelings about them. Network homogeneity can affect how one feels towards political groups and then those feelings can influence the subjective likelihood of political groups engaging in good or bad behaviors. Finally, network composition was associated with higher conservative beliefs among Republicans, but not Democrats (though this could be due to a lack of statistical power). As predicted, measuring one's political diversity in one's personal network through the "important matters" item does capture meaningful social relationships and in turn influences political polarization. This provides

further evidence that how researchers measure personal networks can influence the effect network composition can have on belief formation and feelings towards groups.

In addition to connecting social network composition to Affect Control Theory, Study 2 also investigated in how feelings towards political groups impacted political beliefs. When Republicans had more positive evaluations of Democrats, they were more likely to agree with socialism having merit and climate change being caused by humans. When Democrats had higher positive evaluations of Republicans, they were less likely to support socialism and believe in climate change. Furthermore, when Republicans had more positive evaluations of Democrats, they had less strong conservative beliefs. When Democrats had more positive evaluations of Republicans, they had less strong liberal beliefs. Outgroup evaluation was found to be a significant mediator between both climate change and general ideological belief and network homogeneity. When participants had a single close tie that differed in their political ideology, they were more likely to have positive feelings towards their outgroup, and also have weaker ideological beliefs. While outgroup evaluation had several significant effects, this was not the case for ingroup evaluation. Feelings towards one's ingroup did not appear to make a difference for the ideological beliefs I measured. As other research has shown (Edgell, Gerteis, & Hartmann 2006) delineating oneself from their opposing group could also be a way for individuals to affirm their own ingroup identity. Thus, one's feelings towards their political outgroup could influence how likely they are to agree with outgroup beliefs more than how they feel about their ingroup.

Study 2's main conclusion is that having meaningful connections with individuals of a different political group can increase positive feelings towards that different group

and in turn can also reduce polarization. Social structure influences how we feel about certain groups which can also impact what we believe.

Limitations

This project contains several limitations that are important to discuss while reflecting on its implications. The samples of Study 1 and Study 2 were both collected from *Prolific*, which is an online population that has issues with generalizability. Also, because of the small sample size, meaningful examination of demographic differences (such as race, gender, and education) was not possible (see Appendix H). Additionally, because Study 1 was conducted online, there may have been distractions occurring during the priming that would not occur in a controlled laboratory setting. My hypotheses assume the psychological prime is having a proper impact, but if online primes are significantly weaker than completing the prime in the laboratory, then this would severely limit how primes are influencing self-sentiments. While both self-affirmation and self-uncertainty primes have been well-studied in the literature, it is still unknown what "dosage" is required to obtain significant effects (such as time spent writing or number of words written). Furthermore, my study did not assess if derogating the outgroup made my participant's self-evaluation return to baseline, resolving inauthenticity.

While Study 2 investigated the relationship between network composition and political polarization, it is important to note that these results cannot establish causality. While I predicted homogeneity influenced feelings towards political groups, it is possible that feelings towards political groups could affect network composition. An experiment involving a proxy for homogeneity or a longitudinal study would be necessary to

determine causal inference. My results show a significant association between network homogeneity and political bias, but future work will need to establish causality. Finally, both Study 1 and 2 used behaviors ("bully" and "help") that focused on the contrast between their evaluation dimension. The differences between behavior potency and activity may also influence subjective likelihood and this is another avenue for future research.

Future Directions

My project offers many different pathways for future work involving both self-sentiments and network composition. Study 1 and 2 created a link with Affect Control Theory. Study 1 found a significant contrast on self-sentiments (and subsequent outgroup evaluation) between the self-uncertainty and self-affirmation primes. However, future research can discover if this was due to having more affective resources to cope with disruptive situations or because when people are acting especially good, they are compelled to move through the world accordingly.

Future studies could also dive into how deflection specifically is involved with political beliefs. My studies only looked at deflection levels with their association to the likelihood of events, but future work could investigate how different identities rate different behaviors differently (such as "bully" and "help") which may influence how they process the likelihood of social events as well. Understanding how each group rates the components involved would provide even greater precision for predicting how individuals process events involving intergroup behavior. Finally, with the dynamic properties of identity confirming actions influencing feelings towards outgroups, Bayesian ACT could be useful in the future research as well because it could capture the

dynamic nature of political identities instead of treating them as fixed points (Schröder, Hoey, & Rogers 2016).

When considering the self-uncertainty and self-affirmation primes, future studies should determine what levels of "priming dose" could produce different effects for both online and offline samples. Interestingly, the self-integrity manipulation check failed to detect differences, but the self-evaluation scale did produce some significant differences. A global indicator of self-evaluation may simply be more sensitive to changes in self-sentiments than trying to detect the nebulous nature of self-integrity. Additionally, self-affirmation manipulation could create unwanted priming effects (McQueen & Klein 2006; Schwinghammer, Stapel, & Blanton 2006). Thus, a simpler self-sentiment scale, especially when participants are using that same scale to rate other items, could be a reliable measure of self-integrity primes.

After participants derogated their outgroup, Study 1 did not test self-sentiments yet again. Three tests of self-sentiments in one short study seemed to risk revealing what the experiment was trying to measure. However, future studies can attempt to test if inauthenticity is resolved after doing an identity confirming action with clever experimental design. Finally, my project suggests self-uncertainty and self-affirmation are moving self-sentiments (especially self-evaluation) in opposite directions. However, future research can try to provide more support if they are on the same scale and impact self-sentiments with the same magnitude. Perhaps self-uncertainty deflates self-evaluation more than self-affirmation inflates self-evaluation. Due to the subtle nature and significant impact of these psychological primes, it is important for researchers to measure their processes as accurately as possible.

Given how powerful these emotional forces are, it is especially important to understand how they interact on the digital landscape with the prevalence of fake news and misinformation (Lazer et al 2018). A motivation to derogate the political outgroup was found to be a significant reason for sharing fake news online (Osmundsen et al 2020). Thus, how people feel about themselves could influence how likely they are to share fake news online. Additionally, it would be useful for researchers to appreciate the possible intersection of cognitive factors such as analytic thinking styles (Pennycook and Rand 2018) and cognitive rigidity (Zmigrod 2020) which have been found to influence information processing. Future research could investigate how different cognitive factors interact with partisan bias and emotions as well.

How people receive political information from their online networks is another important aspect of technology and society. Hampton Shin & Lu (2017) found that increased social media use created a spiral of silence where individuals are less likely to discuss a certain political issue (government surveillance) offline. Future research could investigate whether other political issues operate in the same process. Additionally, Levy (2019) found that found Facebook's algorithm is less likely to share posts from politically diverse outlets. Companies have a profit motive to keep their users online, which could involve keeping users angry by sharing emotional content with their networks. Thus, researchers should also be aware of the macro level processes at the level of the institution that can affect the structures of how they receive their information. Social factors that influence political bias is of great importance when partisan behavior could impede progress for solving national crises.

The politically polarized response to Covid-19 provided a recent and salient example of how partisans view information differently (and how this could cause harm). Research by Gadarian, Goodman, and Pepinsky (2020) showed that Democrats were much more likely to take the virus seriously and engage in precautionary behavior than Republicans. This is an example of how processing information (i.e. news reports of the virus; information from politicians) differently due to political bias can create public health problems as well. Unfortunately, this is likely not the last virus or major event that requires cooperation between both Democrats and Republicans.

While tribalism may be part of human nature (Clark et al 2019) and can affect how people process identical information (Kahan et al 2017; Alesina, Stantcheva, & Teso 2018), it is crucial to learn how emotions and network composition influence political information processing. How these identities form and influence current emotional states can both provide a pathway for understanding the mechanism influencing political bias and why individuals process information differently. It is important to understand how both discussion networks and emotions fuel political bias as they can each build off each other and perpetuate bias.

Conclusion

Both self-sentiments and discussion networks have important roles in political polarization and information processing. Additionally, these factors were successfully applied using Affect Control Theory as a framework. Despite political polarization already residing at alarming levels, my research showed how social and psychological factors can influence political bias among Democrats and Republicans. Understanding

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both micro, meso, and macro level forces are important for understanding how

individuals process information differently.

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APPENDIX A

SELF-INTEGRITY PRIMES

Self-affirmation:

Pre-test: Participants in the self-affirmation condition will be presented with a list of 11

nonpolitical values. Next, the participants will be instructed to *"pick the one value*

that is most important to you." After that, the participants will be instructed to *"think*

about a time when your #1 value or characteristic was important to you" and to *"write a*

few sentences about a time when this value was important."

Study 1 used the following text from Sherman et al 2009 to yield a longer response

online: "*Describe three reasons why your most important value is important to you. Also*

share one example of something you have done that demonstrates its importance."

Uncertainty condition:

Participants will be asked to think about aspects of their life that made them feel

uncertain about themselves, their lives, and their future. After that, they will be instructed

to write a few sentences about three aspects that made them feel most uncertain. In the

control condition, they will write about what they last bought at the grocery store.

List of values for self-affirmation conditions:

Artistic skills/aesthetic appreciation	Musical ability/appreciation
Sense of humor	Physical attractiveness
Relations with friends/family	Creativity
Spontaneity/living life in the moment	Business/managerial skills
Social Skills	Romantic values
Athletics	

APPENDIX B

SELF-INTEGRITY SCALE

Self-integrity Scale from Sherman and colleagues (2009)

_____ 1. I have the ability and skills to deal with whatever comes my way.

_____ 2. I feel that I'm basically a moral person.

_____ 3. On the whole, I am a capable person.

_____ 4. I am a good person.

_____ 5. When I think about the future, I'm confident that I can meet the

challenges that I will face.

_____ 6. I try to do the right thing.

_____ 7. Even though there is always room for self-improvement, I feel a sense

of completeness about who I fundamentally am.

_____ 8. I am comfortable with who I am

APPENDIX C

DEMOGRAPHIC QUESTIONS

How old are you?

What race do you identify as?

What is your gender?

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

What religion are you? (Christian, Jewish, Muslim, nonreligious, other)

(for studies 1 and 2)

In general, how liberal (left-wing) or conservative (right-wing) are you on social issues?

In general, how liberal (left-wing) or conservative (right-wing) are you on economic issues?

Do you identify as a Republican, Democrat, or other?

Who did you vote for in the 2016 General Election?

How important is this political identity to you?

APPENDIX D

SOCIAL EVENT SCENARIOS

Democrat bullies Republican

Republican bullies Democrat

Democrat helps Republican

Republican helps Democrat

Democrat helps person

Republican helps person

Republican bullies person

Democrat bullies person

APPENDIX E

PERSONALITY QUESTIONS

Openness and agreeableness questions from Big Five Short Form test

"I see myself as someone who…"

O: Is original, comes up with new ideas

Values artistic, aesthetic experiences

Has an active imagination

A: Is sometimes rude to others

Has a forgiving nature

Is considerate and kind to almost everyone

APPENDIX F

SOCIAL NETWORKS QUESTIONS

Please list five people who you discuss important matters with. (name X will be the name the participant provides)

How would you describe name X's political affiliation? Democrat, Republican, Independent

How would you describe name X's political ideology? (Sliding scale on social liberalism to conservative and fiscal liberalism to conservatism)

How often do you discuss politics with name X? (almost daily, once a week, once a month, less than once a month, never)

How much mutual respect there is between X and yourself when discussing politics? (1-7 Likert scale from not at all to very much)

How often do you talk with name X? (almost daily, once a week, once a month, less than once a month)

Does name X know anyone else you listed? If so, who?

What is X's race and gender? What education level do they have?

APPENDIX G

POLITICAL BELIEF QUESTIONS

Climate change is happening now and driven by human activities

Some socialist policies offer benefits for our society.

*Likert scale from 1 Strongly agree to 7 Strongly disagree

APPENDIX H

DEMOGRAPHIC QUESTION RESULTS

Data collection was from the online platform *Prolific.* Demographic results from this online sample were significantly more educated and racially homogenous than the American overall population.

Study 1 Demographics:

> 45% Male, 55% female
>
> Average age = 35.75 (SD = 13.23)
>
> 56% had bachelor's degrees or higher
>
> 83% white

Study 2 Demographics:

> 51% male, 49% female
>
> Average age = 37.33 (SD = 12.41)
>
> 60% had bachelor's degrees or higher
>
> 86% white