

**Hope for the Best or Fear for the Worst:
Utopian vs Dystopian Outlooks as Political Engagement Motivators**

BY

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THESIS

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SUMMARY

The present research aimed to test whether prescriptive and proscriptive mindsets can motivate people to become politically engaged, and whether political orientation, emotion, and cognition play a role in this relationship. Prescriptive and proscriptive manipulations did not lead to stronger political engagement than a control condition in the context of activism related to Black and Blue Lives Matter (Study 1). Positive emotions mediated the relationship between prescriptive manipulations and stronger political engagement relative to control, and negative emotions mediated the relationship between proscriptive manipulations and stronger political engagement in the context of the U.S. 2020 presidential election. Political orientation moderated these relationships such that both emotional pathways were stronger for conservatives compared to liberals, whereas beliefs about candidates did not mediate either pathway (Study 2). Findings are discussed in terms of implications for moral motives theory and motivated cognition theory, and for future experimental work in motivation for political engagement.

I. INTRODUCTION

An underlying theme of 21st century American politics finds two parties uniquely at odds. Democrats and Republicans seem to exist at increasingly distant ends of the political spectrum and appear to have also adopted distinct approaches in their messaging and tone (Finkel et al., 2020; Boxell, Gentzkow & Shapiro, 2020). Existing in stark contrast to President Obama's effective "Hope" and "Yes we can" campaign messaging, President Trump's similarly effective "Make America Great Again" and "Drain the swamp" message strategy invoked a galvanizing effect on his core voter base. These examples typify the polarization that has come to represent modern politics and may point to core differences in the parties' approach to their voters. These two campaigns relied on separate sets of assumptions for what motivates their bases, emphasizing either the hope for a new America, or the fear of what America has become or will be. Though Democrats appear to assume that their supporters and voters are more likely to mobilize to approach a positive, hopeful future, Republicans appear to assume the same effects by stoking fear and a motivation to avoid a negative, fearful future.

Contained in the distinction between these approaches and consequences is a question: Does hope versus fear win out to motivate voting and political engagement? Based on these two successful campaigns, the answer may be nuanced. Beyond asking which of these strong emotions (hope versus fear) wins out, it is worth asking who hope versus fear is more motivating for, and whether political orientation is central to the answer to this question. Are liberals more sensitive to appeals related to prescriptive (approach-oriented) motivation, whereas conservatives are more sensitive to appeals related to proscriptive (avoidance-oriented) motivation? The goal of the present research is to address whether hope or fear more strongly motivates political engagement, and whether the strength of these motivators differs based on political orientation.

More specifically, the goal of this research is to experimentally test the effects of prescriptive and proscriptive motives on political engagement, whether these motivations have different effects based on political orientation, and which, if any, emotions or beliefs mediate the relationship between manipulated motivational mindsets and political engagement. In Study 1, I tested the effects of manipulated motivational frames on activist intentions in the context of the Black Lives Matter protests and movement, and the counter movement of Blue Lives Matter (i.e., police lives matter). I tested whether emotions related to outcomes of protests explained the relationship between participants' motivational mindsets and political engagement, and whether political orientation moderated any differences in the effects of manipulated motivational frames on political engagement.

In Study 2, I conceptually replicated Study 1 in the context of the 2020 United States presidential election using a different control condition. Before turning to the specifics of these studies, I will first review what we already know about political engagement and its predictors. I will also review motivation in general and then with respect to political engagement in particular, as well as competing theory and research about whether liberals' and conservatives' motivations for political engagement are more similar or different.

A. Political Engagement

I broadly define political engagement as citizen's attention and efforts that affect politics. This definition is derived from the closely related, yet more constrained, concept of political participation (van Deth, 2014; 2016). Political participation encompasses a wide range of activities, from smaller-scale actions, (e.g., signing a petition or boycotting a company) to larger-scale actions (e.g., participating in a protest or volunteering time). Political engagement encompasses these forms of political action, as well as less active forms of involvement with

political issues, such as watching the news or political discussion (Solt, 2008). Political engagement can then be thought of as an umbrella term which encompasses more active and passive forms of engagement, including collective action, which is often studied even more narrowly than political action (van Zomeren & Iyer, 2009). Collective action is typically defined as the actions that an individual undertakes on behalf of a group to improve that group's conditions; much of the existing research focuses narrowly on protest behavior from disadvantaged group members, although some work has attempted to broaden this scope (van Zomeren, 2013; Thomas et al., 2020). Presently, I will focus on political engagement because this concept casts a broader net in defining what constitutes political behavior that affects political outcomes.

Political engagement is important to understand because of the wide-reaching implications it has. The extent that citizens are engaged with political processes in their environments can indicate how well a democracy is functioning. For instance, exercising the right to vote is an important tradition for citizens in America. Researchers found that those who are more interested and aware of different ballot initiatives during midterm elections are more likely to subsequently vote (Tolbert, Grummel, & Smith, 2001). Additionally, freely being able to participate in causes that one cares about is a hallmark of democratic values, particularly when those causes are central to topical political issues. Understanding antecedents of political engagement is important in the role of maintaining a healthy democratic society. The motivational and psychological underpinnings of political engagement can offer insight into how these mechanisms might affect policy, voting, and general civic engagement.

Political engagement work shows ties between a number of factors and engagement, notably including emotion, moral conviction, and beliefs tied to outcomes of engagement.

Scholars have largely focused on the effects of emotion on political behaviors, and anger in particular has been studied as an emotion that leads to increased political engagement. Weber (2012) found that cuing anger led to greater reported political efficacy and likelihood of volunteering and was broadly predictive of other forms of political engagement. Other scholars have additionally found evidence which links anger to greater levels of political engagement (Valentino et al., 2011). Within this work, there is some additional evidence that may point to both enthusiasm and fear as motivators of political engagement, however the role of these emotions is still unclear and warrants further investigation (Brader, 2005).

Other work has explored antecedents to political engagement beyond emotion, positing moral conviction as a crucial factor in predicting people's willingness to become engaged (Skitka & Wisneski, 2011). These authors found that the extent to which one feels morally convicted about political outcomes and subsequently experiences positive affect related to those outcomes, they are more likely to endorse stronger activist intentions. Additionally, Skitka, Hanson and Wisneski (2017) further explored these relationships through cognitive appraisals or beliefs, the perceived harms and benefits, of political outcomes, and found that moral conviction also predicted activist intentions to the extent people believed the outcomes to be beneficial. Given this previous work, the extent to which one's emotions and beliefs about salient political outcomes are strong should predict political engagement. In light of this, both emotional and cognitive appraisals about a given political outcome are key factors to consider when studying political engagement.

I aim to expand the understanding of motivational frames as predictors of political engagement with the present work. Although some work has begun to explore different emotional effects on the likelihood of political engagement, little work has focused on emotional

effects within classic theories of motivation in a political context. Prescriptive and proscriptive motivations have been studied as key human psychological elements and may offer insight into these underlying emotional mechanisms that encourage increased levels of political behaviors. These motivational tendencies will also be investigated in the extent to which they apply across different political orientations and contexts.

B. What motivates people in general and political engagement in particular?

Political engagement is a wide-reaching area of study and there are a number of theoretical perspectives which predict why one is motivated to become politically engaged. Each of three perspectives I will review contain some overlap in predictions about the motivators of political engagement, however each is also distinct in their predictions. First, I will review social cognition theory, which suggests political orientation is a primary motivator for political engagement, then I will review more classic theories of motivation that predict prescriptive and proscriptive aims are principal motivators for political engagement. Finally, I will review moral motives theory, that suggests both political orientation and prescriptive and proscriptive aims are motivational factors which predict political engagement.

1. Political Motivation

Much of the work that presently exists on motivation in political contexts is derived from social cognition perspectives, with assumptions of inherent ideological differences being central to the proposed mechanisms. Motivated social cognition work has focused on understanding conservatism through different processes of epistemic, existential, and ideological needs, all of which contribute to motivated reasoning (Jost et al., 2003). In other words, what is motivating to people are issues related to knowledge, existence, and ideas, respectively. According to these authors, the motivational needs that conservatives have diverge from those of liberals. Compared

to liberals, conservatives have higher needs for certainty, closure, and security. A key idea within work from Jost et al. (2003) is that much of what underlies political cognition and behavior is driven by these motivations, that suggests that personal needs and individual differences are central to political motivation. Subsequent cognitions and behaviors are then crafted to fill these needs. From this perspective, political motivation and political orientation may take shape, to some extent, through personality differences (Jost, Federico, & Napier, 2009).

Differences between these needs have been explored between liberals and conservatives, that finds some evidence of conservatives being more strongly affected by fear and threat than liberals and having less motivation than liberals to engage in cognitively effortful tasks (Jost & Amodio, 2012; Jost et al., 2017). Although this evidence points to plausible differences between liberals and conservatives when it comes to the motivating power of fear and threat, definitive and overarching differences are not necessarily supported. Federico and Malka (2018) offer an in-depth review of the differences in certainty and security needs as predictors of liberal and conservative leanings. The authors found, overall, that although certainty and security needs, and sensitivity to fear and threat, predict social conservatism, they do not predict fiscal conservatism. Additionally, in samples from historically communist and socialist countries, certainty and security needs tended to predict more left-wing attitudes. These overall findings suggest that although there is some merit to the idea that conservatives have a higher sensitivity to fear and threat than liberals, the political and social context of that connection matters.

Motivated cognition theory sheds light on potential political motivational differences through drivers of epistemic, existential, and ideological needs (i.e., certainty, closure, and security). However, motivated cognition theory does not give much attention to more classic theories of basic human motives. Within political contexts, it is likely that more basic human

motivational orientations are also at play. Particularly in the context of political engagement, an area where overarching political motives are still being explored, motivated cognition theory may benefit from exploring two more fundamental motivators for people: approach and avoidance. Whereas conservatives may, overall, respond more to threat and fear compared to liberals, approaching desired outcomes and avoiding undesired outcomes is a core aspect of cognition across people, and may have important implications in political contexts as well.

2. General Motivation: Approach and avoidance

What motivates political engagement may have some idiosyncratic properties, however, more basic human motivations may offer a better foundation for understanding political motives as a whole. Fundamental to human psychology, approach and avoidance motivations are key to how people interact with their environments (Carver, 2006). These behaviors are thought to be driven by two distinct regulatory systems, one in which you approach a desired end-state, or goal, and one in which you avoid an undesired end-state, or anti-goal. These two separate systems are also conceptualized as a behavioral activation system, where one activates behavior or affect, and a behavioral inhibition system, where one inhibits behavior or affect, that contribute to self-regulation (Carver & White, 1994). Approach and avoidance motivation are long-standing psychological constructs which have been central to the study of human behavior and motivation for several decades and understanding the contexts of when one approaches and avoids is of particular recent interest (Higgins, 1998).

Approach and avoidance have been studied across a wide array of areas, including but not limited to affect, personality, cognition, and motivation. Researchers have found these systems to underly behavior across these domains (Gable, Reis, & Elliot 2003). The idea that people seek to avoid negative, but approach positive, stimuli and experiences is then even more

fundamental, beyond just motivation, as a guiding principle for behavior. Because of the application of approach vs. avoidance as a guiding principle for human behavior, it may be useful to position novel questions regarding motivation within this framework. Within the present work, understanding the underpinnings of political motives may be best served by understanding when one is likely to approach or avoid in a given political context.

Whereas Jost et al. (2003) might argue that the sensitivities to prescriptive or proscriptive aims are motivated and driven by the epistemic, existential, and ideological needs laid out in their research, Carver (2006) would likely argue that these sensitivities are instead due, first and foremost, to self-regulatory systems and related affective states. Either approach may lend the same conclusions about any ideological differences we may or may not find. However, given the relative novelty of trying to induce approach and avoidance as motivational states in a political context, classic theories of motivation and self-regulation may offer the most parsimonious approach as to what motivates political engagement. The aims of the present study will focus explicitly on inducing prescriptive and proscriptive motives for liberals and conservatives to assess differences in sensitivities to approaching desired outcomes versus avoiding undesired outcomes as motivators of political engagement, and whether emotions and cognitions play a role in this relationship.

3. Moral Motivation

In line with classic theories of motivation, moral motives theory suggests that moral and political motivations can be conceptualized within the framework of approach and avoidance. Principally, proponents of this theory suggest that there exists a proscriptive system that is sensitive to negative outcomes and what one ought not to do, or avoid, and a prescriptive system that is sensitive to positive outcomes and what one should do, or approach (Janoff-Bulman,

Sheik, and Hepp, 2009).¹ Proscriptive moral regulation controls inhibition and avoidance of bad or immoral behavioral and prescriptive moral regulation controls activation and approach of good or moral behavior. Moral motives theory explicitly supports the notion that approach and avoidance aims are central to moral and political self-regulation, an idea that is more aligned with classic motivational theories (that suggest people are driven by approach- and avoidance-oriented outcomes) than motivated cognition theories (that suggest people are driven by political orientation). Because of this, moral motives theory may be a useful approach for understanding differences in motivational tendencies in political or ideological contexts.

Whereas approach and avoidance motivation work is foundational to moral motives theory, the moral motives theory posits that prescriptive and proscriptive moral regulation systems have unique sets of assumptions and functions related to morality. Proscriptive moral regulation is more mandatory, blame-worthy, and focused on transgressions, whereas prescriptive moral regulation is more discretionary, credit-worthy, and focused on good deeds (Janoff-Bulman, Sheik, & Hepp, 2009). These authors suggest a moral asymmetry between these two systems given the difference of behaviors either system characterizes. Janoff-Bulman, Sheik, and Hepp (2009) further suggest there is a general negativity bias, where people are more likely to engage in proscriptive regulation, avoid the bad, than they are to engage in prescriptive regulation, approach the good.

In line with classic theories of motivation, moral motives theory suggests that moral and political motivations can be conceptualized within the framework of approach and avoidance.

1. Across motivation work, researchers use different language to describe similar motivation systems. For the purposes of this thesis, prescriptive motives will be used to describe motivational systems related to approach or promotion orientation, whereas proscriptive motives will be used to describe motivational systems related to avoidance or prevention orientation.

Principally, proponents of this theory suggest that there exists a proscriptive system that is sensitive to negative outcomes and what one ought not to do, or avoid, and a prescriptive system that is sensitive to positive outcomes and what one should do, or approach (Janoff-Bulman, Sheik, and Hepp, 2009).¹ Proscriptive moral regulation controls inhibition and avoidance of bad or immoral behavioral and prescriptive moral regulation controls activation and approach of good or moral behavior. Moral motives theory explicitly supports the notion that approach and avoidance aims are central to moral and political self-regulation, an idea that is more aligned with classic motivational theories (which suggest people are driven by approach- and avoidance-oriented outcomes) than motivated cognition theories (which suggest people are driven by political orientation). Because of this, moral motives theory may be a useful approach for understanding differences in motivational tendencies in political or ideological contexts.

Across seven studies, the authors were able to distinguish between the two types of morality and found some evidence to suggest that people tend to engage in more proscriptive behavior and focus on what they should not do than engage in prescriptive behavior and focus on what they should do. It may be easier overall to inhibit what one ought not to do (e.g., not starting a fight with someone) than to activate something one ought to be doing (e.g., breaking up an ongoing fight). While prescriptive morality often requires some level of activation, or engaging in action, proscriptive morality often requires that you do not engage in action to avoid an undesired end-state. In terms of effort put forth by an individual, it is generally easier not to engage in behavior than it is to engage in behavior. There also exists evidence across domains of psychological functioning to suggest a general negativity bias where bad outcomes and emotions are psychologically stronger than good outcomes and emotions (Baumeister et al., 2001). This negativity bias may have some ties to adaptation and survival, as negative events may have

meaningful and permanent threats to survival whereas positive events do not. In the context of motivation, people should, overall, tend to avoid potential negative and threatening circumstances rather than approach positive and non-threatening ones.

Although these authors suggest that a negativity bias exists in prescriptive and proscriptive motives, it is likely this is not always the case. For instance, in circumstances where activation or engagement in behavior is the ultimate goal, it would follow that the type of motivation that can bolster that engagement should win out, specifically, prescriptive motives. Skitka, Hanson and Wisneski (2017) studied prescriptive vs. proscriptive motives in the context of political engagement, and their findings support the idea that both motivational tendencies contribute to increased political engagement. Across two studies, the authors tested whether the perceived negative emotions and harmful outcomes for an undesired policy change, rather than the perceived positive emotions and beneficial outcomes for a desired policy change, better predicted support for intentions to engage in activist behaviors. Essentially, to the extent prescriptive vs. proscriptive emotions and cognitions were experienced, how likely were people to become politically engaged?

Contrary to the previous work suggesting proscriptive motives tend to win out over prescriptive motives, Skitka and colleagues found no support for a negativity bias, and even found that prescriptive aims were stronger predictors than proscriptive aims in predicting activist intentions. It may be that engaging in activism or political engagement relies more heavily on prescriptive motivators. If moral asymmetry suggests people rely on proscription rather than prescription, then political engagement may be a context where this pattern does not hold. Proscription as a regulatory strategy may be too psychologically at odds with political engagement which necessarily requires some level of activation to be carried to fruition.

However, it is still plausible that one might be motivated to become politically engaged to prevent some outcome they view as undesirable, or to protect the status quo, in which case adopting a proscriptive motivational frame may still be advantageous.

a. Evidence for prescriptive and proscriptive mindsets in political engagement

i. Utopian thinking.

Consistent with the moral motives theory emphasis on the power of prescriptive and proscriptive motivations, other lines of research have explored the impact of different imagined outcomes, or outlooks, on political action. Within prescriptive approaches, some scholars have studied the impact of utopian thinking on self-regulation and motivation for political engagement. Fernando et al. (2018) found that utopian thinking was correlated with participants' greater willingness to engage in behaviors that support social change, and greater criticism of their current society. Engagement in utopian thinking was akin to mental contrasting, a motivational technique used to elicit goal achievement through imagining positive outcomes and directly comparing those outcomes to current life, that is, the act of envisioning ideal goals contrasted with present reality (see Oettingen, 2012 for a review of mental contrasting). Compared to only thinking about current society, both utopian thinking and mental contrasting lead to stronger endorsements for changing current society, and weaker endorsement for satisfaction with society. Mental contrasting is a motivational tool that is typically performed on an individual psychological level, used to envision where one wants to be compared to where one is currently (Oettingen, Mayer, & Brinkman, 2010). Given that envisioning a utopian outcome for society almost necessarily puts this imagined future at odds with the present reality, it is plausible that utopian thinking can be regarded as a form of collective mental contrasting. If this is so, then it follows that envisioning these best-case futures should be a particularly

motivating tool for the goals one holds for their collective, in whatever form that may take (see Levitas, 1990 for more on functions of utopia).

Additionally, hope has been studied as a tie to social change and may be a more salient motivating emotion compared to other relevant emotions in political engagement. Across four studies, Greenway et al. (2014) found that both measured and manipulated hope predicted greater support for social change over and above happiness, anger, sadness, fear, and general measures of positive and negative affect. Although hope and envisioning a utopian future are not completely interchangeable, they are highly related psychological states. As much has been proposed by Badaan et al. (2020), who studied the mechanisms through which utopian thinking affect support for social change. In their model, the authors suggest that hope is one pathway through which utopian thinking may increase greater support for social change. In line with both of these findings, Fernando et al. (2020) found some evidence that utopias that elicited more positive affect and feelings of warmth predicted greater endorsement for change.

Voting behavior is a specific form of political engagement that has been of particular interest, and some work explored the effects of emotional cues in political advertisements on campaign interest and voting intention. Brader (2005) studied the effects of both positive and negative advertising on voting and campaign interest and found that using positive and enthusiastic messaging cues led to greater endorsement of intention to vote than using negative and fearful messaging cues. Whereas positive information and cues resulted in a greater overall likelihood of engagement and action, negative information and cues resulted in greater attention to information and vigilance. Both positive and negative outcomes then might be expected to motivate political engagement but may do so in different ways. Some work has begun to distinguish these differences, finding positive emotions like enthusiasm predict more costly

participation where negative emotions like fear predict less costly forms of participation. Taken at face value, this would suggest we should expect more hopeful, positive messages to win out in more direct and costly forms of action and engagement than more fearful, negative messages, however more negative message strategies may still have an effect.

ii. Dystopian thinking.

Utopian thinking and positive outcomes may be one strategy for motivating political behavior, however dystopian thinking and negative outcomes may be another. Though more direct study of dystopian thinking on political engagement, akin to Fernando et al.'s (2018) studies on utopian thinking, is lacking, it is warranted to study the impact of negative futures as well as positive futures on different types of engagement. Shrikanth, Szpunar, and Szpunar (2018) have recently demonstrated that people are better at generating negative, rather than positive, information where collective futures are concerned. If the default for thinking about a collective or political future focuses on negative outcomes, this provides some evidence to support the negativity bias proposed by Janoff-Bulman et al. (2009). However, it is still unclear whether this bias for considering negative collective outcomes would be sufficient to motivate people to action, or whether considering positive outcomes is more likely to facilitate political engagement.

The role of negative futures on engagement is still unclear, however, there has been some work that has looked at fear and threat-based appeals and messaging strategies. In one study by Miller and Krosnick (2004), the authors tested different types of messaging strategies including a control message, a fearful policy change message, and a policy change opportunity message about reproductive rights. The researchers found that people were more likely to donate money in the fear condition than the control or opportunity condition. Whereas fear led to greater

likelihood of donating than the control and opportunity messages, the opportunity message led to greater likelihood of sending a postcard to the president than the control or fear messages. Similarly, work on environmental messaging has revealed that threat-based messages about pollution lead to more financial donations, but less time donation than control messages (Hine & Gifford, 1991). Based on this work, it may be that fear-based messaging and outcomes are particularly motivating for certain forms of political engagement (e.g., financial donations) but not others (e.g., time donation).

Taken together, it is still relatively unclear what role negative futures and outcomes play on motivating political engagement, particularly in direct contrast to positive futures and outcomes. Although there is some evidence that suggests the use of negative and fearful outcomes may contribute to a greater likelihood of political engagement, these effects have been mostly studied in the context of messaging strategies and only explored a few types of engagement. I attempt to address these gaps within this research, where I both directly address the effects of thinking about negative and dystopian future outcomes versus thinking about positive and utopian future outcomes on activist intentions. Manipulating utopian and dystopian thinking may offer insight into whether a prescriptive- or proscriptive-oriented outcome orientation is similarly or differentially motivating for political engagement and expand on the present literature.

In the context of the present work, promoting either utopian or dystopian outlooks related to a relevant collective cause may induce either a prescriptive, approach-oriented mindset, or a proscriptive, avoidance-oriented mindset, respectively. Whether both utopian and dystopian mindsets motivate political engagement (Dual Motives Hypothesis), or whether the negativity

bias leads dystopian mindsets to motivate political engagement more strongly than utopian mindsets (Dystopian Motives Hypothesis) remain to be seen.

C. Are there ideological differences in what motivates political engagement?

As previously stated, the idea that people are motivated to approach desired outcomes and avoid undesired outcomes is well-established. However, what is less established is for whom either motivational orientation is stronger. Within political motivation specifically, the question remains: do motivational approaches differ by political orientation? If this answer to this question is yes, this may at least partially point to why we see successful campaigns such as Obama's and Trump's which have core messages that are overwhelmingly different. The current evidence is mixed, however, with many scholars finding evidence that points to ideological differences in sensitivities to prescriptive and proscriptive motives, and others finding no differences. Understanding any differences in motivational tendencies based on political orientation is particularly important to explore in the context of political engagement, as the effects of prescriptive vs proscriptive motives are still largely contentious, and any differences may clarify existing findings.

1. Arguments in favor of asymmetry

Moral motives theory, beyond proposing a general asymmetry in motivational tendencies, also proposes an ideological asymmetry. According to Janoff-Bulman, Sheikh, and Baldacci (2007), liberals tend to be more prescriptive-oriented than conservatives, whereas conservatives tend to be more proscriptive-oriented than liberals. These authors assessed the relationship between social dominance orientation and right-wing authoritarianism, measures often used to gauge conservatism, and found that people low in social dominance (more liberal) were more likely to endorse more prescriptive motives, whereas people high in right-wing authoritarianism

(more conservative) were more likely to endorse proscriptive motives. These differences have also been explored as more group-based motivations, where researchers have suggested that liberals tend to be more likely to focus on providing for a group through prescriptive regulation, whereas conservatives tend to be more likely to protect a group through proscriptive regulation (Janoff-Bulman, & Carnes, 2013). This proposed ideological difference should be reflected in the type of messaging and motivational frames that are most effective for liberals and conservatives, where liberals will be more sensitive to positive mindsets whereas conservatives are more sensitive to negative mindsets.

Motivated cognition theories of political motivation additionally suggest a motivational distinction between liberals and conservatives. Jost et al. (2017) conducted a meta-analysis aimed at assessing the relationship between conservatism and existential threat and fear. Across 100 studies, they concluded that there is a difference in existential motivation where conservatives tend to have more of a psychological reaction to threat and fear than liberals. There is also some neuroscience evidence which points to these ideological differences, where conservatives were found to have more sensitive activation for areas which monitor fear and threat, and less activation for areas which monitor cognitive flexibility than liberals (Jost & Amodio, 2012). Motivated cognition work may provide some insight into ideological differences for motivation, however there is still room to further question specific differences for prescriptive and proscriptive aims between political orientations

Beyond these frameworks, other scholars have explored differences between liberals and conservatives based on fear motives, which suggests that conservatives would be more proscriptive than liberals. Shook and Fauzio (2009) conducted a study where liberals and conservatives interacted with novel positive and negative stimuli. Conservatives were both less

likely to explore novel stimuli and better at learning where negative stimuli were compared to liberals, suggesting both a lower prescriptive orientation and higher proscriptive orientation. This is supported by other work which has shown conservatives to be more prone to and effected by negative stimuli than liberals (Carraro, Castelli, & Macchiella, 2011). Additionally, according to scholars who study right-wing authoritarianism (RWA), a broadly used measure of conservatism, those higher in RWA are more likely to hold perceptions of the world as dangerous, which may suggest that those who are more conservative are also more aversive (Altemeyer, 1998).

Federico and Malka's (2018) review reveals that those with stronger sensitivities to fear and threat are often more conservative, however, this was not always the case. The relationship between security and safety concerns and conservatism were shown to be non-significant in some domains (i.e., economic issues) and even reversed for different cultural contexts (i.e., countries with left-wing backgrounds). Additionally, other recent work has failed to find strong and consistent support for the relationship between political conservatism and negativity biases. Johnston and Madson (2022) found, across five different operationalizations of tasks to induce negativity bias and four different outcome measures of political conservatism, that there was overwhelmingly no support for the link between a stronger negativity bias and conservatism. In line with this, other work shows that liberals show similar negativity biases as conservatives when under higher cognitive load or fail to show any differences in negativity biases at all (Salter et al., 2022). In terms of cross-national evidence, work has also demonstrated that participants across different countries do not show differences in physiological skin-conductance responses to negative news based on political ideology (Fournier, Soroka, & Nir, 2020). Taken together, this recent evidence points to a relationship between political conservatism and sensitivity to threat and negativity biases that is substantially less robust than much of the previous literature

on this topic would suggest, a conclusion more consistent with the idea that there may not be ideological differences in how prescriptive and proscriptive mindsets affect people's motivations, I turn to next.

2. Arguments in favor of symmetry

Much of this previous work supports the idea that there are ideological differences in political motives, however, other work fails to do so. Skitka, Hanson, and Wisneski (2017) found no differences in prescriptive and proscriptive motivators as predictors of activist intentions between liberals and conservatives for issues of same-sex marriage or gun control on campuses. The design of the studies was such that both liberals and conservatives were asked about these issues with desired and undesired outcomes based on their positions. The authors found no differences in likelihood of engaging in activist intentions between liberals and conservatives when outcomes were preferred or not preferred, suggesting no ideological differences between prescriptive or proscriptive motives for these contexts. Given that both affect and cognition are potential mechanisms through which motivation increases political engagement, the extent to which one experiences strong emotions or holds strong attitudes toward an outcome as a function of political orientation may help disentangle any differences (Skitka, Hanson, & Wisneski, 2017).

Although there is evidence to justify the notion that liberals and conservatives may differ in whether they are more sensitive to prescriptive or proscriptive aims, this may not hold true for political engagement across the board. Whereas much of the previous literature points to a fearful, closed off conservative and hopeful, open liberal (political orientation asymmetry hypothesis), more recent literature suggests that this difference should not always be the case (political orientation symmetry hypothesis). Given these concerns, I will further explore any

ideological differences in motivation for activist intentions, to determine whether liberals and conservatives do, in fact, diverge in their motivational sensitivities.

D. Hypotheses

1. Motivational main effect

Given the framework of moral motives theory as evidence of prescriptive and proscriptive motivations predicting political engagement, I propose two competing hypotheses. If moral motives theory is true, then there will be a main effect such that both prescriptive and proscriptive outlooks will motivate political engagement more than a control outlook (dual motives hypothesis). If the negativity bias exists in moral motives, then there will be a main effect such that proscriptive outlooks will motivate political engagement more than a prescriptive or control outlook (dystopian motives hypothesis).

2. Political orientation interaction

Additionally, evidence regarding political orientation differences in prescriptive and proscriptive motives is mixed, and I propose two competing hypotheses for these findings as well. If liberals and conservatives have similar motivational dispositions, then there will be no interaction between political orientation and prescriptive versus proscriptive outlooks (political orientation symmetry hypothesis). If liberals and conservatives have differentially strong motivational dispositions across contexts, then there will be an interaction between political orientation and motivational outlooks such that a prescriptive outlook will result in greater motivation for political engagement for liberals rather than conservatives, whereas a proscriptive outlook will result in greater motivation for political engagement for conservatives rather than liberals (political orientation asymmetry hypothesis).

It is possible that the effects of prescriptive and proscriptive motives will be indirect rather than direct on political engagement. Given the important role that emotions (e.g., Brader, 2005) and cognitions (e.g., Skitka, et al., 2017) play in predicting political engagement, the effect of motivational mindsets might be mediated partially or fully through the effects of the mindset manipulation on people's positive or negative emotional states or their beliefs of harms and benefits related to political events. I will therefore also test a mediational hypothesis that the effects of mindset manipulations will affect people's emotional states and beliefs, that will in turn predict their level of political engagement. Proscriptive mindsets should lead to more negative emotions and beliefs about harms of political events than either prescriptive or control mindsets, which could then predict greater political engagement (possibly only for conservatives). Conversely, prescriptive mindsets should lead to more positive emotions and beliefs about benefits of political events than either proscriptive or control mindsets, which should predict greater political engagement (possibly only for liberals).

Hypotheses were tested in two different contexts: The Black Lives Matter and the counter Blue Lives Matter movements (Study 1) and the 2020 U.S. Presidential election. I provide more detail below.

II. STUDY 1

The primary aim of Study 1 was to investigate the hypotheses laid out in the previous section. Rather than measuring prescriptive and proscriptive tendencies, this study used an experimental design that manipulated motivational aims by either asking participants to adopt a utopian (prescriptive), dystopian (proscriptive), or control frame when thinking about a future outcome. The advantage of using this approach is that by manipulating mindsets, I tested the causal relationship between motivational frames and political engagement.

In Study 1, I tested hypotheses in the context of the Black Lives Matter and Blue Lives Matter movements. Black Lives Matter is an on-going movement founded in 2013 after the murder of Trayvon Martin, a black child shot by a white civilian man in Sanford, Florida, and has continued collective efforts against police brutality and white supremacy, including massive protests in response to police killings of Black people (Black Lives Matter, 2013). Blue Lives Matter is an on-going countermovement that arose in 2014 in response to the protests in response to Michael Brown's death, a black man shot by a police officer in Ferguson, Missouri, as well as the murder of two police officers in New York City, Rafael Ramos and Wenjian Liu by Ismaaiyl Abdullah Brinsley, and has continued collective efforts to strengthen public support for law enforcement officials and increase recognition for their actions (Blue Lives Matter, 2014; Parry & Scully, 2020).

In the context of this study, if the dual motives hypothesis is true, then participants with a utopian or a dystopian outlook should endorse stronger activist intentions for their preferred movement than participants with a control outlook. If the dystopian motives hypothesis is true, then then participants with a dystopian outlook should endorse stronger activist intentions on behalf of a preferred movement compared to those with a utopian or control outlook.

If the political orientation symmetry hypothesis is true, then there will be no interaction between political orientation and either utopian or dystopian outlooks, compared to a control outlook, on endorsement of activist intentions on behalf of a preferred movement. If the political orientation asymmetry hypothesis is true, then there will be an interaction between political orientation and outlook condition such that an utopian outlook, compared to a dystopian or control outlook, will result in greater motivation for activist intentions to the extent a participant identifies as liberal rather than conservative, whereas a dystopian outlook, compared to an utopian or control outlook, will result in greater motivation for activist intentions to the extent a participant identifies as conservative rather than liberal. If liberals are more motivated by prescriptive, utopian, aims than conservatives, then they should endorse stronger activist intentions in the utopian condition to the extent this relationship is mediated through stronger positive emotions about the future. If conservatives are more motivated by proscriptive, dystopian, aims than liberals, then they should endorse stronger activist intentions in the dystopian conditions to the extent this relationship is mediated through stronger negative emotions about the future.

III. STUDY 1 METHODS

A. Sample

This study is a secondary analysis of unpublished data collected by Mengyao Li. The Participants were recruited from the Cloud Research Prime panel (N = 818). I excluded any participant who indicated they were not currently residing in the United States (N = 6), did not follow instructions of the writing task (N = 13), or did not indicate their age (N = 4), leaving a final sample size of 795 participants. Participants were 50.51 years old (SD = 17.50) on average, predominately white (81.13%) and female (62.39%).

All participants accessed a Qualtrics survey through CloudResearch to complete the experiment. Data collection through CloudResearch began on 7/8/2020 and concluded on 7/17/2020, a timeframe that was selected because it was soon after the Black Lives Matter protests and the countermovement of Blue Lives Matter began escalating during the timeframe when protests were still occurring, so concerns related to these movements were salient.

B. Experimental Design

The study was a 2 (Movement type: Black Lives Matter, Blue Lives Matter) X 3 (Future valence: Utopia, Dystopia, Control) between subjects experimental design, with future valence as the key independent variable and political orientation as a continuous and potential moderating variable. In addition, emotion related to the movements was explored as potential mediating variables between the by political orientation interaction and activist intentions. Each participant completed a writing assignment for one of six prompts that followed the 2x3 design. The future type (utopia, dystopia, control) was randomly presented; however, participants self-selected the movement type (Black Lives Matter, Blue Lives Matter) they identified with, which was then presented. Each of the prompts provided is detailed below.

C. Procedure

Recruitment language online specified that participants would be expected to complete a study related to current U.S. issues. Participants first read brief excerpts of background information about both Black Lives Matter and Blue Lives Matter movements. Participants then were asked to identify the extent to which they identified with either Black Lives Matter or Blue Lives Matter movements. Participants completed the writing task about the movement they most identified with or were randomly assigned to either movement if they did not identify with one more than the other. Participants then completed the writing task and were not allowed to navigate forward on the page for the first minute of the task, to ensure they spent enough time detailing their response. Participants were able to move forward after one minute or take more time, as desired, to finish their response. After completing the writing task, participants completed, in order, emotion ratings, exploratory measures (not relevant to the present study), and activist intentions before participants completed demographics questions (including measures of ideology) and were debriefed.

3. Materials.

a. Utopia Conditions.

Participants who identified more with or were assigned to the Black Lives Matter movement saw the following message for the utopia-focused writing prompt: “In this task, we would like you to imagine the future of Black Lives Matter. What do you envision to be the best-case scenario? Please use your imagination and describe in a few sentences below the ideal future that you would like to see regarding Black Lives Matter.” Participants who identified or were assigned to the Blue Lives Matter Movement saw the same utopia-focused writing prompt, however instead of “Black Lives Matter” they saw “Blue Lives Matter” instead.

b. Dystopia Conditions.

Participants who identified more with or were assigned to the Black Lives Matter movement saw the following message for the dystopia-focused writing prompt: “In this task, we would like you to imagine the future of Black Lives Matter. What do you envision to be the worst-case scenario? Please use your imagination and describe in a few sentences below the worst possible future that you would not like to see regarding Black Lives Matter.” Participants who identified or were assigned to the Blue Lives Matter Movement saw the same dystopia-focused writing prompt, however instead of “Black Lives Matter” they saw “Blue Lives Matter” instead.

c. Control Conditions.

Participants in the control condition were also asked to imagine the future of the Black or Blue Lives movements but were not provided any prompt about what kind of future to imagine (i.e., they were not told to imagine either the best or the worst-case scenario).

D. Measures

1. Emotion Ratings

Participants completed emotion ratings for nine different categories of emotions, including fear (scared, afraid, frightened), anxious (anxious, nervous, jittery), anger (angry, hostile, outraged), despair (despair, distressed), upset (upset, irritable), guilt (guilty, ashamed), hope (hopeful, optimistic), enthusiasm (enthusiastic, excited, interested), strength (strong, determined), inspired (inspired, proud), and alert (alert, attentive, active). For each emotion presented, participants were asked: “When imagining the future of Blue Lives Matter / Black Lives Matter, to what extent do you feel the following emotions?” Response options available included a sliding scale with 9 choice ranges which spanned from 1 Not at all to 9 A great deal.

Emotions were presented randomly. A Principal Components Analysis (PCA) revealed that the emotion items conformed to a two-factor structure when using either a varimax or an oblimin rotation: Positive emotions eigenvalue = 7.13 and negative emotions eigenvalue = 8.00 for both varimax and oblimin rotations. I therefore averaged the positive (Cronbach's $\alpha = .94$) and negative emotion (Cronbach's $\alpha = .94$) items separately (detailed results of the varimax rotation of the PCA are provided in Appendix 1 of the Supplementary Materials).

2. Activist Intentions

Activist intentions were measured by asking participants their willingness to engage in several behaviors aimed at helping their preferred movement. These measures were adapted from those used by Skitka, Wisneski, and Hanson (2017). Participants were asked "how willing or unwilling are you to engage in the following actions to support Black Lives Matter [Blue Lives Matter]?" Behaviors included: "participating in demonstrations," "donating to organizations," "signing petitions," "discussing the issue in social networks", "organizing demonstrations", "participating in strikes," "voting on relevant policies," and "calling or emailing government officials." For each behavior, participants rated their willingness to engage with response options 1 very unwilling to 9 very willing. All items were presented randomly, and $\alpha = .90$.

3. Political Orientation

Participants completed a branching political orientation measure to assess which political orientation most closely fit participants who were independent or undecided. Participants were asked whether they generally think of themselves as liberal, conservative, or neither/don't know. Participants who selected liberal or conservative were branched to an item that asked how strongly they identified as liberal or conservative with sliding scale options values ranging from 1 not at all to 9 very strongly. Participants who selected neither/don't know were branched to an

item that asked, if they had to say, would they lean more towards being a liberal, conservative, or neither with options of slightly liberal, slightly conservative, or neither. Given those who identified as either liberal or conservative could identify as “not at all” liberal or conservative, this value as well as those who responded “neither” were set at 0, with those who said they lean slightly liberal or slightly conservative representing -1 and 1 on the scale, respectively. The full scale ranged from -8 (very strong liberal) to +8 (very strong conservative).

IV. STUDY 1 RESULTS

A. Manipulation Checks

Before turning to hypothesis tests, I tested whether the experimental manipulation of mindset worked as expected. I coded participant responses to identify those who did and did not follow instructions for the writing task. A colleague and I both rated all participant responses blind to condition. Interrater reliability between both coders indicated overall strong agreement, $\kappa = .73$, $p < .001$, for these responses. I relied on my coded responses because of high agreement. Participants whose responses were either grammatically incoherent or off-task for the writing prompt were identified first, $N = 13$. As an additional manipulation check, I coded participant responses as to whether their writing about the future of either the Black Lives Matter or Blue Lives Matter movements were reflective of a utopian outcome, a dystopian outcome, or a control future which did not reflect either utopian or dystopian themes.

To assess whether the manipulations worked as intended, proportions of responses for both utopian and dystopian conditions were compared to the control condition. This helped determine whether participants were more likely to discuss a utopian- or dystopian-oriented future after being prompted to take these respective mindsets than those in the control condition who were not given a mindset prompt. Two proportion Z-tests revealed that those in the utopian condition (81.13%) were more likely to write about a utopian outcome compared to those in the control condition (48.19%), $Z = 7.99$, $p < .001$, and those in the dystopian condition (81.55%) were also more likely to write about a dystopian outcome than those in the control condition (15.58%), $Z = 15.35$, $p < .001$. Although both the utopian outlook and dystopian outlook manipulations worked and resulted in higher rates of responses about utopian and dystopian outlooks, respectively, compared to the control, it is worth noting differences in responses in the

control condition. Those in the control condition were more likely to write about a utopian future (48.18%) compared to either a dystopian (15.58%), $Z = 8.13$, $p < .001$, or neutral future (34.06%), $Z = 3.29$, $p = .001$, suggesting that, at a baseline, people tend to think about more positive future outcomes than negative or neutral outcomes.

B. Preliminary Test of Hypotheses

To first assess the relationship between variables, I ran two-way ANOVAs between outlook condition type (Utopia, Dystopia, Control) and movement type (Black Lives Matter, Blue Lives Matter) on outcomes of interest. Given that Black Lives Matter is mostly supported by liberals, and Blue Lives Matter is mostly supported by conservatives, support of either group was used as a proxy and more proximate measure of political orientation with respect to this issue. In support of this decision, a Welch-corrected t-test revealed that those who wrote about Black Lives Matter ($M = -1.63$, $SD = 4.97$) were more liberal than those who wrote about Blue Lives Matter ($M = 3.34$, $SD = 4.46$) on the political orientation, $t(780.59) = -14.78$, $p < .001$.

I first tested whether the interaction of condition type (motivational mindset) and movement type (political orientation) predicted activist intentions as a direct test of hypotheses. There was not a main effect of outlook condition on activist intentions, however there was a main effect of movement type. Those who wrote about Black Lives Matter ($M = 4.70$, $SD = 1.50$) endorsed stronger activist intentions than those who wrote about Blue Lives Matter ($M = 3.83$, $SD = 1.50$), see Table 1. There was no interaction of outlook condition and movement type on activist intentions.

These results did not support either the dual motives hypothesis or dystopian motives hypothesis, which predicted that thinking about either dystopian or utopian futures, compared to control futures, would lead to stronger intentions to engage in activism, or that thinking about

dystopian futures, compared to both utopian and control futures, would lead to stronger intentions to engage in activism. These results did not support the political orientation asymmetry hypothesis but may offer some support for the political orientation symmetry hypothesis given there was no interactive effect of the type of movement people supported and the outlook they had on activist intentions.

TABLE I

2-WAY ANOVA RESULTS OF OUTLOOK CONDITION AND MOVEMENT TYPE FOR ACTIVIST INTENTIONS, POSITIVE EMOTIONS, AND NEGATIVE EMOTIONS.

Predictors	<i>df 1</i>	<i>df 2</i>	Activist Intentions			Positive Emotion			Negative Emotion		
			<i>F</i>	<i>p</i>	η^2	<i>F</i>	<i>p</i>	η^2	<i>F</i>	<i>p</i>	η^2
Movement Type	1	789	66.75	< .001	.08	17.61	< .001	.02	12.55	.06	< .01
Outlook Condition	2	789	0.15	.86	< .01	1.39	.25	< .01	9.46	< .001	.02
Movement Type x Outlook Condition	2	789	1.67	.19	< .01	0.44	.64	< .01	0.09	.91	< .01

Note. Significant findings are bolded.

Additionally, I tested variables that could potentially mediate the relationship between outlook condition and activist intentions; specifically, positive emotions and negative emotions (see Table 1). Although there was not a main effect of outlook condition on positive emotions, there was a main effect of movement type on positive emotions. Those who wrote about Black Lives Matter ($M = 6.36$, $SD = 1.80$) reported stronger positive emotions than those who wrote about Blue Lives Matter ($M = 5.82$, $SD = 1.84$). Movement type and outlook condition did not interact to predict positive emotions.

Movement type did not predict negative emotions; however, outlook condition did. Dystopian outlooks ($M = 4.50$, $SD = 1.82$) predicted stronger negative emotions than both utopian outlooks ($M = 4.01$, $SD = 1.83$), $t(793) = 3.14$, $p = .002$, and control outlooks ($M = 3.84$, $SD = 1.87$), $t(789) = 4.19$, $p < .001$. There was no difference in negative emotions between utopian and control outlooks, $t(789) = 1.03$, $p = .30$.

Correlations between activist intentions and potential mediating variables can be seen in Table 2. To the extent participants felt stronger positive emotions, they supported stronger activist intentions, however, there was no relationship between negative emotions and activist intentions². To test hypotheses further, I turn to mediational analyses.

TABLE II
MEANS, STANDARD DEVIATIONS, AND CORRELATIONS OF ACTIVIST INTENTIONS, POLITICAL ORIENTATION, POSITIVE EMOTION, AND NEGATIVE EMOTION.

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Activist Intentions	4.31	1.56			
2. Political Orientation	0.59	5.35	-.23***		
3. Positive Emotion	6.11	1.84	.50***	-.05	
4. Negative Emotion	4.10	1.85	.06	-.03	-.04

Note. Positive values of political orientation indicate greater conservatism whereas negative values indicate greater liberalism.

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2. Anger, although a negative emotion, has been considered approach-oriented, rather than avoidance-oriented (Harmon-Jones, 2003). I tested anger ($\alpha = .94$) as a separate, discrete emotion from the negative emotion scale because of this, however all results remained consistent between anger and the other negative emotions. I thus included anger in this scale and used in following analyses. Analyses with and without anger are in Supplementary Materials, Appendix 3.

* $p < .05$. ** $p < .01$, *** $p < .001$.

C. Mediation Analysis

Although there were no direct effects of outlook condition on activist intentions, it is possible that emotional or cognitive pathways mediated these effects. Kenny and Judd (2014) argue that analyses of direct effects often have less statistical power to detect effects than indirect effects in mediational analyses, which test the mechanism of how a predictor variable effects an outcome. Thus, it is justified to test potential indirect effects of variables that could mediate the relationship between a predictor and outcome variable, even when there is no direct effect of the predictor variable on the outcome (see also: Rucker et al., 2011). In this context, given there are some effects of outlook condition on the potential emotional mediators, I proceeded to test potential mediational and moderated mediational emotional pathways of the relationship between outlook condition and activist intentions. Before turning to these analyses, however, I first tested whether political orientation moderated the effects of outlook condition on activist intentions.

1. Utopian Outlook Moderated Mediational Model

The utopian outlook model included a utopian outlook vector set against control outlook as the predictor variable (and the dystopian outlook vector as a covariate control), positive and negative emotions as mediating variables, political orientation as a moderator of both the ‘a’ and ‘b’ pathways, and activist intentions as the outcome using PROCESS model 21 with 5,000 bootstrapped samples, see Figure 1 (Preacher & Hayes, 2008).

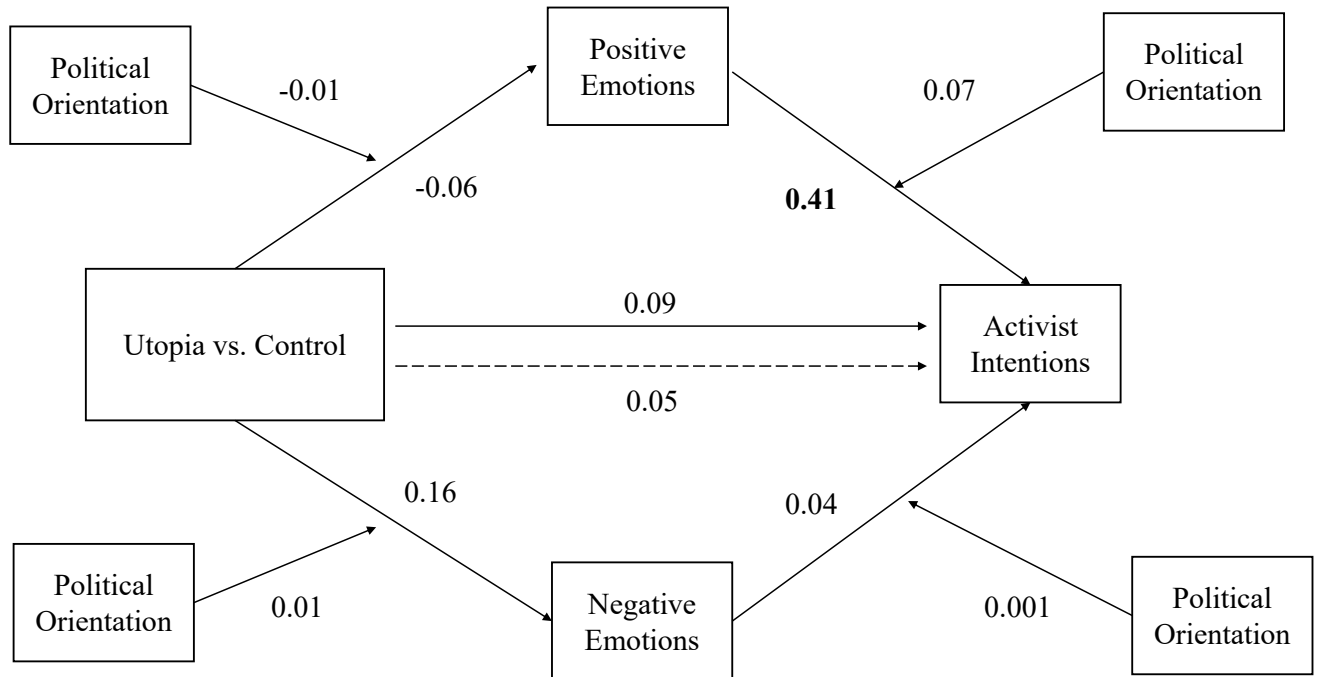


Figure 1. Mediation Results of the Relationship between Utopian vs. Control Outlooks, Positive Emotions, Negative Emotions, Political Orientation, and Activist Intentions. Note. Bolded beta values indicate significant pathways. The dotted line indicates the c' pathway. Utopia is set as a vector against dystopia and control, the dystopia vector is set as a covariate in the model.

* $p < .05$, ** $p < .01$, *** $p < .001$.

As can be seen in Figure 1, and in opposition to the dual motives hypothesis, there was no indirect effect of a utopian vs. control outlook on activist intentions through either the positive or negative emotional pathway. Political orientation did not moderate the positive emotion pathway, and there was no indirect effect of utopian outlook on activist intentions through this pathway, $\beta = -0.04$, $CI = [-0.26, 0.17]$. Additionally, political orientation did not moderate the negative emotion pathway, and there was no indirect effect of utopian outlook on activist intentions through this pathway, $\beta = 0.01$, $CI = [-0.02, 0.05]$. These findings are therefore the most consistent with the political orientation symmetry hypothesis given political orientation did not moderate either emotional pathway.

2. Dystopian Outlook Moderated Mediation Model

The dystopian outlook model included a dystopian outlook vector set against control outlook as the predictor variable (and the utopian outlook vector as a covariate), positive and negative emotions as mediating variables, political orientation as a moderator of both the ‘a’ and ‘b’ pathways, and activist intentions as the outcome using PROCESS model 21 with 5,000 bootstrapped samples, see Figure 2 (Preacher & Hayes, 2008).

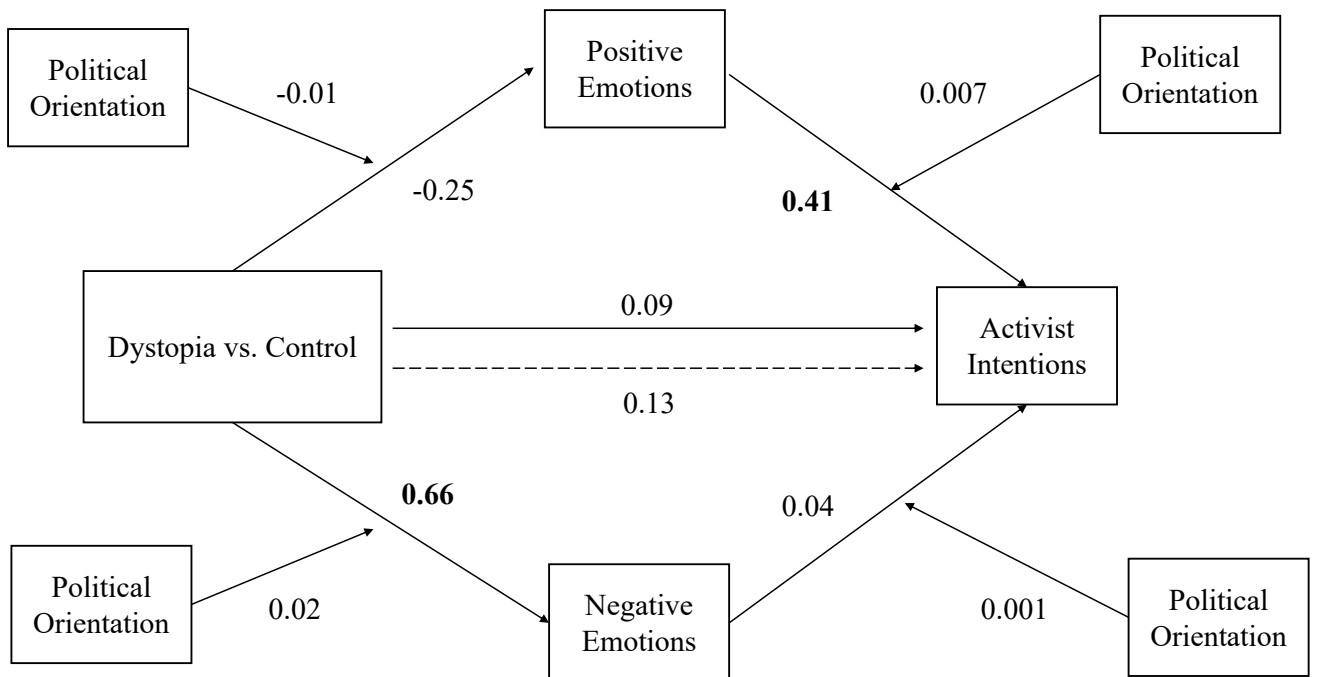


Figure 2. Mediation Results of the Relationship between Dystopian vs. Control Outlooks, Positive Emotions, Negative Emotions, Political Orientation, and Activist Intentions. Note. Bolded beta values indicate significant pathways. The dotted line indicates the c' pathway. Dystopia is set as a vector against utopia and control, the utopia vector is set as a covariate in the model.

* $p < .05$, ** $p < .01$, *** $p < .001$.

As can be seen in Figure 2, and in opposition to both dual motives hypothesis and dystopian motives hypothesis, there was no indirect effect of a dystopian vs. control outlook on activist intentions through either a positive or negative emotional pathway. Political orientation

did not moderate the positive emotion pathway, and there was no indirect effect of dystopian outlook on activist intentions through this pathway, $\beta = -0.14$, $CI = [-0.36, 0.07]$. Additionally, political orientation did not moderate the negative emotion pathway, and there was no indirect effect of dystopian outlook on activist intentions through this pathway, $\beta = 0.05$, $CI = [-0.01, 0.12]$. These findings also support the political orientation symmetry hypothesis given political orientation, again, did not moderate either emotional pathway.

V. STUDY 1 DISCUSSION

The findings of Study 1 did not support either the dual motives hypothesis or the dystopian motives hypothesis, because there were no direct effects or indirect effects of outlook condition on activist intentions. Findings were more consistent with the political orientation symmetry hypothesis over the political orientation asymmetry hypothesis given political orientation did not have differential effects on activist intentions for participants with a utopian or dystopian outlook, either directly or indirectly through emotional pathways. That said, the political orientation symmetry hypothesis predicted that dystopian and utopian frames would have similar effects, not similar non-effects on activist intentions for liberals and conservatives. Given I observed null results for mindsets, these results cannot be interpreted as strong support for the symmetry hypothesis.

Although the manipulation worked (i.e., those in the dystopian condition wrote more about dystopian outcomes than those in control conditions, and those in utopian conditions wrote more about utopian outcomes than those in control conditions), the manipulation may not have been strong enough to affect activist intentions. Alternatively, prescriptive or proscriptive mindsets might not motivate for political engagement in general, or perhaps in the context of Black Lives Matter and Blue Lives Matter specifically.

Study 2 attempted to conceptually replicate and extend Study 1 by exploring effects of prescriptive and proscriptive motivators in the context of the 2020 U.S. presidential election. The election may be a context where it is more likely for people to be engaged given approximately 66% of Americans voted in the 2020 election whereas only about 7-9% of Americans protested for Black Lives Matter (DeSilver, 2021; Buchanan, Bui, & Patel, 2020). I will turn to this work to further address the motivational and political orientation hypotheses.

VI. STUDY 2

The primary aim of Study 2 was to extend findings from Study 1, and further investigate the hypotheses central to this thesis. The main difference in the design of Study 2 and Study 1 is that the control condition of comparison included a separate topic for the outlook frame, a technology-related future, rather than having participants discuss the same topic in the absence of utopian or dystopian prompts, a decision that may have bolstered the effects of the mindset manipulation in a new context, the 2020 U.S. presidential election. I additionally examined motivational and ideological differences on political engagement through regression and mediational analyses.

In the context of this study, if the dual motives hypothesis is true, then participants with an utopian outlook or dystopian outlook should endorse stronger activist intentions on behalf of a preferred 2020 presidential candidate than participants with a control outlook. If the dystopian motives hypothesis is true, then participants with a dystopian outlook should endorse stronger activist intentions on behalf of a preferred 2020 presidential candidate compared to participants with a utopian or control outlook.

If the political orientation symmetry hypothesis is true, then then there will be no interaction between political orientation and either utopian or dystopian outlooks, compared to a control outlook, on endorsement of activist intentions on behalf of a preferred 2020 presidential candidate. If the political orientation asymmetry hypothesis is true, then there will be an interaction between political orientation and outlook condition such that an utopian outlook, compared to a dystopian or control outlook, will result in greater motivation for activist intentions to the extent a participant identifies as liberal rather than conservative, whereas a dystopian outlook, compared to an utopian or control outlook, will result in greater motivation

for activist intentions to the extent a participant identifies as conservative rather than liberal. If liberals are more motivated by prescriptive, utopian, aims than conservatives, then they should endorse stronger activist intentions in the utopian condition to the extent this relationship is mediated through stronger positive emotions about the future, and more perceived benefits of a preferred presidential candidate. If conservatives are more motivated by proscriptive, dystopian, aims than liberals, then they should endorse stronger activist intentions in the dystopian condition to the extent this relationship is mediated through stronger negative emotions about the future, and more perceived harms of a non-preferred presidential candidate.

In addition to manipulating participants' prescriptive or proscriptive mindsets by asking them to think about either a dystopian or utopian future after the election (relative to a control condition), I also manipulated whether I asked them to focus on their personal, or the country's collective, future. Although this manipulation is not the primary focus of this master's thesis, I nonetheless explored whether the change in frame from the personal to the collective level affected people's intentions to become politically engaged.

VII. STUDY 2 METHODS

A. Sample

I recruited 546 participants through CloudResearch and excluded any participant who indicated they were not currently residing in the United States ($N = 2$), did not follow instructions of the writing task ($N = 18$), leaving a final sample size of 526 participants. Participants were 40.39 years old ($SD = 12.21$) on average, predominately white (76.43%) and male (52.09%). All participants accessed a Qualtrics survey through CloudResearch to complete the experiment. Data collection through CloudResearch began on 10/30/2020 and concluded on 11/2/2020. I selected this time frame because it was immediately prior to the 2020 presidential election when concerns related to impacts of the election results would have been salient. I measured activist intentions surrounding the election considering this timing, which is detailed further below.

B. Experimental Design

The study was a 2 (Future domain: Personal, Collective) X 3 (Future valence: Utopia, Dystopia, Control) between subjects experimental design, with future valence as the key independent variable and political orientation as a potential continuous mediating variable. Each participant completed a writing assignment for one of six prompts that followed the 2x3 design, which were randomly presented. They wrote about their personal or collective future, and a utopia-focused, dystopia-focused, or technology-focused (control) future. Each of the prompts I provided is detailed below as one of three prompts each in the personal or collective conditions.

C. Procedure

Recruitment language online specified that participants would be expected to write for two minutes, so all participants knowingly agreed to complete the writing task prior to

participation. Participants were not allowed to navigate forward on the page for the first two minutes of the task, to ensure they spent enough time detailing their response. Participants were able to move forward after two minutes or take more time, as desired, to finish their response. Next, participants completed manipulation checks to assess the extent to which they had written about their personal futures versus a collective future. After completing the manipulation checks, participants completed, in order, emotion ratings, harms and benefits of the presidential candidates, voting preferences, activist intentions, moral conviction measures, and ideology. I finally presented exploratory measures (including immediacy, likelihood, similarity of the imagined future and satisfaction with the present) before participants completed demographics questions and were debriefed.

3. Materials

a. Personal Future Conditions.

Participants saw the following message for the utopia-focused personal future writing prompt: “In this task, we would like you to imagine your personal future one year from now. What do you envision to be the best-case scenario? Please use your imagination and describe in as much detail as possible your thoughts and feelings about the best possible future you foresee for your personal future one year from now.”

Participants saw the following message for the dystopia-focused personal future writing prompt: “In this task, we would like you to imagine your personal future one year from now. What do you envision to be the worst-case scenario? Please use your imagination and describe in as much detail as possible your thoughts and feelings about the worst possible future you foresee for your personal future one year from now.”

Lastly for the personal prompts, participants saw the following message for the technology-focused (control) future writing prompt: “In this task, we would like you to imagine the future role of technology one year from now, in the context of your personal life. Please use your imagination and describe in as much detail as possible your thoughts and feelings about the role of technology in your personal life one year from now.”

b. Collective Future Conditions.

Participants saw the following message for the utopia-focused collective future writing prompt: “In this task, we would like you to imagine the future of the United States one year from now. What do you envision to be the best-case scenario? Please use your imagination and describe in as much detail as possible your thoughts and feelings about the best possible future you foresee for the United States one year from now.”

Participants saw the following message for the dystopia-focused collective future writing prompt: “In this task, we would like you to imagine the future of the United States. What do you envision to be the worst-case scenario? Please use your imagination and describe in as much detail as possible your thoughts and feelings about the worst possible future you foresee for the United States one year from now.”

Lastly for the collective prompts, participants saw the following message for the technology-focused (control) future writing prompt: “In this task, we would like you to imagine the future role of technology one year from now, in the context of American life. Please use your imagination and describe in as much detail as possible your thoughts and feelings about the role of technology in American life one year from now.”

D. Measures

1. Manipulation Check

To ensure participants were responding according to the prompt instructions, I included a manipulation check for whether participants engaged in thinking about personal vs collective futures. I asked participants: “When writing your thoughts about the future, to what extent were you thinking about how life would be in the U.S. in general versus your personal circumstances in particular?” They selected options “I was thinking mostly about my personal circumstances in particular” coded as 0 or “I was thinking mostly about life in the U.S. in general” coded as 1. As an additional manipulation check, all responses will be coded as to whether the content of the writing includes personal vs collective information, and dystopia-focused, utopia-focused, or technology-focused future outlooks and compared to the conditions participants were in.

2. Emotion Ratings

Participants completed emotion ratings for nine different categories of emotions, including disgust (disgust, grossed out, revulsion), worry (worry, anxiety, concern), sadness (sadness, unhappiness, blue), happiness (happiness, cheerfulness, joyful), hope (hope, optimism, aspiration), fear (fear, terror, threat), anger (anger, hostility, outrage), enthusiasm (enthusiasm, excitement, energetic), and pride (pride, achievement, honor). For each emotion presented, participants were asked: “When imagining the future you just described, to what extent do you feel the following emotions?” Response options available included 5 choices which were 1 not at all, a little, moderately, a lot, or 5 completely. Emotions were presented randomly. A Principal Components Analysis (PCA) revealed that the emotion items conformed to a two-factor structure when using either a varimax or an oblimin rotation: Positive emotions eigenvalue = 6.31 and negative emotions eigenvalue = 15.33 for both varimax and oblimin rotations. I therefore averaged the positive (Cronbach’s $\alpha = .97$) and negative emotion (Cronbach’s $\alpha = .98$) items

separately. I detailed results of the varimax rotation of the PCA in Appendix 1 of the Supplementary Materials.

3. Harms and Benefits

Participants indicated the degree to which they found a presidency for the 2020 Democratic and Republican candidates harmful or beneficial. They were asked both: “To what extent would a 2nd term presidency for Donald Trump be harmful or beneficial?” and “To what extent would a 1st term presidency for Joe Biden be harmful or beneficial?” Response options for each question included -3 extremely harmful, harmful, somewhat harmful, 0 neither harmful nor beneficial, somewhat beneficial, beneficial, or 3 extremely beneficial.

4. Voting Preferences

Voting preferences were assessed by a branching scale measure. Participants were first asked, “which candidate would you prefer win the 2020 presidential election on November 3rd?” with options Joe Biden, Donald Trump, Howie Hawkins, Jo Jorgensen, or Another candidate. For participants who chose options other than Joe Biden or Donald Trump, a second scale measure was presented that asked, “if you had to choose one candidate between the Democratic and Republican nominees, who would it be?” with options Joe Biden, Donald Trump, or Neither.

5. Activist Intentions

I measured activist intentions by asking participants their willingness to engage in several behaviors aimed at helping their preferred candidate get elected. These measures were adapted from those used by Skitka, Wisneski, and Hanson (2017). Participants were asked “how willing are you to engage in the following activist behaviors in support of your preferred presidential candidate?” Behaviors included: “sign a petition,” “attend a rally or political event,” “place a sign in my yard or window,” “write post cards or engage in other effort to encourage voter

turnout”, “wear clothing or apparel that promotes their campaign”, “volunteer for phone banking”, “campaign door-to-door,” “share campaign messages in my social media, email or text potential voters about campaign issues,” “donate a small sum to a campaign or campaigns,” and “donate a large sum to a campaign or campaigns.” For each behavior, participants rated their willingness to engage with response options 1 not at all willing, slightly willing, moderately willing, or 4 very willing. All items were presented randomly, and $\alpha = .94$.

6. Moral Conviction

Moral conviction was assessed for both the preferred and non-preferred candidate of each participant. For preferred candidates vs non-preferred candidates, respectively, participants were prompted with “to what extent is your support of your preferred presidential candidate for the 2020 election:” and “to what extent is your opposition of your non-preferred presidential candidate for the 2020 election:”. Questions for both prompts included “a reflection of your core moral beliefs and convictions,” “connected to your beliefs about fundamental right and wrong,” based on a moral principal,” and “a moral stance?” For each question, participants rated their agreement with response options 1 not at all, slightly, moderately, much, or 5 very much. All questions were presented randomly after each preferred and non-preferred candidate prompt, $\alpha = .96$ for preferred candidate, and $\alpha = .96$ for non-preferred candidate.

7. Political Orientation

Participants completed a branching political orientation measure to assess which political orientation most closely fit participants who were independent or undecided. We first asked participants whether they generally think of themselves as liberal, conservative, or something else. Participants who selected liberal or conservative were branched to an item that asked how strongly they identified as liberal or conservative with options of slightly strong, moderately

strong, or very strong. Participants who selected something else were branched to an item that asked, if they had to say, would they lean more towards being a liberal, conservative, or neither with options of slightly liberal, slightly conservative, or neither. Participants who responded “neither” were set at 0, with those who said they lean slightly liberal or slightly conservative representing -1 and 1 on the scale, respectively. This full item was then scaled from -4 (very strong liberal) to +4 (very strong conservative).

8. Exploratory Measures

I included exploratory measures at the end of the experiment, which first included asking participants about their perceived immediacy, likelihood, and similarity of the future they had just imagined, relative to the present. I then adapted Diener et al.’s (1985) Satisfaction with Life Scale to instead ask about satisfaction with the present from both a collective and personal perspective.

a. Immediacy.

We asked participants “how distant or close in time do you feel to the future you just imagined” with response options on a 7-point scale including -3 very distant, distant, a little distant, 0 neither distant nor close, a little close, close, or 3 very close. We then asked, “how far or near in time do you feel to the future you just imagined” with response options on a 7-point scale including 3 very far, far, a little far, 0 neither far nor near, a little near, near, or -3 very near. These questions were randomly presented.

b. Likelihood.

I asked participants “how likely or unlikely do you think the future you just imagined would become a reality” with response options on a 7-point scale including -3 very unlikely, unlikely, a little unlikely, 0 neither unlikely nor likely, a little likely, likely, or 3 very likely. We

then asked, “how real or unreal did you feel the future you just imagined is” with response options on a 7-point scale including -3 very unreal, unreal, a little unreal, 0 neither unreal nor real, a little real, real, or 3 very real. These questions were randomly presented.

c. Similarity.

I asked participants “how different or similar is the future you imagined to the present” with response options on a 7-point scale including -3 very different, different, a little different, 0 neither different nor similar, a little similar, similar, or 3 very similar. We then asked, “how inconsistent or consistent is the future you imagined to the present” with response options on a 7-point scale including -3 very inconsistent, inconsistent, a little inconsistent, 0 neither inconsistent nor consistent, a little consistent, consistent, or 3 very consistent. These questions were randomly presented.

d. Satisfaction with the present.

Participants rated the extent to which they agreed or disagreed with a series of statements aimed at assessing their satisfaction with either their current personal lives, or their current collective lives. For personal dissatisfaction with the present, $\alpha = .12$, and for collective dissatisfaction with the present, $\alpha = .09$. Because the reliability of these measures is poor, and the variables are not central to our hypotheses, we did not conduct any exploratory analyses with the satisfaction with the present measures. See Appendix 1 in the Supplemental Materials for more detailed information about the measures we used.

9. Attention Checks

I included two attention checks in the study. Analyses were conducted both including and excluding participants who fail both attention checks to assess any issues with data quality on results.² The first attention check was included in the collective version of the dissatisfaction

with the present scale. I prompted participants “this survey asked me about my music preferences” with response options mirroring the other prompts in the scale, with 7-point scale options including -3 strongly disagree, disagree, somewhat disagree, 0 neither agree nor disagree, somewhat agree, agree, or 3 strongly disagree. Participants who selected answers other than 0 or 1, strongly disagree or disagree, failed this check. The second attention check was included at the end of the demographics section. We asked participants “what is your favorite movie” with response options somewhat, very much, extremely, or a fill-in answer for the movie title. Participants who selected any answer other than the movie title response box failed this check.

VIII. STUDY 2 RESULTS

A. Manipulation Checks and Exclusions

Before turning to coding of participant responses, I first analyzed the manipulation check that asked participants whether they wrote about a personal future versus a collective future. A two-proportioned Z-test revealed that participants in the personal future condition (71.15%) were more likely to report having thought about a personal future than a collective future, whereas participants in a collective future condition (95.49%) were more likely to report having thought about a collective future compared to a personal future, $Z = 7.39$, $p < .001$.

I then tested whether the experimental manipulation that instructed participants to adopt different outlooks worked as expected before turning to hypothesis tests. I coded participant responses to identify those who did and did not follow instructions for the writing task. I identified participants whose responses were either grammatically incoherent or off-task for the writing prompt first, $N = 18$. As an additional manipulation check, I coded participant responses as to whether their writing was reflective of a utopian outcome, a dystopian outcome, or a future related to technology. I rated the first 57 participants' responses blind to condition along with a colleague. Interrater reliability between both coders for outlook type was $\kappa = .95$, $p < .001$. I then coded the rest of the responses independently because of high agreement for outlook type coding.³

Similar to Study 1, manipulations of utopian and dystopian outlooks tended to work. Two proportion Z-tests revealed that those in the utopian condition (96.00%) were more likely to write about a utopian outcome compared to those in the control condition (2.20%), $Z = 17.60$, p

3. I completed additional coding of message content related to whether participants wrote about personal or collective futures, and what themes were discussed in responses. These findings are included in Supplementary Materials, Appendix 4.

< .001, and those in the dystopian condition (98.24%) were also more likely to write about a dystopian outcome than those in the control condition (1.68%), $Z = 17.99$, $p < .001$. Results additionally revealed that those in the control condition were equally likely to write about a utopian future (1.71%) compared to a dystopian future (0.00%), $Z = 1.13$, $p = .26$, and that participants in the control condition were more likely to write about a technology-related, control, future (96.13%) compared to a utopian-related future, $Z = 17.71$, $p = .001$.

B. Preliminary Test of Hypotheses

To first assess the relationship between variables, I ran correlations between the condition types and outcomes of interest. I coded outlook conditions using dummy coding, with the control outlook condition set as the reference variable. As seen in Table 2, and contrary to hypotheses, utopian ($M = 1.81$, $SD = 0.83$) and dystopian ($M = 1.87$, $SD = 0.84$) outlooks, relative to a control outlook ($M = 1.90$, $SD = 0.84$), did not predict activist intentions. However, stronger negative emotions and positive emotions in response to thinking about imagined futures, and greater perceived benefits of preferred and (to a lesser degree) nonpreferred candidates predicted stronger endorsement of activist intentions. Whereas utopian outlooks ($M = 3.29$, $SD = 0.99$) predicted stronger positive emotion compared to control outlooks ($M = 2.67$, $SD = 1.03$), dystopian outlooks ($M = 1.56$, $SD = 0.90$) predicted weaker positive emotions compared to control outlooks. Additionally, although dystopian outlooks ($M = 3.36$, $SD = 1.02$) predicted stronger negative emotions compared to control outlooks ($M = 1.70$, $SD = 0.91$), utopian outlooks ($M = 1.61$, $SD = 0.78$) did not differ from control outlooks in predicting negative emotions.

TABLE III.

MEANS, STANDARD DEVIATIONS, AND CORRELATIONS OF ACTIVIST INTENTIONS, UTOPIAN AND DYSTOPIAN OUTLOOKS, POLITICAL ORIENTATION, NEGATIVE EMOTION, POSITIVE EMOTION, AND HARMS AND BENEFITS OF NONPREFERRED AND PREFERRED PRESIDENTIAL CANDIDATES.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Activist Intentions	1.86	0.83							
2. Utopian vs. Control Outlook	0.33	0.47	-.04						
3. Dystopian vs. Control Outlook	0.32	0.47	.01	-.49***					
4. Political Orientation	-0.39	2.88	-.06	.05	-.04				
5. Negative Emotion	2.21	1.21	.21***	-.35***	.66***	.04			
6. Positive Emotion	2.52	1.21	.18***	.45***	-.55***	.15***	-.49***		
7. Harms/Benefits of Nonpreferred	-2.09	1.36	.14**	-.04	-.01	.30***	.15**	.18**	
8. Harms/Benefits of Preferred	1.78	1.24	.30***	.01	-.03	-.08	.03	.09*	-.28***

Note. Positive values of harms and benefits indicate greater benefit of a candidate whereas negative values indicate greater harm of that candidate. Positive values of political orientation indicate greater conservatism whereas negative values indicate greater liberalism.

* $p < .05$, ** $p < .01$, *** $p < .001$.

In line with Study 1, these results did not support either the dual motives hypothesis or dystopian motives hypothesis, which predicted that thinking about either dystopian or utopian futures, compared to control futures, would lead to stronger intentions to engage in activism, or that thinking about dystopian futures, compared to both utopian and control futures, would lead to stronger intentions to engage in activism. Before turning to moderated mediational analyses

for both utopian and dystopian models for Study 2, I additionally tested whether political orientation and outlook conditions interacted to have effects on activist intentions to test political orientation hypotheses.

C. Were there Differences as a Function of Outlook Condition Type and Political Orientation on Activist Intentions?

As a test of the political orientation hypotheses, I regressed the interaction of political orientation and dummy-coded outlook condition onto activist intentions. The interaction of utopian vs. control condition and political orientation on activist intentions revealed no effects, $\beta = 0.01$, $CI = [-0.05, 0.07]$. The interaction of dystopian vs. control condition and political orientation was significant, $\beta = 0.06$, $CI = [0.001, 0.12]$, however, the simple slopes analysis revealed there were not significant simple slopes of political orientation on activist intentions for either dystopian outlooks, $\beta = 0.03$, $p = 0.18$, or control outlooks, $\beta = -0.03$, $p = 0.11$. These findings, in line with Study 1, offer partial support for the political orientation symmetry hypothesis given there were no differences in the effect of the outlook condition type on activist intentions as a function of whether participants identified as liberal or conservative.

D. Mediation Analyses

Two separate mediational models were run: One model tested the relationship between a utopian outlook, relative to a technology-related control outlook, and activist intentions, whereas the other model tested the relationship between a dystopian outlook, relative to a technology-related control outlook, and activist intentions. I analyzed both the utopian and dystopian models with mediators of positive emotions, negative emotions⁴, harms and benefits of preferred and non-preferred candidates, and a moderator of political orientation for the ‘a’ and ‘b’ pathways.

1. Utopian Outlook Moderated Mediational Model

The final utopian outlook model included a utopian outlook vector set against a control outlook as the predictor variable (a dystopian outlook vector was set as a covariate) using PROCESS model 21 with 5,000 bootstrapped samples, see Figure 3 (Preacher & Hayes, 2008). Pathways that did not successfully mediate the relationship between utopian vs. control outlooks on activist intentions, and were thus not moderated by political orientation, include negative emotion, $\beta = -0.07$, $CI = [-0.26, 0.11]$, harms and benefits of a preferred candidate, $\beta = -0.0009$, $CI = [-0.18, 0.18]$, and harms and benefits of a non-preferred candidate, $\beta = -0.02$, $CI = [-0.11, 0.05]$.

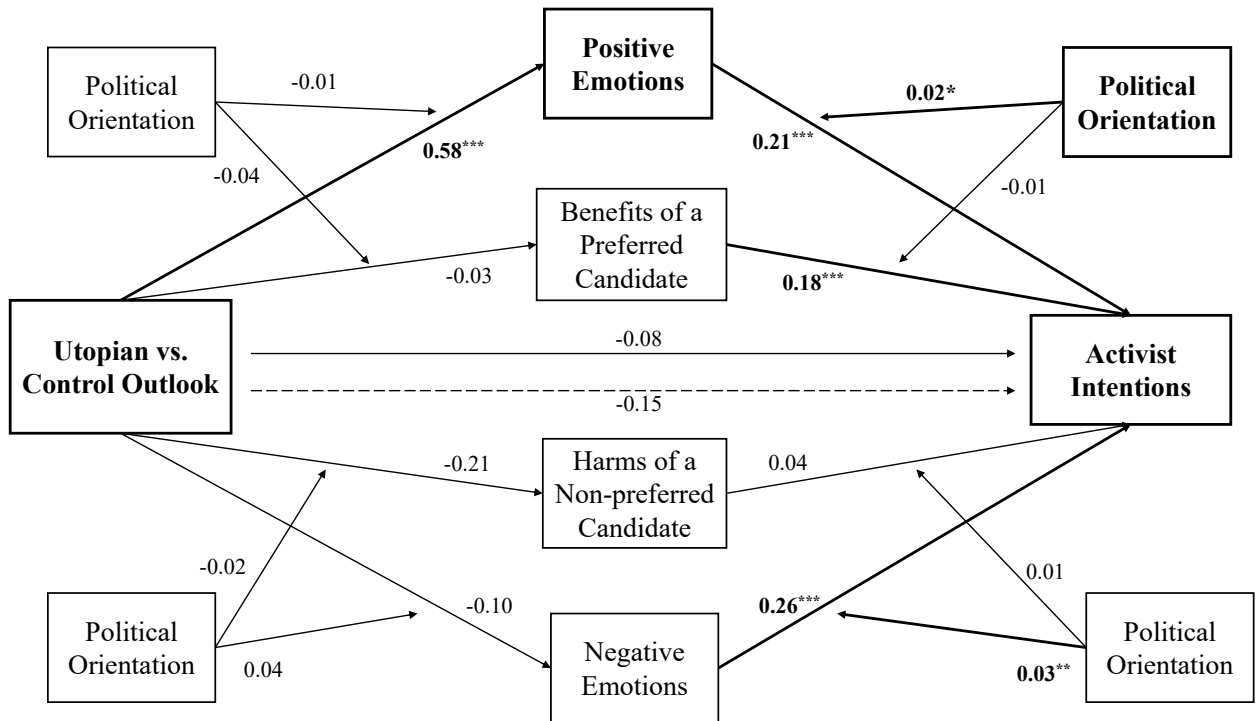


Figure 3. Moderated Mediation Results of Relationship between Utopian vs. Control Outlook, Positive Emotions, Harms of a Non-preferred Candidate, Benefits of a Preferred Candidate, Political Orientation, and Activist Intentions.

Note. Bolded lines and beta values indicate significant pathways. The dotted line indicates the c' pathway. Utopia is set as a vector against dystopia and control, the dystopia vector is a covariate in the model.

* $p < .05$, ** $p < .01$, *** $p < .001$.

In support of the dual motives hypothesis, there was a positive indirect effect where participants in the utopian outlook condition reported stronger positive emotions than those in the control outlook condition, which in turn predicted stronger activist intentions. Political orientation moderated the effects of positive emotions on activist intentions (see Figure 4). The indirect effect of the utopian vs. control condition on activist intentions through stronger positive emotions was stronger for conservatives, $\beta = 0.14$, $CI = [0.06, 0.24]$, than it was for liberals, $\beta = 0.08$, $CI = [0.01, 0.17]$. Conservatives with a utopian, compared to control, outlook endorsed stronger activist intentions when they felt stronger positive emotions to a greater extent than liberals. These findings are the opposite of what was predicted by the ideological asymmetry hypothesis given conservatives', and not to liberals', endorsement of activist intentions was more affected by a utopian outlook and stronger positive emotions.

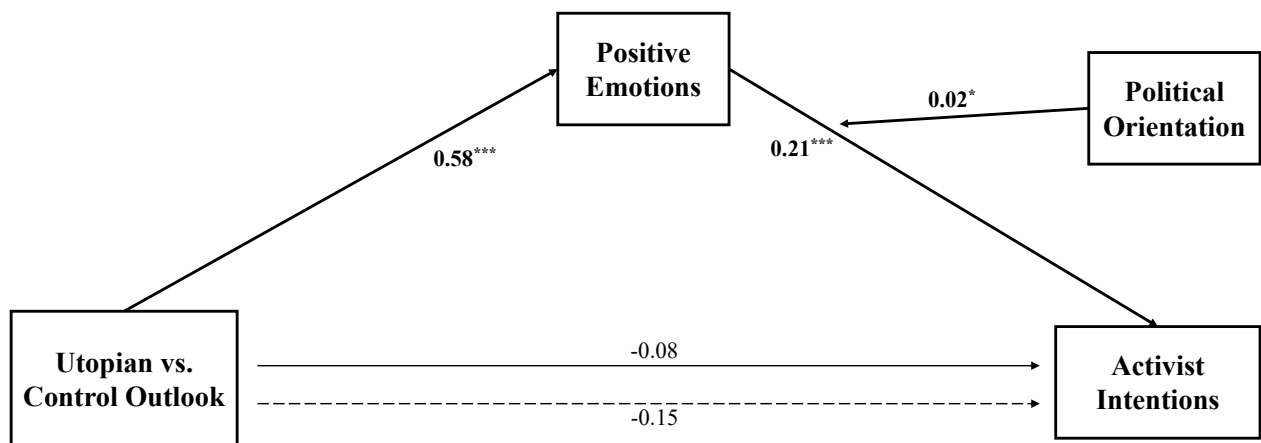


Figure 4. Moderated Mediation Results from Figure 3 Retaining Only Significant Pathways

* $p < .05$, ** $p < .01$, *** $p < .001$.

2. Dystopian Outlook Moderated Mediation Model

The final dystopian outlook model included a dystopian outlook vector set against a control outlook as the predictor variable (a utopian outlook vector was set as a covariate) using PROCESS model 21 with 5,000 bootstrapped samples, see Figure 5 (Preacher & Haynes, 2008). Pathways that did not successfully mediate the relationship between utopian vs. control outlooks

on activist intentions, and were thus not moderated by political orientation, include harms and benefits of a preferred candidate, $\beta = -0.06$, $CI = [-0.25, 0.11]$, and harms and benefits of a non-preferred candidate, $\beta = -0.02$, $CI = [-0.09, 0.05]$.

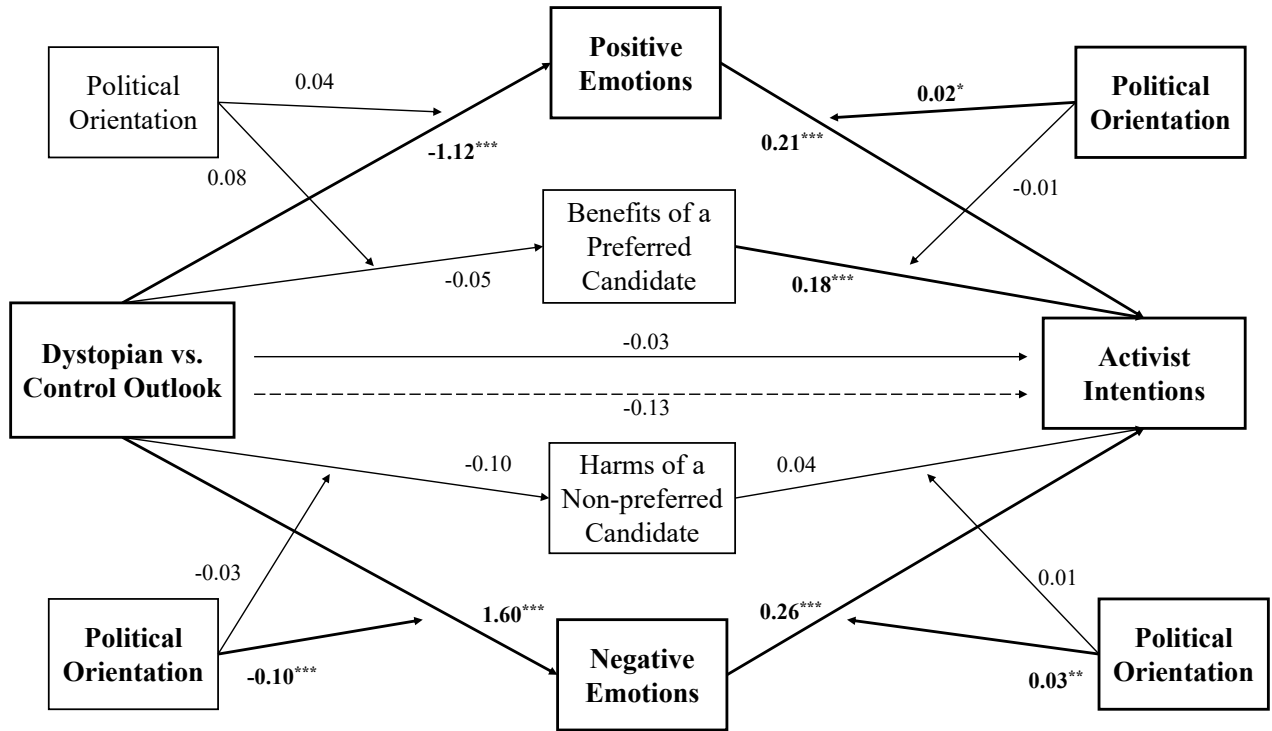


Figure 5. Moderated Mediation Results of Relationship between Dystopian vs. Control Outlook, Negative Emotions, Positive Emotions, Harms of a Non-preferred Candidate, Benefits of a Preferred Candidate, Political Orientation, and Activist Intentions.

Note. Bolded lines and beta values indicate significant pathways. The dotted line indicates the c' pathway. Dystopia is set as a vector against utopia and control, the utopia vector is a covariate in the model.

* $p < .05$, ** $p < .01$, *** $p < .001$.

a. Positive emotion.

There was a negative indirect effect of dystopian outlook on activist intentions through positive emotions; participants in the dystopian outlook condition reported weaker positive emotions than those in the control outlook condition, which in turn predicted stronger activist intentions (see Figure 6). Political orientation also moderated the effects of positive emotions on

activist intentions. The indirect effect of the dystopian vs. control condition on activist intentions through weaker positive emotions was stronger for conservatives, $\beta = -0.27$, $CI = [-0.41, -0.16]$, than it was for liberals, $\beta = -0.17$, $CI = [-0.30, -0.03]$. Conservatives with a dystopian, compared to control, outlook endorsed weaker activist intentions when they felt weaker positive emotions to a greater extent than liberals. These findings offered some support for the ideological asymmetry hypothesis given conservatives' endorsement of activist intentions was more affected by a dystopian outlook and weaker positive emotions than liberals' was.

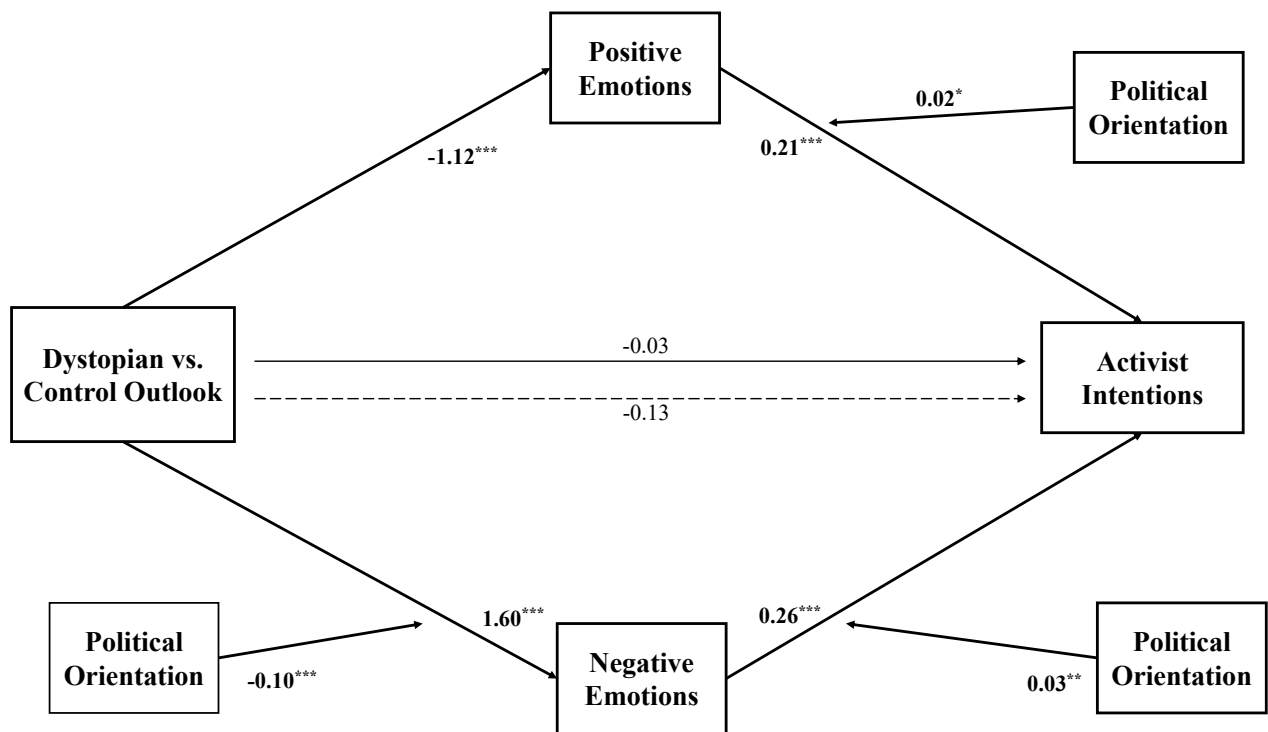


Figure 6. Moderated Mediation Results from Figure 5 Retaining Only Significant Pathways
 * $p < .05$, ** $p < .01$, *** $p < .001$.

b. Negative emotion.

As can be seen in Figure 6, there was also a positive indirect effect of dystopian (vs. control) outlook on activist intentions through negative emotions. Participants in the dystopian outlook condition reported stronger negative emotions than those in the control condition, which

in turn predicted stronger activist intentions. Political orientation moderated the relationship between dystopian vs. control outlook and negative emotions, and the relationship between negative emotions and activist intentions in this model. The indirect pathway from the dystopian vs. control condition on activist intentions through stronger negative emotion was stronger for conservatives, $\beta = 0.47$, $CI = [0.31, 0.66]$, than liberals $\beta = 0.29$, $CI = [0.08, 0.49]$. Conservatives with a dystopian, compared to control, outlook endorsed stronger activist intentions when they felt stronger negative emotions to a greater extent than liberals.

Results of both models best supported the dual motives hypothesis, which predicted that prescriptive and proscriptive motivations (i.e., utopian and dystopian outlooks) would both predict stronger endorsement of activist intentions compared to a control outlook, and were inconsistent with the dystopian motives hypothesis, which predicted that proscriptive motivations alone would predict stronger activist intentions. Results offered partial support for the political orientation asymmetry hypotheses because political orientation moderated the emotional pathway in the utopian model opposite to what the hypothesis predicted but did moderate pathways in the dystopian model in line with predictions.

E. Exploratory Analyses

Given previous work by Shrikanth, Szpunar, and Szpunar (2018), I tested the relationship between collective and personal future outlooks on activist intentions. It is plausible that personal and collective futures have different effects on activist intentions based on emotion, because people tend to be negatively biased about collective futures and positively biased about personal futures. To test whether future outlook conditions had any effect on activist intentions based on whether participants wrote about personal or collective futures, I ran 2 x 3 ANOVAs. Personal vs. collective futures were the levels for the first variable and utopia vs. dystopia vs. control

outlooks were the levels for the second variable, which predicted activist intentions. Analyses revealed there were no main effects of either future outlook condition or personal vs. collective future on activist intentions (see Table 4). There was no interaction of future outlook and personal vs. collective future on activist intentions.

TABLE IV.

TWO-WAY ANOVA RESULTS OF PERSONAL VS. COLLECTIVE FUTURE AND OUTLOOK CONDITION FOR ACTIVIST INTENTIONS, POSITIVE EMOTIONS, AND NEGATIVE EMOTIONS.

Predictors	<i>df 1</i>	<i>df 2</i>	Activist Intentions			Positive Emotion			Negative Emotion		
			<i>F</i>	<i>p</i>	η^2	<i>F</i>	<i>p</i>	η^2	<i>F</i>	<i>p</i>	η^2
Personal vs. Collective	1	520	1.34	.25	< .01	4.93	.03	.01	12.55	< .001	.02
Outlook Condition	2	520	0.48	.62	< .01	139.49	< .001	.38	207.65	< .001	.44
Personal vs. Collective x Outlook Condition	2	520	1.52	.22	.01	0.68	.51	< .01	0.51	.26	< .01

Note. Significant findings are bolded.

I additionally tested whether the 2 x 3 ANOVA comparing different personal vs. collective futures and utopian vs. dystopian vs. control outlooks had effects on positive and negative emotions (see Table 4). Tukey-corrected pairwise comparisons revealed that those in the personal future condition ($M = 2.60$, $SD = 1.25$) felt stronger positive emotions than those in the collective future condition ($M = 2.43$, $SD = 1.16$), a finding that was not moderated by the outlook condition (i.e., whether participants were thinking about a utopian, dystopian, or technological future), $t(520) = 2.22$, $p = .03$. This finding is in line with previous work that suggests people tend to feel more positively about personal futures than collective futures. Those in the collective future condition ($M = 2.33$, $SD = 1.26$) also felt stronger negative emotions than

those in the personal future condition ($M = 2.08$, $SD = 1.14$), an effect that was again not moderated by what kind of future condition participants were imagining, $t(520) = -3.54$, $p < .001$. This finding again supports previous literature which suggest people tend to feel more negatively about collective, compared to personal, futures.

These exploratory findings replicated previous research, and additionally show that the future outlook conditions of utopia and dystopia were sufficiently strong on their own to affect positive and negative emotions. Despite a general tendency for people to feel positively about a personal future and negatively about a collective future, adopting a utopian or dystopian future outlook separately predicted emotional outcomes. Given there was no interaction of personal vs. collective futures and outlook condition type, I can conclude that observed effects for outlook conditions on positive and negative emotions were not influenced by whether participants thought about either a personal or collective future.

IX. STUDY 2 DISCUSSION

The results of Study 2 yielded partial support for the dual motives hypothesis and were inconsistent with the dystopian motives hypothesis; both utopian and dystopian outlooks predicted stronger activist intentions than a control outlook when mediated by either positive or negative emotional pathways, respectively. In other words, whereas neither utopian nor dystopian outlooks predicted stronger activist intentions than a control outlook through direct effects, they did through the indirect effects of emotion pathways.

Findings offered mixed support for both the political orientation symmetry hypothesis and the political orientation asymmetry hypothesis. Although political orientation did not directly moderate the relationship between outlook type and activist intentions, when comparing the utopian vs. control conditions, there was a stronger effect of the positive emotion pathway for conservatives compared to liberals, and when comparing the dystopian vs. control outlook conditions, there was a stronger effect of the negative emotion pathway for conservatives compared to liberals. Whereas the latter findings are in-line with the political orientation asymmetry hypothesis, the former findings contradict it. I will discuss these surprising findings in more depth in the General Discussion.

X. GENERAL DISCUSSION

I conducted two studies in this thesis that were designed to test hypotheses related to motivational and political orientation differences that could drive political engagement. In terms of motivational main effects, the dual motives hypothesis predicted that both prescriptive and proscriptive outlooks would motivate political engagement more than a control outlook. The dystopian motives hypothesis predicted that proscriptive outlooks would motivate political engagement more than a prescriptive or control outlook.

Study 1 tested these hypotheses in the context of the Black and Blue Lives Matter movements and did not find evidence that supported either the dual motives hypothesis or the dystopian motives hypothesis, given there was no direct or indirect effect found for either prescriptive or proscriptive outlooks over control outlooks on political engagement. Study 2 that tested hypotheses in the context of the U.S. 2020 election, however, did find partial support for the dual motive hypothesis. Although neither prescriptive nor proscriptive outlooks predicted stronger activist intentions than a control outlook through direct effects, there were indirect effects for both prescriptive and proscriptive outlooks, compared to control outlooks, on political engagement through emotional pathways. In line with predictions of dual motives hypothesis, prescriptive outlooks predicted stronger activist intention than control outlooks through positive emotions, and proscriptive outlooks predicted stronger activist intentions than control outlooks through negative emotions.

The political orientation symmetry hypothesis predicted similar effects of prescriptive and proscriptive outlooks, regardless of whether the perceiver was liberal or conservative, and that both outlooks would predict stronger activist intentions than the control condition. In contrast, the political orientation asymmetry hypothesis predicted that prescriptive outlooks

would result in greater motivation for political engagement for liberals than conservatives, whereas proscriptive outlooks would result in greater motivation for political engagement for conservatives than liberals. The results of Study 1 were more consistent with the political orientation symmetry hypothesis than the political orientation asymmetry hypothesis given there was no moderation of political orientation on the relationship between motivational outlook and political engagement in the context of the Black and Blue Lives Matter movements. That said, because there were no direct or indirect effects of motivational outlook on political engagement, support for the political symmetry hypothesis is limited. In other words, the political orientation symmetry hypothesis predicted that pre- and proscriptive mindsets would both motivate political engagement more than control mindset, and equally for both liberals and conservatives. Instead, the results of Study 1 found no mindset effects or effects of political orientation on political engagement in the context of the Black Lives and Blue Lives Matters movements.

The results of Study 2 in the context of the 2020 Presidential Election offered partial support for the political orientation asymmetry hypothesis; political orientation moderated the relationship between proscriptive vs. control outlooks in line with predictions, such that conservatives were more strongly motivated than liberals to be politically engaged through the indirect effects of negative emotions. However, contrary to this hypothesis, political orientation moderated the relationship between prescriptive vs. control outlooks such that conservatives were also more strongly motivated than liberals to be politically engaged through the indirect effects of positive emotions, a finding opposite to what was predicted. Given this unexpected finding and the lack of direct effects of motivational frame on political engagement, the political orientation asymmetry hypothesis was also not fully supported in Study 2.

These results have important implications for theories underpinning this work, that is, moral motives theory and motivated cognition theory (Janoff-Bulman, Sheik, & Hepp, 2009; Jost et al., 2003). The findings across Studies 1 and 2 were mixed, and subsequently support for both theories was mixed. There were no differences based on motivational outlooks in Study 1, however Study 2 revealed that people found both prescriptive and proscriptive aims to be motivating, a finding that supports ideas put forth by the moral motives theory. At least in the context of the 2020 presidential election, the extent to which people sought to avoid bad outcomes and pursue good outcomes were both factors in subsequent political engagement, suggesting there was not a strong negativity bias. Moral motives theory predicts that avoiding negative outcomes is psychologically stronger than approaching good outcomes, however, this pattern does not hold in the present context.

Although there was no support for political orientation differences in Study 1, there was in Study 2. Both moral motives theory and motivated cognition theory predict that proscriptive, fear-based frames would motivate conservatives more than liberals, whereas prescriptive, hope-based frames would motivate liberals more than conservatives. The finding that conservatives were more sensitive than liberals to proscriptive frames through negative emotions is consistent with these predictions. However, the finding that conservatives were also more sensitive than liberals to prescriptive frames through positive emotions is inconsistent with moral motives theory and motivated cognition and is the opposite of what was expected from either perspective. Given the difference in findings between Studies 1 and 2, it is difficult to draw strong conclusions about implications for the literature. This work largely failed to support both moral motives and motivated cognition theories; however, the findings in Study 2 does offer partial support for both theories because it did reveal political orientation differences as a

function of motivational frames and supported moral motives theories' predictions about motivational effects of those frames—just not entirely in a pattern consistent with the theory.

The present work suggests that emotions play a key role in bridging the gap in the relationship between motivational mindsets and political engagement, and political orientation may affect this relationship as well. Emotions were especially salient in the context of Study 2 and were mediators of the effects of both prescriptive and proscriptive outlooks on engagement. In light of these results, stronger tests of both emotional and cognitive pathways between these constructs are warranted. Because there were no assessments of cognition or beliefs related to the political outcomes in Study 1 and a single measure, which measured the extent to which presidential candidates were perceived to be harmful or beneficial, in Study 2, it is difficult to draw conclusions about cognitive pathways as well. Even so, emotion, rather than cognition, seems to be central to motivating political engagement in the present work, particularly for conservatives.

Conservatives' sensitivity to emotional effects of both prescriptive and proscriptive outlooks on political engagement is a surprising finding given past literature. One potential explanation could simply be that the 2020 election is a specific context where conservatives were more emotionally engaged or needed more emotional investment to become engaged. The Because the Republican Trump administration had been in power for the previous term, it could be that conservatives felt there was a status quo to protect vs. liberals who had already experienced the Trump administration and were potentially already living their worst-case scenarios. Additionally, liberals may have been experiencing compassion fatigue related to social issues given the constant reporting of negative information related to the Trump administration (Kinnick et al., 1996). If this is the case, then liberals may have had less emotional capacity to

motivate their engagement. Even so, the emotional pathway was still present for liberals for both prescriptive and proscriptive outlooks, but these reasons may point to why this pathway was not as strong as it was for conservatives.

It may also simply be that the specific contexts of Study 1 and Study 2 resulted in differences on the basis of these contexts themselves. Prescriptive and proscriptive motivations might have been less salient for the Black Lives Matter protests (and the counter movement of Blue Lives Matter) in Study 1 compared to the 2020 presidential election in Study 2. Conservatives may have, overall, been less likely to become politically engaged than liberals in Study 1, or other conservatives in Study 2, given that Blue Lives Matter is a countermovement which does not organize political engagement to the same extent as Black Lives Matter or an election campaign.

Another important constraint is that both studies were conducted during the Covid-19 pandemic. Although the activist intentions measured in each study included items which could have been completed remotely, it is worth noting that participants' willingness to become engaged may have been suppressed due to anxieties surrounding public health concerns at the time both studies were conducted.

Beyond specific context-dependent explanations for the results of these studies, there are also methodological limitations that may help explain these results. One important distinction between Study 1 and Study 2 is the control condition used for the motivational outlook manipulation. Using a control condition in Study 2 that wasn't related to the same issue used for the manipulation conditions may have offered a cleaner comparison than the control condition in Study 1. More specifically, participants were still asked to think about the future of their preferred movement, but were not asked to think about that future in terms of best-case or worst-

case scenarios. Even without explicit language to prompt participants about positive or negative outcomes, participants were still very likely to write about positive outcomes related to their preferred movement in the control condition (48.18%) compared to those who wrote about negative futures (15.58%), or even neutral futures (34.06%), which could have impacted emotional responses and made it harder to distinguish any differences between the conditions.

The writing manipulation task may not have been strong enough in general to induce a prescriptive or proscriptive motivational outlook given the lack of direct effects in both Study 1 and Study 2. Half of participants were asked to think about their own personal futures while the other half of participants were asked to think about the future of the United States in Study 2. Despite this, only one third of participants (32.51%) discussed something related to the U.S. and upcoming election, meaning the majority of participants did not discuss the U.S. or election in their responses. It is still plausible that the election would have been salient for participants, even if they did not spontaneously write about it, however these findings may suggest that most participants were not as focused on the election at the time of the study, and a stronger manipulation that focused more specifically on the election may have yielded clearer findings. More explicit measurements and manipulation of prescriptive and proscriptive information related to political outcomes might also be warranted; prompts given to participants could have more directly asked about approaching good electoral outcomes or avoiding bad electoral outcomes.

Although there were methodological weaknesses present in these studies, there were also a number of methodological strengths. An important strength includes the experimental design. Whereas previous literature on the topic of prescriptive and proscriptive motivation and political engagement has relied on correlational methods, these studies used experimental methods to

understand the impact of either type of motivational outlook on political engagement. This work offers a more direct test of this relationship, and additionally uncovers some of the mechanisms that could explain the relationship between motivation, political orientation, and political engagement. Experimental findings offered some evidence that was consistent with previous correlational work, but also revealed some surprising outcomes as well. This approach allowed a view of the mechanisms underpinning the relationship between motivation and political engagement; whereas motivational frame only predicted emotional responses, emotion mediated the relationship between motivational frame on engagement. Cognition, surprisingly, did not play a role. Beyond this, emotion was more motivating for conservatives, regardless of whether they were adopting prescriptive or proscriptive outlooks, which is at-odds with previous literature.

Another strength of the current approach was that hypotheses were tested in the context of salient, real-world events at the time of both studies. Each study addressed political issues that were at the forefront of national attention at the time of data collection, and these timelines allowed for stronger tests of hypotheses given how relevant the specific issues addressed were at the time of participation. Results offered insight into how people become motivated and engaged for important social issues and can help offer a framework for testing these hypotheses for future political events. Given that participants were made to fill out free-response answers to the condition prompts, this research also produced a rich dataset that can highlight how the manipulations affected participants at a descriptive level. This data can offer a more detailed understanding of what people tend to think about in terms of best-case and worst-case scenarios when it comes to highly salient political issues.

The present research offers information that has implications for practical issues related to political engagement, namely pointing to what types of messaging is motivating for people across the political spectrum, and when that messaging is effective and ineffective. In terms of political messaging, results indicated that using both prescriptive and proscriptive frames are motivating for liberals and conservatives, at least when it comes to election-related behavior. Given that the present work indicated that conservatives and liberals were both sensitive to negative, avoidant motives and positive, approach-based motives, political figures trying to appeal to their respective parties in future elections may want to avoid limiting their messaging campaigns to only focus on negative or positive outcomes.

Future research should further illuminate the processes that lead people to become politically engaged. In the political contexts presently studied, the outcomes studied were tied to current events, that is, the Black Lives Matter protests and 2020 presidential election. It is less clear whether similar processes and effects would still apply for issues that are more temporally distant, because more psychologically distant future events typically rely on different information than more psychologically proximal future events (Lieberman & Trope, 2003). It is plausible that for people to be motivated to become politically engaged for an event that is more distant in time, for example, climate change, people may need to engage in different processes to sustain motivation. It is unclear whether the emotional reaction people had to the manipulation prompts in this study would be enough to motivate meaningful engagement on behalf of a longer-term issue, such as climate change. Given that people tend to have a harder time sustaining motivation for more distant outcomes, using manipulations or prompts that orient or focus people to more distant outcomes may elucidate whether the effects in this study can generalize to political issues with a different scale for engagement (Green, Fry, & Myerson,

1994). It is worth exploring whether prescriptive and proscriptive motives, and subsequent emotional and cognitive responses, would still motivate long-term engagement in future work.

Beyond exploring different timeframes for political engagement, understanding other variables that affect sensitivity to motivational frames is another meaningful area of future study. Past work has found that prescriptive and proscriptive emotions and cognitions mediate the relationship between moral conviction and political engagement, therefore, it is worth exploring whether moral conviction plays a role in the relationship between these motives and political engagement as well (Skitka, Hanson, & Wisneski, 2017). The degree to which people are high in moral conviction with respect to a given issue or cause (that is, they perceive that their position on an issue reflects their core moral beliefs about fundamental right and wrong) might play a role in their likelihood of becoming politically engaged. Previous work has explored robust ties between moral conviction and political engagement, and it stands to reason that moral conviction may heighten emotional and cognitive reactions to motivational frames in political contexts. Moral conviction may serve to explain part of the relationship between motivation and political engagement and is a critical area of future study in this topic.

XI. CONCLUSION

The present studies offer a deeper understanding of motivation and political ideology in relation to political engagement through experimental findings. Although results varied between studies, this may reflect potential differences in the specific contexts chosen for study. Some findings were consistent with previous correlational work that suggests that both prescriptive and proscriptive motivators are relevant to political issues, whereas other findings conflicted with previous work given that conservatives were more sensitive than liberals to both positive and negative outcomes, rather than just negative outcomes. Further exploration of these relationships in other political contexts, including contexts with a long timeframe for engagement, with other variables of interest, such as moral conviction, will be crucial to fully understand motivational underpinnings and mechanisms that lead to political engagement. The importance of both prescriptive and proscriptive frames when it comes to political engagement highlights the ubiquity of these fundamental motivations and offers insight into how we may approach the study of motivation and political engagement moving forward.

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APPENDICIES

Appendix 1

Study 1 Emotion Measures

I conducted a Principal Components Analysis (PCA), both with a varimax and oblimin rotations using SPSS version 27. Eigenvalues and the PCA components matrix agreed between both rotations, with positive emotions primarily loading onto component 1, and negative emotions primarily loading onto component 2. There were two additional components that loaded onto the factors with eigenvalues greater than 1 (component 3 = 1.38, component 4 = 1.21), however no factors had higher loadings on either components 3 or 4 compared to components 1 or 2. I will therefore only report components 1 and 2. I reported the varimax rotation with Kaiser normalization of component loadings to show maximized orthogonality between positive and negative emotional measures. All loadings that were less than .3 or negative are suppressed. The findings of factor loadings are detailed below on Table A1.

TABLE AI.

COMPONENT LOADINGS FROM PRINCIPAL COMPONENTS ANALYSIS FOR
POSITIVE AND NEGATIVE EMOTION MEASURES USING A VARIMAX ROTATION

Variable	Component 1: Positive emotion	Component 2: Negative emotion
Eigenvalue	8.00	7.13
% variance	29.64	26.39
Scared		.840
Afraid		.836
Frightened		.844
Anxious		.707
Nervous		.838
Jittery		.762
Despair		.629
Distressed		.552
Upset		.421
Irritable		.425
Angry		.330
Hostile		.357
Outraged		.312
Guilty		.337
Ashamed		.316
Hopeful	.785	
Optimistic	.790	
Enthusiastic	.847	
Excited	.790	
Interested	.718	
Strong	.748	
Determined	.724	
Inspired	.823	
Proud	.811	
Alert	.430	
Attentive	.561	
Active	.683	

Appendix 2

Study 2 Emotion Measures

I conducted a Principal Components Analysis (PCA), both with a varimax and oblimin rotations using SPSS version 27. Eigenvalues and the PCA components matrix agreed between both rotations, with negative emotions primarily loading onto component 1, and positive emotions primarily loading onto component 2. I reported the varimax rotation with Kaiser normalization of component loadings to show maximized orthogonality between positive and negative emotional measures. All loadings that were less than .3 or negative are suppressed. The findings of factor loadings are detailed below on Table A2.

TABLE AII.

COMPONENT LOADINGS FROM PRINCIPAL COMPONENTS ANALYSIS FOR
POSITIVE AND NEGATIVE EMOTION MEASURES USING A VARIMAX ROTATION

Variable	Component 1: Negative emotion	Component 2: Positive emotion
Eigenvalue	15.33	6.31
% variance	54.77	22.51
Disgust	.898	
Grossed out	.866	
Revulsion	.901	
Sickened	.894	
Worry	.575	
Anxiety	.610	
Concern	.560	
Sadness	.625	
Unhappiness	.661	
Blue	.688	
Fear	.665	
Terror	.804	
Threat	.746	
Anger	.835	
Hostility	.882	
Outrage	.913	
Happiness		.859
Cheerfulness		.869
Joyful		.898
Hope		.852
Optimism		.809
Aspiration		.840
Enthusiasm		.869
Excitement		.883
Energetic		.870
Pride		.870
Achievement		.863
Honor		.776

Satisfaction with the Present Measures

Participants rated the extent to which they agreed or disagreed with a series of statements aimed at assessing their satisfaction with either their current personal lives, or their current collective lives. For personal satisfaction, statements included: “In most ways, my current personal situation is close to my ideal,” “my current personal situation is excellent,” “I am dissatisfied with my current personal situation” (reverse scored), “I would change almost nothing about my current personal situation,” and “I feel angry when I think about my current personal situation” (reverse scored). Statements were randomly presented. Next, for collective satisfaction, statements included: “In most ways the current situation in the United States is close to my ideal,” “the current situation in the United States is excellent,” “I am dissatisfied with the current situation in the United States” (reverse scored), “I would change almost nothing about the current situation in the United States,” and “I feel angry when I think about the current situation in the United States” (reverse scored). Statements were again randomly presented. For both personal and collective satisfaction statements, participants rated their agreement or disagreement using the same 7-point scale options including strongly disagree, disagree, somewhat disagree, neither agree nor disagree, somewhat agree, agree, or strongly agree.

Appendix 3

Results of Study 1 With and Without Anger as a Discrete Emotion

TABLE AIII.

MEANS, STANDARD DEVIATIONS, AND CORRELATIONS OF ACTIVIST INTENTIONS, POLITICAL ORIENTATION, POSITIVE EMOTION, NEGATIVE EMOTIONS WITHOUT ANGER, AND ANGER.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Activist Intentions	4.31	1.56				
2. Political Orientation	0.59	5.35	-.23***			
3. Positive Emotion	6.11	1.84	.50***	-.05		
4. Negative Emotion without anger	4.06	1.88	.05	-.03	-.05	
5. Anger	4.32	2.14	.05	-.07	-.03	.75***

Note. Positive values of political orientation indicate greater conservatism whereas negative values indicate greater liberalism.

* $p < .05$. ** $p < .01$, *** $p < .001$.

TABLE AIV.

2-WAY ANOVA RESULTS OF OUTLOOK CONDITION AND MOVEMENT TYPE FOR
NEGATIVE EMOTIONS WITHOUT ANGER AND ANGER.

Predictors	df 1	df 2	Negative Emotions Without Anger			Anger		
			F	p	η^2	F	p	η^2
Movement Type	1	789	2.56	.11	.08	7.06	.008	< .01
Outlook Condition	2	789	8.76	< .001	.02	7.93	< .001	.02
Movement Type x Outlook Condition	2	789	0.01	.99	< .01	0.44	.64	< .01

Note. Significant findings are bolded.

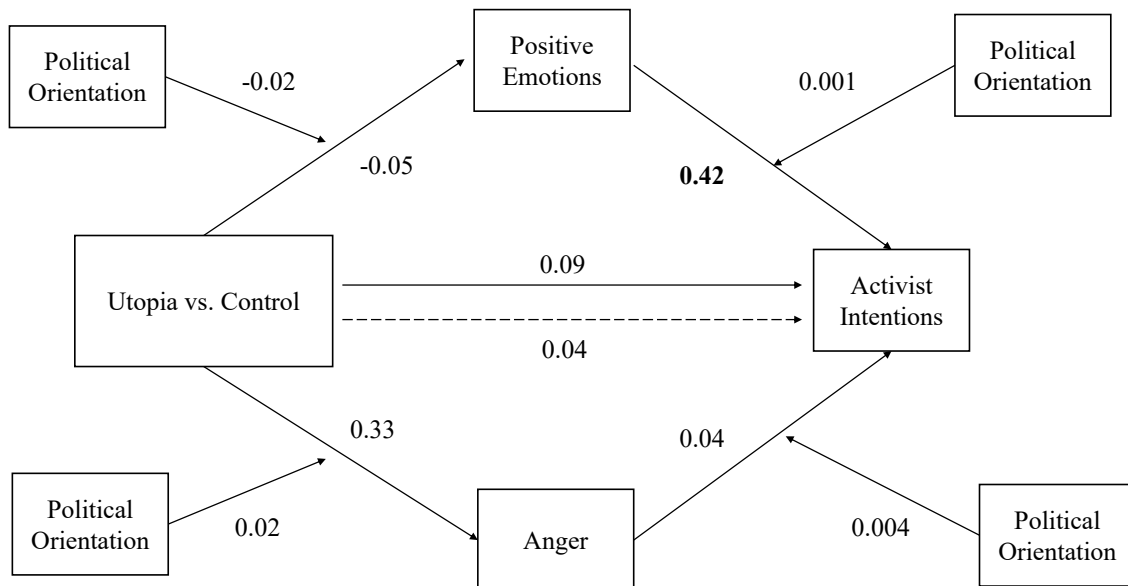


Figure A1. Mediation Results of the Relationship between Utopian vs. Control Outlooks, Positive Emotions, Anger, Political Orientation, and Activist Intentions.

Note. Bolded beta values indicate significant pathways. The dotted line indicates the c' pathway. Dystopia is set as a vector against utopia and control, the utopia vector is set as a covariate in the model.

* $p < .05$, ** $p < .01$, *** $p < .001$.

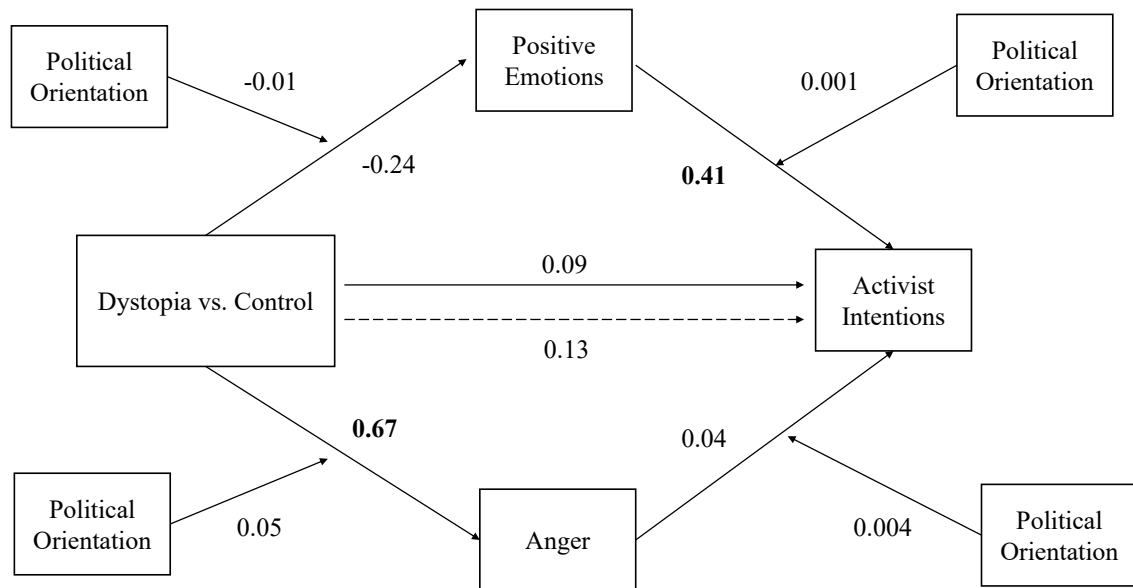


Figure A2. Mediation Results of the Relationship between Dystopian vs. Control Outlooks, Positive Emotions, Anger, Political Orientation, and Activist Intentions.
 Note. Bolded beta values indicate significant pathways. The dotted line indicates the c' pathway. Dystopia is set as a vector against utopia and control, the utopia vector is set as a covariate in the model.
 * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix 4

Additional Study 2 Coding Results

TABLE AV.

FREQUENCY OF MESSAGE CONTENT THEMES FOR CODED PARTICIPANT
RESPONSES FOR STUDY 2

Message Theme	Count	Frequency
Covid	104	19.77%
Election/US issues	90	16.11%
Covid and Election/US issues	81	15.40%
Personal	118	22.43%
Technology	133	25.29%
Total	526	100.00%

Results of Study 2 With and Without Anger as a Discrete Emotion

TABLE AVI.

MEANS, STANDARD DEVIATIONS, AND CORRELATIONS OF ACTIVIST INTENTIONS, UTOPIAN AND DYSTOPIAN OUTLOOKS, POLITICAL ORIENTATION, NEGATIVE EMOTION WITHOUT ANGER, ANGER, POSITIVE EMOTION, AND HARMS AND BENEFITS OF NONPREFERRED AND PREFERRED PRESIDENTIAL CANDIDATES.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Activist Intentions	1.86	0.83								
2. Utopian vs. Control Outlook	0.33	0.47	-.04							
3. Dystopian vs. Control Outlook	0.32	0.47	.01	-.49***						
4. Political Orientation	-0.39	2.88	-.06	.05	-.04					
5. Negative Emotion without anger	2.27	1.21	.20***	-.36***	.67***	.04				
6. Anger	1.97	1.24	.25***	-.30***	.56***	.05	.89***			
7. Positive Emotion	2.52	1.21	.18***	.45***	-.55***	.15***	-.51***	-.37***		
8. Harms/Benefits of Nonpreferred	-2.09	1.36	.14**	-.04	-.01	.30***	.16**	.19**	.21***	
9. Harms/Benefits of Preferred	1.78	1.24	.31***	.01	-.03	-.08	.01	.03	.09*	-.28**

Note. Positive values of harms and benefits indicate greater benefit of a candidate whereas negative values indicate greater harm of that candidate. Positive values of political orientation indicate greater conservatism whereas negative values indicate greater liberalism.

* $p < .05$, ** $p < .01$, *** $p < .001$.

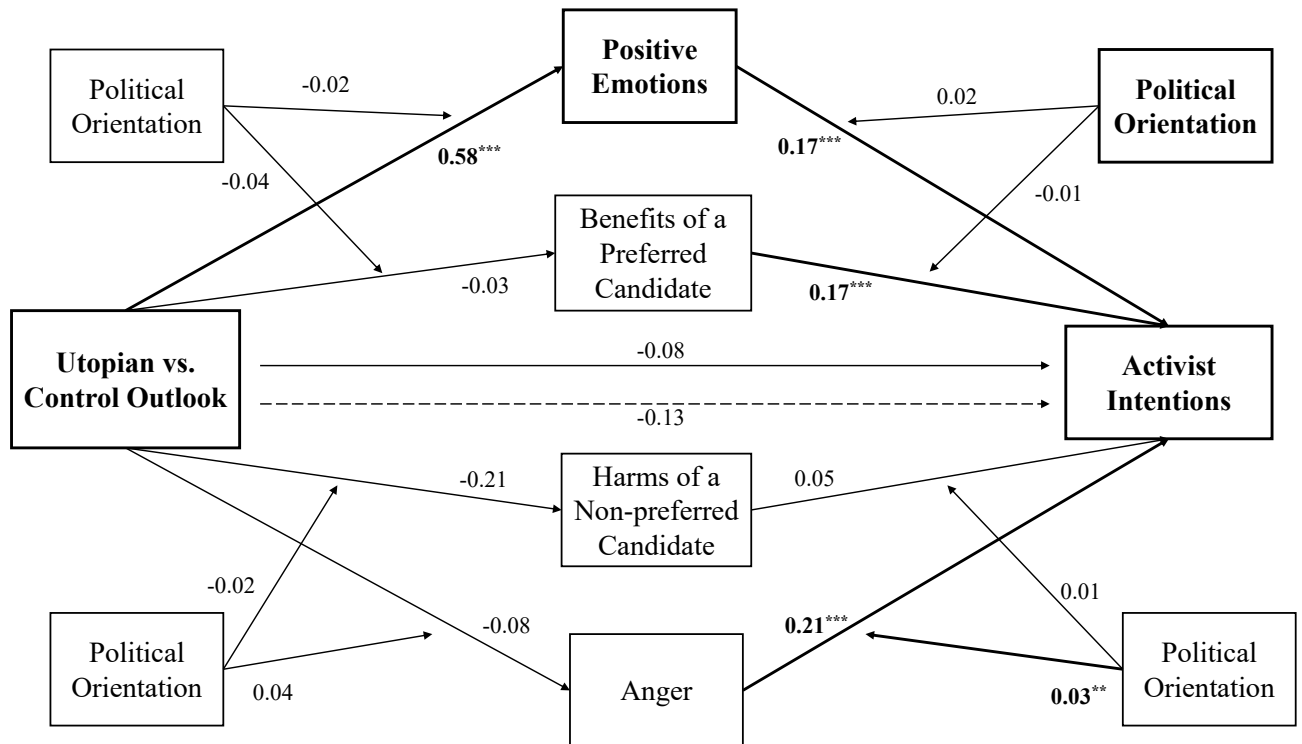


Figure A3. Moderated Mediation Results of Relationship between Utopian vs. Control Outlook, Positive Emotions, Anger, Harms of a Non-preferred Candidate, Benefits of a Preferred Candidate, Political Orientation, and Activist Intentions.

Note. Bolded lines and beta values indicate significant pathways. The dotted line indicates the c' pathway. Utopia is set as a vector against dystopia and control, the dystopia vector is a covariate in the model.

* $p < .05$, ** $p < .01$, *** $p < .001$.

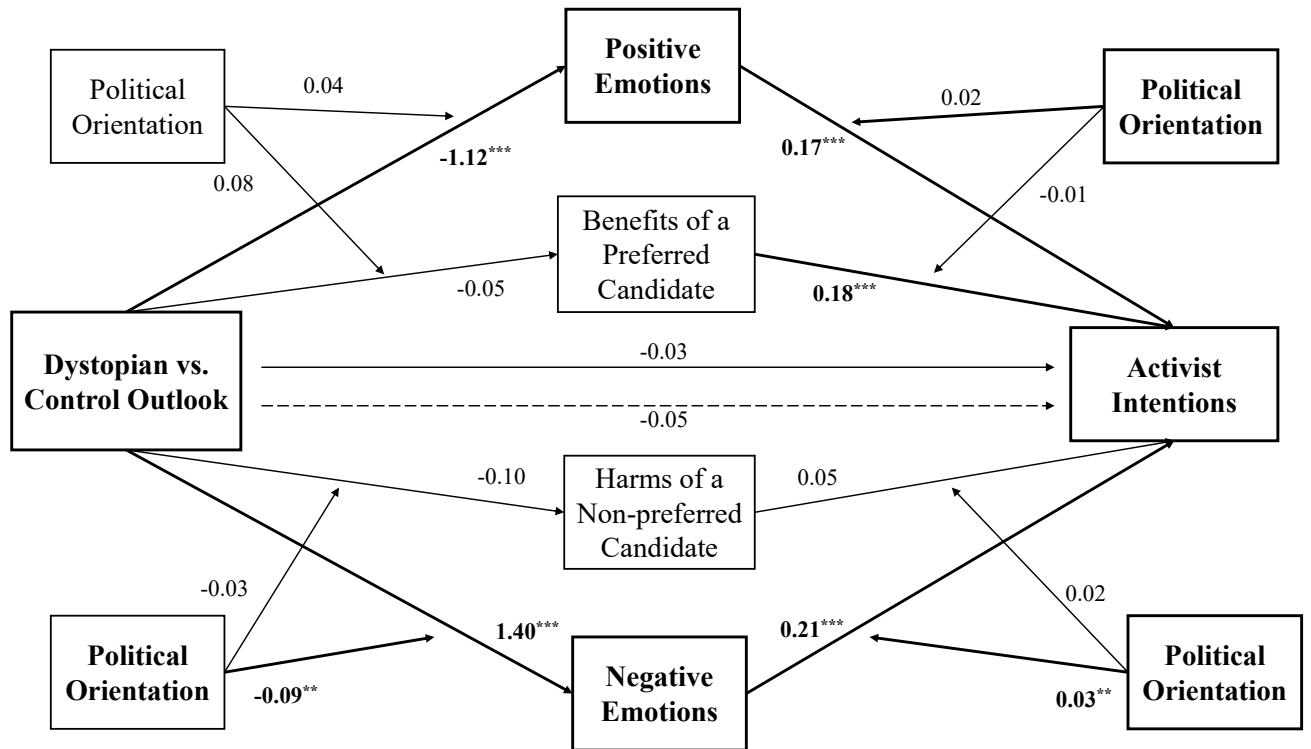


Figure A4. Moderated Mediation Results of Relationship between Dystopian vs. Control Outlook, Positive Emotions, Anger, Harms of a Non-preferred Candidate, Benefits of a Preferred Candidate, Political Orientation, and Activist Intentions.

Note. Bolded lines and beta values indicate significant pathways. The dotted line indicates the c' pathway. Dystopia is set as a vector against utopia and control, the utopia vector is a covariate in the model.

* $p < .05$, ** $p < .01$, *** $p < .001$.

IRB APPROVAL LETTER

Exemption Granted

October 23, 2020

Katie (Kathleen) Hudson
Psychology

RE: **Protocol # 2020-1375**
“Future Outlooks on Collective Action”

Dear Katie (Kathleen) Hudson:

Your Claim of Exemption was reviewed on **October 23, 2020** and it was determined that your research meets the criteria for exemption as defined in the U.S. Department of Health and Human Services Regulations for the Protection of Human Subjects [45 CFR 46.104(d)]. You may now begin your research.

Exemption Granted Date: October 23, 2020
Sponsor: None

The specific exemption category under 45 CFR 46.104(d) is: 2

You are reminded that investigators whose research involving human subjects is determined to be exempt from the federal regulations for the protection of human subjects still have responsibilities for the ethical conduct of the research under state law and UIC policy.

Please remember to:

- Use your research protocol number (2020-1375) on any documents or correspondence with the IRB concerning your research protocol.
- Review and comply with the [policies](#) of the UIC Human Subjects Protection Program (HSPP) and the guidance [Investigator Responsibilities](#).

We wish you the best as you conduct your research. If you have any questions or need further help, please contact me at choehne@uic.edu or the OPRS office at (312) 996-1711. Please send any correspondence about this protocol to OPRS via [OPRS Live](#).

Sincerely,
Charles W. Hoehne, B.S., C.I.P.
Assistant Director, IRB #7
Office for the Protection of Research Subjects

cc: Michael E. Ragozzino
Linda J. Skitka

VITA

KATHLEEN R. HUDSON
KHUDSO4@UIC.EDU | 513-550-5181

EDUCATION

University of Illinois at Chicago <i>MA in Social Psychology</i>	Chicago, IL <i>Expected June 2022</i>
<i>Thesis: Hope for the Best or Fear for the Worst: Utopian vs Dystopian Outlooks as Political Engagement Motivators</i>	Advisor and chair: Linda Skitka
The Ohio State University <i>BS in Psychology, magna cum laude</i>	Columbus, OH <i>May 2018</i>
<i>Thesis: Mental time travel and construal-level associations: Functional past and future-directed thinking</i>	Supervised by: Dr. Kentaro Fujita

RESEARCH EXPERIENCE

Skitka Lab Dr. Linda Skitka, University of Illinois at Chicago	Chicago, Illinois 2020 – Present
Memory Lab Dr. Karl Szpunar, University of Illinois at Chicago	Chicago, Illinois 2018 – 2019
Motivation and Cognitive Science Laboratory <i>Dr. Kentaro Fujita, The Ohio State University</i> <i>Thesis Student</i>	Columbus, Ohio 2015 – 2018

TEACHING EXPERIENCE

Teaching Assistant <i>Laboratory in Social Psychology</i>	Chicago, Illinois 2018 – Present
<ul style="list-style-type: none">• Assist students with classroom work, including lit reviews, data collection, data analysis, and writing and reporting findings• Teach introductory analyses programming in R• Provide detailed feedback on project papers <i>Statistical Methods in Behavioral Science</i> <ul style="list-style-type: none">• Teach discussion sections, grade homework and exams• Develop discussion materials and lessons• Teach SPSS analyses and interpretation and help students develop statistical programming skills <i>Introductory Psychology</i> <ul style="list-style-type: none">• Taught discussion sections, graded papers and class activities• Developed and workshopped discussion lessons each semester <i>Personality Psychology</i> <ul style="list-style-type: none">• Helped plan and organize a lecture• Graded assignments and offered feedback to students	

MENTORSHIP

Undergraduate research assistant mentor

Present

- Co-mentors undergraduate student Ras for summer coding project

Psychology Undergraduate Research Readiness Program (PURR) mentor

Present

- Mentors and offers guidance to student from under-represented background on research activities and graduate school

PRESENTATIONS

Hudson, K. R., Dusthimer, N. E., & Fujita, K. (2017, September) *Mental time travel and construal level associations: Functional past- and future-directed thinking*. Poster presented at annual Fall Undergraduate Research Forum, The Ohio State University, Columbus, OH.

Hudson, K. R., Dusthimer, N. E., & Fujita, K. (2018, March) *Mental time travel and construal level associations: Functional past- and future-directed thinking*. Poster presented at annual Psychology Undergraduate Research Colloquium, The Ohio State University, Columbus, OH.

Hudson, K. R., Dusthimer, N. E., & Fujita, K. (2018, March) *Mental time travel and construal level associations: Functional past- and future-directed thinking*. Poster presented at annual Denman Undergraduate Research Forum, The Ohio State University, Columbus, OH.

Hudson, K. R., Dusthimer, N. E., & Fujita, K. (2018, April) *Mental time travel and construal level associations: Functional past- and future-directed thinking*. Poster presented at annual Midwestern Psychological Association Conference, Chicago, IL.

Dusthimer, N. E., **Hudson, K. R.,** & Fujita K. (2019, Feb) *Mental time travel and construal level associations: Functional past-and future-direct thinking*. Poster presented at Society for Personality and Social Psychology Annual Meeting, Portland, OR.

Hudson, K.R., Murphy, L. E., & Szpunar, K.K. (2019, Nov) *The role of event simulation on goals and snacking behavior*. Poster presented at Psychonomics Society Annual Meeting, Montreal, Quebec

Hudson, K.R., Skitka, L.J. (2021, Feb) *How do we frame this? Moral foundations and motivations in environmental messaging*. Poster presented at the Society of Personality and Social Psychology Annual Meeting, Online.

Hudson, K.R., Mengyao, L., Skitka, L.J. (2022, Feb) *Does priming utopian versus dystopian mindsets affect liberals and conservatives differently?* Poster presented at the Society of Personality and Social Psychology Annual Meeting, San Francisco.

Hudson, K.R., Mengyao, L., Skitka, L.J. (2022, June) *Does priming utopian versus dystopian mindsets affect liberals and conservatives differently?* Poster presented at the Social Psychology of the Future conference, online.

PROFESSIONAL AFFILIATIONS

Society for Personality and Social Psychology member

2021-present

Psychonomics Society member

2019-2020

MPA general member

2017-2019

Psi Chi Honor Society Member

2017-2018

HONORS, FUNDING, & AWARDS

Strengthening Democracy Grant Competition (applied)

September 2021

UIC Psychology Student Travel Award (\$600)

October 2019,

January 2022

Psychology Conference Undergraduate Travel Scholarship (\$400)

April 2018

Denman Undergraduate Research Forum First Place in Social Psychology (\$200)

April 2018

Arts and Sciences Undergraduate Research Scholarship (\$5,000)

April 2017

Social and Behavioral Science Undergraduate Research Grant (\$100)

March 2017

RESEARCH SKILLS

- Experience programming with MediaLab and DirectRT, Qualtrics, mturk, and CloudResearch
- Experience analyzing data with SPSS and R
- Coding experience with Linguistic Category Model and Autobiographical Interview

DEPARTMENT SERVICE

Department TA

2020-2021

- Plan and organize brown bag speaker series
- Communicate with department and speakers about upcoming talks
- Plan and organize prospective student visits

Cross Program Conference Committee Member

2020

- Planned and organized UIC Psychology Department Cross Program Conference
- Facilitated organization and events during the conference

PROFESSIONAL SERVICE

Ad hoc Reviewer with advisor

Social Psychological and Personality Science (SPPS)

REFERENCES

Linda J. Skitka

Professor of Psychology
University of Illinois at Chicago
lskitka@uic.edu

Kentaro Fujita

Professor of Psychology
The Ohio State University
Fujita.5@osu.edu