DISCERNING THE OTHER: POLITICAL PREJUDICE AND INTERGROUP CONTACT

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ABSTRACT

Increasing political polarization in the United States over the last 60 years has led to an increase in self-segregation by political affiliation. This can be seen at the level of the nation, state, city, and even the neighborhood. One of the most studied methods for decreasing intergroup prejudice has been Gordon Allport's intergroup contact hypothesis. Allport suggested that contact between groups who see themselves as equals with common interests, common goals, and the support of cultural institutions are more likely to reduce prejudice between said groups. This mixed methods study attempts to apply the lessons of other applications of Allport's hypothesis to members of opposing political groups using direct one-on-one discussion between individuals in these groups. Results suggest that participants were positive in their evaluation of each other and their discussion, and that it is likely that intergroup contact decreases political prejudice both immediately and 30 days after the discussion.

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TABLE OF CONTENTS

ABSTRACT iv

ACKNOWLEDGEMENTS v

LIST OF TABLES viii

LIST OF FIGURES x

CHAPTER

I. INTRODUCTION 1

II. LITERATURE REVIEW 5

Intergroup contact theory 5
Summary 8
Current study 9

III. METHODS 11

Participants 11
Materials 13
Measures 14
Demographics and political issue positions 14
Openness to experience 14
Perspective-taking 15
Intergroup attitude 15
Allport's four conditions 16
Procedure 16
Hypotheses 18
Hypothesis 1 18
Hypothesis 2 18
Hypothesis 3 19
Hypothesis 4 19
Hypothesis 5 19

IV. QUANTITATIVE STUDY 20

Quantitative analysis 20
Quantitative results 21
Model one 23
Model two 29
Quantitative discussion 33
Model one 33
Model two 35

V. QUALITATIVE STUDY 37

Participant conversation analysis 37
Participant conversation discussion 50
Participant interview analysis 53
Interview question one 55
Interview question two 56
Interview question three 60
Interview question four 63
Participant interview discussion 69

VI. LIMITATIONS 72

VII. OVERALL DISCUSSION 74

REFERENCES 78

APPENDIX

A. IRB APPROVAL LETTER 84

B. QUALITATIVE INTERVIEW QUESTIONS 87

C. DEMOGRAPHICS QUESTIONNAIRE 90

D. PERSPECTIVE-TAKING: INTERGROUP REACTIVITY INDEX 92

E. INTERGROUP ATTITUDE: GENERAL EVALUATION SCALE 94

VITA 96

LIST OF TABLES

1 Descriptive statistics for the independent and dependent variables overall 21

2 Descriptive statistics for the independent and dependent variables by condition 22

3 Model one initial results: estimates of the effects of the independent variables on the change in Intergroup Attitude from time 1 to time 2 26

4 Model one posterior predictions relating to change in Intergroup Attitude from time 1 (t1) to time 2 (t2).....27

5 Results of simplified model for the effects of perspective taking and openness to experience on change in intergroup attitude from t1 to t2 28

6 Simplified model one posterior predictions relating to change in Intergroup Attitude from t1 to t2 28

7 Model two initial results: estimates of the effects of the independent variables on the change in Intergroup Attitude from t1 to t3 30

8 Model two posterior predictions relating to change in Intergroup Attitude from t1 to t3 31

9 Results of simplified model for the effects of perspective taking and openness to experience on change in Intergroup Attitude from t1 to t3 32

10 Simplified model two posterior predictions relating to change in Intergroup Attitude from t1 to t3 32

11 Descriptive analysis of word count means and standard deviations in participant discussions 39

12 Overall frequency of codes by condition in participant discussions.....45

13 Overall frequency percentages of codes by condition in participant discussions.....46

14 Frequency percentages of interview codes by condition for question one 56

15 Frequency percentages of interview codes by condition for question two 59

16 Frequency percentages of interview codes by condition for question three 63

17 Frequency percentages of interview codes by condition for question four 66

LIST OF FIGURES

1 Rate per 10,000 words of the term “feel” by condition in participant discussions.....47

2 Rate per 10,000 words of the term “feel by political affiliation in participant discussions.....48

3 Rate per 10,000 words of the phrase “illegal immigrants” by political affiliation in participant discussions 49

4 Rate per 10,000 words of the phrase “illegal immigration” by political affiliation in participant discussions 49

5 Rate per 10,000 words of the term “feel” by condition in participant interviews 67

6 Rate per 10,000 words of the term “feel” by political affiliation in participant interviews 68

CHAPTER I

INTRODUCTION

"What I was interested in was trying to find the human beings behind the façade and to see what else there is to these people – and is it possible for me to sit with my enemy and for them to sit with theirs?" – Deeyah Khan (Saner, 2017)

The United States is experiencing an age arguably characterized by increasing political polarization. This shift can be illustrated in a variety of ways, including differences in values, acceptance of inter-political marriage, differences in spousal political opinion, and geographical segregation by political affiliation. With respect to political values, across ten measures of political values (e.g., immigration, racial discrimination, the social safety net, etc…) tracked by the Pew Research Center in the United States since 1994, the gap between the political right and left (conservatives and liberals) has become significantly larger. This gap used to be comparable to the gap between blacks and whites, but it has now steadily increased to be roughly two and a half times the size of the racial gap (Pew Research Center, 2017).

A similar pattern emerges in opinions regarding inter-political versus interracial marriage. As of Gallup's latest update on the issue from 2013, roughly 87% of Americans approved of marriage between blacks and whites, up from 4% when Gallup first began collecting these data in 1958 (Newport, 2013). Yet we see the opposite trend for inter-political marriage. Republicans and Democrats now disapprove of their child marrying a person from the opposing political party at rates roughly double those who disapprove of interracial marriage, averaging 4.5% opposed in 1963 and 23% opposed in 2008 (Iyengar, Sood, & Lelkes, 2012). These trends

also align with an increasing tendency to view members of the opposing political party as less moral. In the period from 2016 to 2019, the percentage of Republicans who reported believing that Democrats were "more immoral" than Republicans rose from 47% to 57%, while the share of Democrats who believed the opposite about Republicans rose from 35% to 47% (Pew Research Center, 2019).

Concurrently, spousal political opinion has become more aligned in the last 50 years. From 1965 to 2015, correlations for spousal agreement on political issues have increased from .39 to .77 (Iyengar, Konitzer, & Tedin, 2018). These trends extend outside of the family as well. Political pollsters frequently describe states as "red" or "blue," generally a reference to the proportion of Republican or Democratic voters in those areas. Regions are also described similarly, with urban areas being more Democratic and rural areas being more Republican. There is also evidence to suggest that these trends are showing up in neighborhoods, with Republicans and Democrats effectively self-segregating themselves in neighborhoods with other families who are more politically similar (Bishop, 2009; Motyl, 2016). These trends suggest a trend away from exposure to a diversity of political views and towards segregated political uniformity.

In contrast to these trends in political segregation, racial segregation has dramatically declined. The dramatic reduction in opposition to interracial marriage over the past 50 years in America (Livingston & Brown, 2017) could partially be explained by an overall reduction in explicit prejudice (Payne, et al., 2010). It is possible that these reductions in explicit prejudice could well reflect overall reductions in prejudice. They could also reflect acquiescence to evolving social norms which discourage racial prejudice. These norms are present for race, gender, and other categories but are absent for political party affiliation (Iyengar & Westwood, 2015). The lack of such norms carries with it several drawbacks, not the least of which is that

prejudging individuals according to their group membership obscures their individual differences.

Alternatively, these opposing trends may reflect a growing sense that racial preference ultimately pales in importance when compared to differences in beliefs. Rokeach (1960) suggested that what appears at first glance to be a matter of racial prejudice may, upon closer inspection, actually be a matter of belief prejudice. To tease out these differences, he conducted several studies in which Jews as well as northern and southern whites were asked to indicate how likely they were to be friends with a person who held a variety of political and religious beliefs, varying both the beliefs (e.g., preference for socialized medicine, communism, labor unions, belief in God, etc…) and the race (e.g. Black, White, or Jew) of this hypothetical person in each case. He found his subjects "generally prefer[red] as friends those who agree with them far more than those who disagree with them, regardless of race or ethnic group." (Rokeach, 1960, p. 153) This suggested that whites, when confronted with a black person and a white person, were more inclined towards being friends with whichever of the two more closely aligned with his own beliefs. That said, when beliefs were held constant, his subjects preferred "other ethnic and racial groups almost but not quite as much as their own" (Rokeach, 1960, p. 153).

It should be noted that Rokeach's focus was to understand the nature of prejudice rather than to propose a means of overcoming it. A prejudiced white southerner may consider a black man to be a good person only insofar as that black man agrees to be subservient to whites. And while this may appear to be a reasonable assumption, it may well be that Rokeach's findings about the importance of belief congruence in overcoming prejudice were more prescient than he suspected. A modern case study may illustrate why this could be the case.

The work of Daryl Davis to deradicalize members of the Klu Klux Klan (KKK) has revealed a similar finding to that of Rokeach. Davis's method consists of befriending KKK members, showing them respect and listening to them, and thus encouraging the same in their response. He estimates that he has personally helped approximately 200 members of the KKK leave the organization (Canadian Broadcasting Corporation, 2018). In one illustrative example, Imperial Wizard of the KKK Roger Kelly stated at a public rally that he had greater respect for Davis than for the white protestors nearby (Lyrad Productions, 2012). Even for Kelly, a man holding the highest rank in the KKK, the respect and friendship that he shared with Davis was more important than their racial difference. As a result of their long friendship, Kelly resigned from the KKK in 1999 (Davis, 2017). Davis's success at deradicalizing KKK members aligns with the potential implications of Rokeach's work. He illustrates that shared beliefs (e.g., the importance of listening and mutual respect) can overcome even the most pronounced of racial prejudice.

In the present context in which political prejudice and segregation appear to be increasing while racial prejudice and segregation appear to be decreasing, Rokeach and Davis's work may prove useful in identifying ways to mitigate this polarization. Rokeach's work in the 1950s suggested that the identification of shared beliefs generally overcame racial prejudice, while Davis's method of respectful dialogue suggests a means by which people can apprehend those shared beliefs on the ground. But Davis is just one man, and his focus is on racial rather than political prejudice. Is it even plausible to assume that the methods he proposes could be appropriated in a political context and at a level that would impact broader trends in political polarization? How could we begin to develop norms that encourage recognition of shared beliefs and discourage political prejudice?

CHAPTER II

LITERATURE REVIEW

Intergroup contact theory

The development of norms discouraging racial prejudice are often explained by way of intergroup contact theory. Allport's (1954) book *The Nature of Prejudice* introduced this theory via what is now referred to as the intergroup contact hypothesis. He proposed that prejudice can be reduced when groups cooperate as equals, with common interests, in pursuit of common goals, and with the sanction of local institutions. This hypothesis and its four conditions (i.e., equal status contact, institutional sanction, common interests, and common goals) laid the foundation for decades of research on out-group hostility.

Two recent meta-analyses attempted to determine the degree to which intergroup contact was associated with generalized prejudice reduction. The first meta-analysis (Pettigrew & Tropp, 2005) reviewed 515 studies and found that 94% of the studies found a significant negative relationship between intergroup contact and prejudice. Interestingly, it also found that Allport's four conditions were not necessary for intergroup contact to have a substantial effect. The second meta-analysis (Paluck, Green, & Green, 2018) focused only on studies with random assignment of participants and delayed outcome measures and found generally similar negative relationships. However, it did differ in that it found smaller effects of intergroup contact on racial or ethnic prejudice. It also suggested that future studies directly address the question of Allport's four

conditions. Both meta-analyses also concluded that there was a need for more future studies to incorporate longitudinal designs.

Intergroup contact studies on political affiliation prejudice are not nearly as common as those studying ethnic, racial, or disability-based prejudices. In reviewing the titles of the studies selected for their meta-analyses by Pettigrew and Tropp (2005) and Paluck, Green, and Green (2018), only one appeared to address political affiliation prejudice. That study (Mutz, 2002) first examined national telephone survey data that recorded the self-reported frequency and characteristics of the participants' political discussions. Analysis of the survey results suggested that exposure to oppositional political rationales did increase awareness of legitimate rationales for opposing views. This effect remained even when accounting for participant interest in the topic. The second half of the study involved a confirmatory experiment in which participants were assigned to one of three conditions. The first condition required participants to engage in a variety of activities associated with political arguments consonant with (i.e., similar to) their own. The second condition switched the consonant arguments for dissonant (i.e., dissimilar) arguments. The control condition involved no exposure to either consonant or dissonant arguments. Participants who had scored high in a tendency towards spontaneous perspective-taking on a pretest, and who were exposed to dissonant arguments, showed a 14% increase in scores on a measure of tolerance for opposing views. The opposite relationship was found for participants low in perspective-taking. Similar effects have been supported in later studies as well (Vescio, Sechrist, & Paolucci, 2003; Wang, Kenneth, Ku, & Galinsky, 2014).

More recently, Manbeck et al. (2018) implemented a psychotherapeutic approach to improve relations and decrease demonization between conservatives and liberals. Study participants attended a workshop in which they were split into either a group of mixed liberals

and conservatives or a group of all liberals. They were then encouraged to disclose vulnerabilities related to personally significant political issues and express responsiveness to other participants' vulnerabilities. Analysis of the results revealed significant decreases in demonization of the opposing group as well as increases in positive attitudes. Together, these results suggest that exposure to opposing political perspectives can increase both understanding and tolerance of those viewpoints as well as positive attitudes towards those who express them.

One of the most well-known examples of this phenomenon was the struggle for gay rights. According to Pew Research, support for gay marriage increased dramatically across all measured groups in America since 2001 (Pew Research Center, 2017). It is plausible that this is a function of the history of increased activism and/or more visible advocacy of activists, as well as the removal of the designation of homosexuality as a pathology between the second and third versions of the Diagnostic and Statistical Manual in 1973. That said, an additional contributing factor was likely intergroup contact. Herek and Capitanio (1996), for example, found in the early 1990s that heterosexuals with higher numbers of close relationships with gay men and women had significantly more favorable attitudes toward homosexuals in general than did heterosexuals with no such close relationships. An important limitation to note is that Herek and Capitanio's study did not establish whether participants adopted more favorable attitudes as they made friends with gay people or if gay people were more likely to befriend participants that already had favorable attitudes. Both options are plausible. Nonetheless, as predicted by intergroup contact theory, when people are in contact with, know, and care about individuals in the outgroup, they are less likely to be prejudiced towards them.

The inclination to employ spontaneous perspective-taking may also be influenced by whether an individual is open to contact with members of the outgroup. One way to measure this

openness is the Big Five Factor of openness to experience (McCrae & Costa Jr., 2004), which measures intellectual and experiential curiosity. A person who is both open to experience and inclined towards perspective taking will, presumably, be more likely to respond positively to intergroup contact – and experience reduced levels of intergroup prejudice as a result (Simonovits, Kézdi, & Kardos, 2018; Sparkman, Eidelman, & Blanchar, 2017; Sparkman & Eidelman, 2016; Levin, et al., 2015; Turner, Dhont, Hewstone, Prestwich, & Vonafakou, 2013; Pettigrew & Tropp, 2008; Flynn, 2005; Jackson & Paulson, 2005).

With increasing political polarization, however, fewer people are either willing, able, and/or interested in genuinely engaging with those in opposing political groups. Thus, even people who are more open to experience and inclined towards perspective-taking will not necessarily have a chance to make use of it as there is less engagement across political lines when political self-segregation is higher.

Summary

These findings suggest that intergroup contact can be an effective way to reduce intergroup prejudice, though its effect may be moderated by openness to experience and a tendency towards spontaneous perspective-taking. The importance of an inclination to understand the perspective of the other aligns with Rokeach's work which indicated that belief congruence tended to outweigh racial or ethnic congruence, as well as Davis's approach towards respectful understanding of other's beliefs and perspectives which allows for recognition of shared beliefs and perspectives. Higher numbers of close relationships with members of the outgroup are also related to lower levels of prejudice. But what is the case for the whole may not be for its constituent parts. As the focus here is on political prejudice, and the research in this

area has been lacking compared to other types of intergroup prejudice, more work is needed to determine whether findings for generalized prejudice also apply to political prejudice.

Current study

With these findings as inspiration, the present study seeks to adopt a quasi-experimental design with an intervention to provide an opportunity for improved understanding of the beliefs of members of the political outgroup. The purpose is not to change people's minds about what they believe. Like those opposed to gay marriage, their rationales may remain theologically justified in their own minds. The opposition to homosexuality did not suddenly lose its epistemic footing because of the downfall of political restrictions on gays in the military or the legalization of gay marriage. As suggested by to the contact hypothesis, though, what is more amenable to change is how favorably people view those with whom they disagree as well as how well they understand opposing perspectives. Further amenable to change is the understanding of other shared beliefs held by members of opposing political groups.

Previous research suggests that intergroup contact in the context of a cooperative task reduces intergroup prejudice (Gaertner, Mann, Dovidio, & Murrell, 1990). This can even occur when the cooperative task is an ostensibly violent one, as in a video game in which participants work together to fight a third party (Adachi, Hodson, Willoughby, & Zanette, 2015). Lacking in the literature, however, is an intervention that encourages participants to improve out-group favorability by way of a task designed to improve the accuracy of their perspective-taking. The present study will implement such a task, instructing participants to summarize the position statement of a discussion partner to their partner's satisfaction prior to beginning a discussion on a political topic. As an intervention, this method is positively ancient within the realm of

philosophy. If a person employing the methods of Socratic dialogue does not first accurately understand their discussion partner's perspective, they cannot proceed to interrogating it honestly. Recognizing this fundamental prerequisite to informed engagement with those holding opposing views, John Stuart Mill famously noted, "He who knows only his own side of the case, knows little of that" (Mill, 2011). I am proposing to put this philosophical argument to the test via a quasi-experimental design in which participants have direct one on one discussions with those on the other side of the political spectrum.

The paradigm within which I am operating in this study will be post-positivist in that I am proposing that some interpretations of the data will more accurately align with both reality and my participants' actual perspectives as they understand them. I am operating under the assumption that we can evaluate the plausibility of our interpretations by examining the evidence using basic principles of intellectual honesty and humility (i.e., adopting provisional acceptance, predictability, falsification, consistency, parsimony, and the exposure of our ideas to rigorous and thorough good faith critique). I contend that these are the ideal means of mitigating biases that adversely affect my interpretations.

CHAPTER III

METHODS

Participants

This study recruited 28 participants. The average age of participants was 35 with a standard deviation of 11.34. Of the 28 participants, 11 were female, 16 were male, and one self-identified as "other." Five of the participants noted that they had completed up to a high school diploma or GED, 15 had completed through a Bachelor's degree, seven had completed up through a Master's degree, and one participant indicated having completed a doctoral degree. I elected not to collect data on racial or ethnic identification as I was unable to identify any robust data-driven research that suggested race or ethnicity as potential moderating or mediating variables for attitudinal change in the context of political affiliation. Participation was contingent on consent to complete study surveys and engage in a direct one-on-one discussion with another participant on the other side of the political spectrum. Participants were pre-screened to identify 14 participants who indicated that they were at least "somewhat liberal" on a 7-point Likert scale measuring political views on the issue of immigration, and likewise 14 participants who indicated that they were at least "somewhat conservative" on the same scale. These 28 participants all lived in the United States and met all other requirements of UTC's Institutional Review Board. Recruitment was first attempted via a method of snowball sampling – initially from my personal connections and contacts through email, phone, and social media applications. This method proved insufficient, yielding only a handful of the needed 28 participants after

nearly two months of active recruitment. The identified participants at this point in recruitment were also heavily skewed towards the political left, a likely function of my own social inclinations.

To address these shortcomings, I then pursued an alternative recruitment strategy, instead seeking participants through postings on Craigslist between May and July of 2020. As Craigslist listings can only be seen by searching for listings near major cities (e.g., within 25 miles of Memphis, TN), several Craiglist postings were created over the course of a two-month period. Cities for these postings were selected based on two criteria. Firstly, to diminish cultural or linguistic differences as a potential confounding variable, I focused on cities in the southeast United States. Secondly, as recruitment early on was dominated by the political left, I referenced an online tool (Dottle, 2019) designed to identify political demographics in US cities. This allowed me to target cities with greater prevalence of people on the political right such that I could increase the likelihood that the Craigstlist postings might be seen by more of them. The cities selected ultimately included Chattanooga, TN, Knoxville, TN, Atlanta, GA, Orlando, FL, and Jackson, MS. This approach provided a relatively steady stream of interested potential participants until early July of 2020, at which point I noted a large influx of what appeared to be ineligible bot or automated accounts. From that point forward, I closed the Craigslist postings and recruited the two remaining participants through snowball sampling.

All 28 participants completed a basic demographics questionnaire (Appendix C), a scale measuring openness to experience (McCrae & Costa Jr., 2004), a scale measuring perspective-taking (Davis & Hogan, 1983), and a scale measuring intergroup attitude (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). All participants provided consent per UTC IRB's requirements. Participants in both the left and right political groups were then randomized to

either the control group or one of the two quasi-experimental groups (hereafter referred to as "experimental groups" for brevity's sake). Participants were also randomly matched within each condition to the extent possible. Given the need to match and schedule participants in a timely manner, this within-condition randomization was necessarily limited by how many potential participants were available for each condition at any given time as well as whether their selected discussion partner actually attended the scheduled meeting.

Materials

Participant discussions and post-discussion interviews were completed primarily on Zoom (Zoom Video Communications, n.d.). One participant was not able to secure a consistent connection through Zoom, and in that case Skype (Microsoft, n.d.) was used as an alternative video conferencing platform. In all cases, I used the Zoom or Skype applications' in-app recording capability to record the conversations. To create transcripts for qualitative analysis, these video recordings were then uploaded to Youtube (Google LLC, n.d.). Youtube contains an automated subtitling process such that I was able to then download subtitles from each video and create transcripts.[1] All transcripts for both the participant discussions and the post-discussion interview were then coded and evaluated in QDA Miner version 6 (QDA Miner, n.d.) and Wordstat version 8 (Wordstat, n.d.) with the resultant raw data exported to Microsoft Excel 2016 for further analysis.

For the quantitative analysis, I gathered survey data via Qualtrics XM (Qualtrics, n.d.). Data were cleaned and reverse coded using Microsoft Excel 2016 and SPSS version 26.

[1] To ensure confidentiality, I listed each video as a "private" video while uploading. The "private" listing means that only I or those given permission by me can access the videos. I did not give permission to anyone else to access the videos. Once I had secured subtitles for each video, all videos were deleted from Youtube.

Descriptive analysis was performed in SPSS version 26 and Bayesian modeling was performed in R Studio with the following packages: ggplot2 version 3.3.0 (Wickham, Ggplot2: Elephant graphics for data analysis, 2016), reshape2 version 1.4.3 (Wickham, 2007), scales version 1.1.0 (Wickham, 2019), dplyr version 0.8.5 (Wickham, Francois, Henry, & Müller, 2020), stringr version 1.4.0 (Wickham, 2019), blavaan version 0.3-9 (Merkle, Rosseel, & Goodrich, 2020), semPlot version 1.1.2 (Epskamp, 2019), and brms version 2.12.0 (Buerkner, 2017).

Measures

Demographics and political issue positions

Participants in pre-screening completed a demographics questionnaire to indicate their age, gender, and maximum level of educational attainment (Appendix C). Participants in pre-screening also indicated the degree to which they adopt a liberal or conservative position on immigration on a 7-point Likert scale, with one being very liberal and seven being very conservative.

Openness to experience

Participants in pre-screening completed the revised NEO-Five Factor Inventory (NEO-FFI-R) 12-item subscale related to intellectual and experiential curiosity (McCrae & Costa Jr., 2004). This subscale has demonstrated an acceptable internal reliability in the literature, $\alpha = 76$, though in this study it was slightly lower, $\alpha = 70$. Previous research suggests a small to medium effect for openness to experience on prejudice (Sparkman, Eidelman, & Blanchar, 2017; Turner, Dhont, Hewstone, Prestwich, & Vonafakou, 2013; Flynn, 2005; Jackson & Paulson, 2005). An

example item from this subscale asks the participant to rate on a scale from 1-5 (very inaccurate to very accurate) how accurately the following statement describes them, “I believe in the importance of art.”

Perspective-taking

Participants in pre-screening completed the 7-item Interpersonal Reactivity Index (IRI) subscale (Davis & Hogan, 1983) addressing the tendency to spontaneously take on the perspective of others (Appendix D). The literature suggests that the IRI has acceptable internal (α = .71 to .77) and test-retest reliabilities (α = .62 to .71). In this study, the internal reliability was somewhat higher, α = .85. Previous research suggests a small to medium effect for perspective-taking on prejudice (Simonovits, Kézdi, & Kardos, 2018; Sparkman & Eidelman, 2016; Levin, et al., 2015), as well as a stronger mediational effect when perspective-taking is combined with empathy (Pettigrew & Tropp, 2008).

Intergroup attitude

Participants in pre-screening, immediately after the discussion, and one month post-discussion completed the 6-item General Evaluation Scale (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997), which uses a semantic differential format to assess intergroup attitude where higher scores are associated with more negative adjectives and lower scores represent a mirrored, positive adjective (Appendix E). This scale has demonstrated high internal reliability in the literature, α = .90; though, it varied in this study from α = .65 at pre-screening (time 1), α = .95 immediately after the discussion (time 2), and α = .65 thirty days after the discussion (time 3).

This scale was chosen as the inverse of a prejudice scale as I expected it would be less likely to suffer from the social desirability of appearing not prejudiced.

Allport's four conditions

To address Allport's four conditions, all participants in the post-discussion interview were asked to rate their agreement with the following questions on a scale of 1 (strongly disagree to 7 (strongly agree): 1) My discussion partner and I were equals, 2) My discussion partner and I had common interests, 3) My discussion partner and I had common goals, and 4) The researcher was supportive of our having a quality discussion.

Procedure

The present study used a mixed methods approach. It consisted of a control condition and two quasi-experimental conditions. Twenty-eight participants who identified as either "very", "mostly," or "somewhat" liberal/conservative on the topic of immigration during pre-screening were selected for an in-person meeting. Eight of these participants were selected for the control condition and were knowingly paired with another control participant whose political view opposed their own (i.e., each liberal was be paired with a conservative). They were instructed to have a 20-minute discussion about their favorite outdoor sports or leisure activities to do or watch. This discussion took place in a private video conference room with me functioning as a facilitator before and after the discussion[2]. The remaining 20 participants were evenly split

[2] Prior to instructing the participants to begin their discussion, I informed the participants that I would be turning off my video broadcasting, my mic, and my audio speakers during the participants' discussion. I informed them that I would, however, be present and available if the participants experienced a technical difficulty or otherwise required my assistance. In such cases, I asked the participants to use Zoom's chat feature or wave their arms in an exaggerated fashion to signal me.

between the two quasi-experimental conditions (i.e., 5 pairs of liberals/conservatives in the first quasi-experimental condition and the other 5 pairs in the second quasi-experimental condition).

The experimental conditions were identical to the control condition, but with the following exceptions. Participants in the first experimental condition were knowingly paired with another participant with opposing political views but were instead be instructed to discuss the issue of immigration for 20 minutes. The second experimental condition differed from first in that each participant was also instructed to follow a process of listening and summarizing the perspective of others. Prior to beginning their discussion, both participants were instructed to give a one to two-minute statement of their position on the topic. Following each statement, the listening participant was instructed to summarize the speaker's statement to the speaker's satisfaction. Once both participants provided satisfactory summaries, they were then instructed to proceed to discuss the issue of immigration for the remaining 20 minutes.

All participants then completed separate post-discussion interviews with me. The post-discussion interview included me asking each participant to verbally answer the questions for the General Evaluation Scale (i.e., intergroup attitude), a set of questions related to how well they thought Allport's four criteria were met during their experience as participants, as well as a series of open-ended questions about the discussion itself (Appendices A and D). After the participants answered these questions, I informed them of the timeline for the 30-day follow-up.

To measure any change in intergroup attitude towards opposing political groups, the 6-item General Evaluation Scale was given during pre-screening, immediately after the discussion, and one month after the discussion. This design was intended to test whether both the content of the discussion and/or the format of the discussion influence attitudinal change in the participants. Intergroup attitude here is intended to function as the inverse of intergroup prejudice. The choice

of immigration as the topic of discussion was made due to the generally sharp perceived contrast in views between liberals and conservatives. It was also chosen because the study was not seeking to not measure affect and I anticipated that the topic of immigration would evoke less of a confounding emotional response compared to other "hot button" issues like abortion or gun control. Participants in pre-screening also completed scales measuring openness to experience (McCrae & Costa Jr., 2004) and perspective-taking (Davis & Hogan, 1983) as both are plausible factors of attitudinal change.

Hypotheses

Hypothesis 1

The control condition and both experimental conditions will have positive effects on immediate post-intervention intergroup attitude scores.

Hypothesis 2

Experimental condition two will have the largest effect on intergroup attitude, followed by experimental condition one and then the control condition.

Hypothesis 3

Effects of and differences between conditions will be smaller but will persist in the 30-day post-intervention intergroup attitude scores.

Hypothesis 4

Perspective-taking and openness to experience will have a positive effect on intergroup attitude post-intervention and at 30-days post intervention.

Hypothesis 5

Allport's four criteria (equal status contact, common interests, common goals, and institutional support) will positively influence intergroup attitude.

CHAPTER IV

QUANTITATIVE STUDY

Quantitative analysis

The independent variables for this study were condition, perspective-taking, openness to experience, and Allport's four criteria. The dependent variables were the change in intergroup attitude from time one (pre-screening) to time two (immediately post discussion) as well as the change from time one to time three (30 days post discussion). The data were initially imported into Excel for cleaning and then imported into SPSS for initial descriptive analysis and normality testing. The data were then imported into R and analyzed using Bayesian modelling to test the study's hypotheses. The overwhelming majority of research in this area has taken a classical Fisherian approach, repeatedly testing the same null hypotheses that intergroup contact has no effect on outgroup prejudice. Given that the Pettigrew and Tropp (2005) meta-analysis alone included 515 studies of this relationship and found negative effects amongst 94% of them, it is arguably time to move from a descriptive Fisherian approach to a predictive Bayesian approach. Implementing a Bayesian modelling approach will not only allow for a continued testing of the null hypotheses, but also for the potential accumulation of evidence for the null hypotheses[3] rather than simply being unable to reject them (Lynch & Bartlett, 2019) as well as the

[3] It should be noted here that I anticipated that evidence against any of the hypotheses was unlikely.

development of more precise predictive models of how various factors influence outgroup prejudice/favorability.

Quantitative results

Means and standard deviations for each of the variables (except condition) can be found in Table 1

Table 1 Descriptive statistics for the independent and dependent variables overall

Item	Mean	Standard Deviation
Perspective taking (7-49)	39.64	7.14
Openness to experience (5–50)	37.89	4.95
Participants as equals (1-7)	6.11	1.55
Common interests (1-7)	5.21	1.23
Common goals (1-7)	4.86	1.72
Institutional support (1-7)	7.00	0.00
Intergroup attitude t1 (6-42)	24.04	4.90
Intergroup attitude t2 (6-42)	23.54	6.16
Intergroup attitude t3 (6-42)	21.63	4.58

Note: N = 28. The numbers in parentheses refer to the minimum and maximum possible values for each measure.

Descriptive statistics broken down by condition can be found in Table 2:

Table 2 Descriptive statistics for the independent and dependent variables by condition

Item	Condition 1 Mean (SD)	Condition 2 Mean (SD)	Condition 3 Mean (SD)
Perspective taking (7-49)	42.5 (5.83)	36.70 (8.62)	40.30 (5.91)
Openness to experience (5–50)	36.38 (5.42)	39.00 (5.16)	38.00 (4.52)
Participants as equals (1-7)	5.50 (2.27)	6.40 (1.35)	6.30 (0.95)
Common interests (1-7)	5.63 (1.41)	5.00 (1.15)	5.10 (1.20)
Common goals (1-7)	3.50 (1.60)	5.70 (0.95)	5.10 (1.85)
Institutional support (1-7)	7.00 (0.00)	7.00 (0.00)	7.00 (0.00)
Intergroup attitude t1 (6-42)	24.25 (3.20)	23.20 (4.32)	24.70 (6.65)
Intergroup attitude t2 (6-42)	23.25 (7.29)	23.00 (5.01)	24.30 (6.80)
Intergroup attitude t3 (6-42)	23.13 (3.31)	19.44 (3.71)	22.40 (5.68)

Note: N = 28. The first number in each column is the average while the number in parentheses is the standard deviation.

I analyzed the data using Bayesian multiple regression with change in intergroup attitude as the dependent variable. More specifically, I used a Markov chain Monte Carlo (MCMC) simulation algorithm in R primarily using the package brms (Buerkner, 2017), an R interface that fits Bayesian generalized multivariate (non-)linear multilevel models for Bayesian inference. I

elected to run separate models for the change in intergroup attitude from time one to time two as well as from time one to time three. The most crucial element of Bayesian methods is the setting of the prior distribution for each variable. The prior distribution is determined through a review of previous evidence and sets the initial parameters for the Bayesian model. As there was a time difference between the intervention at time two and the 30-day follow-up at time three, I anticipated that the effect of the intervention would be greater at time two than at time three, and that variables linked more to stable personality traits (openness to experience) or process inclinations (perspective taking) would likely reassert themselves at time three. I also excluded the fourth of Allport's criteria variables (institutional support) as there was no variability in participants answers.

Though the priors varied between models, there were several similarities of note. Firstly, all models used a conservative adapt_delta of 0.95 to mitigate the likelihood of a loss of geometric ergodicity leading to a biased MCMC chain (Betancourt, 2017). Secondly, each model made use of three separate MCMC chains that consisted of 5000 iterations of which 1000 were warm up iterations. A visual inspection of the chains revealed "fuzzy caterpillars" which suggest a strong central tendency with evenly distributed aberrations (Annis, Miller, & Palmeri, 2017). Lastly, all models converged with an acceptable Rhat value of 1.0, which is a diagnostic value of convergence which assesses estimates between and within chains (Vehtari, Gelman, Simpson, Carpenter, & Bürkner, 2020).

Model one

For the change in intergroup attitude from time one to time two, I reviewed the intergroup contact literature to assist with setting priors. Previous studies looking at the relationship

between perspective-taking and intergroup contact have suggested a small to medium effect (Simonovits, Kézdi, & Kardos, 2018; Sparkman & Eidelman, 2016; Levin, et al., 2015; Pettigrew & Tropp, 2008). Accordingly, the prior was set at 0.3, which would indicate that for every one-point increase in perspective-taking, intergroup attitude would increase by 0.3. Given the variability in effects from the literature, I elected to set a wide prior for perspective-taking, anticipating that the posterior distribution would fall 0.3 above or below the initial setting of 0.3 (i.e., somewhere between 0 and 0.6).

For openness to experience, the literature also suggested a variably small to medium effect (Sparkman, Eidelman, & Blanchar, 2017; Turner, Dhont, Hewstone, Prestwich, & Vonafakou, 2013; Flynn, 2005; Jackson & Paulson, 2005), and the priors were thus also set at 0.3 plus or minus 0.3. For condition, priors were set according to an anticipated hierarchy in which experimental condition two had a greater effect than experimental condition one, which itself had a greater effect than the control condition. I was not able to find cases in the literature where this kind of structure was used, and thus had to rely upon alternative sources for priors. Considering that experimental condition two (summarize the other's position before discussing immigration) has conceptual overlap with perspective-taking, I elected to set the prior for experimental condition two also at 0.3. As this is new territory, however, I wanted to give the Bayesian models a less restrictive prior to allow for more flexibility, anticipating that the models would converge at 0.5 above or below the initial setting of 0.3 (i.e., somewhere between -0.2 and 0.8). For experimental condition one (discussion of immigration with no summary task) and the control condition (discussion of leisure activities), I set the anticipated prior at decreasing levels of 0.2 and 0.1, respectively, and with equally wide priors (0.5 on either side).

As noted by Paluck, Green, & Green (2018), there is also a dearth of research specifically looking at Allport's four criteria (equal status contact, common interests, common goals, institutional support). I used a 7-point scale for each of these variables, and thus I anticipated that a one point increase in any of these variables might have a more substantial effect on intergroup attitude (itself a scale with a possible range of 6-42). Given this larger ratio, I set a prior of 1.0 for each of these three criteria. Given the lack of clarity in the literature for the effect of Allport's criteria, I again elected to use a wide prior (0.5 on either side) to allow the model more flexibility. I also set a prior of 3 for error (sigma), anticipating that a substantial amount of the variability in the model would likely be due to other (non-included) factors while also setting it as a wide prior (plus or minus 2) to allow for flexibility. The resultant R syntax for model one was as follows:

t1_t2_change~0+Condition+PerspectiveTaking+Openness+Equals+Interests+Goals,

The results from model one are included below in tables 3 and 4:

Table 3 Model one initial results: estimates of the effects of the independent variables on the change in Intergroup Attitude from time 1 to time 2

Item	Estimate	Est. Error	Credible interval
Condition: Control	0.12	0.49	-0.83 to 1.08
Condition: Experimental 1	0.17	0.49	-0.78 to 1.14
Condition: Experimental 2	.28	0.48	-0.68 to 1.22
Perspective Taking	-0.06	0.10	-0.26 to 0.14
Openness to experience	-0.28	.11	-0.49 to -0.06
Allport's conditions: Equals	0.79	0.39	0.04 to 1.55
Allport's conditions: Interests	0.84	0.41	0.04 to 1.64
Allport's conditions: Goals	0.65	0.38	-0.10 to 1.42
Sigma (error)	4.96	0.64	3.84 to 6.36

To summarize an example of the results in table 3, the model yielded an estimate of the y-intercept for the control condition of 0.12 and a credible interval of -0.83 to 1.08. This indicates that being in the control condition reflected a 0.12 increase in the intergroup attitude score. The credible interval suggests a substantial amount of variability in this effect, however. The results for condition could, thus, be positive or negative. In Bayesian statistics it is possible to leverage the posterior distribution to identify the probability that a given result is greater or less than zero (or any other relevant number). I selected zero and the set prior for each variable as relevant points against which to evaluate the posterior distribution. This allows for results

reflective of whether each variable had a positive effect as well as the probability of whether it was greater than the effect I anticipated (i.e., my prior). Table 4 reflects the results of this analysis:

Table 4 Model one posterior predictions relating to change in Intergroup Attitude from time 1 (t1) to time 2 (t2)

Item	Prior	> 0	> prior
Condition: Control	0.1	60%	52%
Condition: Experimental 1	0.2	64%	48%
Condition: Experimental 2	0.3	71%	48%
Perspective Taking	0.3	27%	<1.0%
Openness to experience	0.3	<1.0%	<1.0%
Allport's conditions: Equals	1.0	98%	29%
Allport's conditions: Interests	1.0	98%	34%
Allport's conditions: Goals	1.0	96%	18%

Given the small sample size of 28 and the positive relationship implied by the literature, it is plausible that the effects of perspective taking and openness to experience are being obscured in this multiple regression model. To address this possibility, I then ran a simplified model looking at the relationship of just these two variables with the outcome variable. The results of that simplified model are reflected in tables 5 and 6 below:

Table 5 Results of simplified model for the effects of perspective taking and openness to experience on change in intergroup attitude from t1 to t2

Item	Estimate	Est. Error	Credible Interval
Perspective taking	-.04	.10	-0.16 to 0.24
Openness to experience	-.06	.11	-0.27 to 0.16
Sigma (error)	5.58	0.69	4.39 to 7.06

Table 6 Simplified model one posterior predictions relating to change in Intergroup Attitude from t1 to t2

Item	Prior	> 0	> prior
Perspective Taking	0.3	65%	<1.0%
Openness to experience	0.3	30%	<1.0%

To further test the estimated predictive accuracy of this simplified model compared to the more complex model involving all of the variables, I used the loo_compare (leave-one-out cross validation) approach to compare both models (Vehtari, Gelman, & Gabry, 2017). The results slightly favored the more complex model (ELPD of -3.0 for the simplified model compared to 0.0 for the complex model). As a result, I elected to use the more complex model.

Model two

Measurements of intergroup contact at time three took place approximately 30 days after the intervention. For change in intergroup attitude from time one to time three, I anticipated that the effects of the intervention would lessen substantially while more plausibly stable traits like perspective taking and openness to experience would become more prominent. Accordingly, these expectations were reflected in the priors set for model two. Priors for condition were reduced by half, such that the prior for the control condition was 0.05, the prior for experimental condition two was 0.1, and the prior for experimental condition two was 0.15. As this remains new territory, I again set wide priors for condition (0.25 above and below the prior) to allow for more flexibility in the model. Anticipating that the effects of Allport's criteria would also lessen to below the effects of perspective taking and openness, each of Allport's criteria variables were set at 0.2. These priors were also set widely (0.25 above and below) to allow for flexibility.

Priors for perspective taking and openness to experience were maintained from model one (0.3 plus or minus 0.3) as I expected them to align with the literature more closely in the absence of the effects of a recent intervention. The prior for error (sigma) also remained unchanged (3 plus or minus 2) as I expected the number and effect of non-included variables would likely remain relatively constant. The resultant R script for model two was as follows:

```
t1_t3_change~0+Condition+PerspectiveTaking+Openness+Equals+Interests+Goals,
```

Table 7 below provides the effect estimates reflected in the output from model two:

Table 7 Model two initial results: estimates of the effects of the independent variables on the change in Intergroup Attitude from t1 to t3

Item	Estimate	Est. Error	Credible interval
Condition: Control	0.08	0.25	-0.42 to 0.57
Condition: Experimental 1	0.06	0.25	-0.42 to 0.55
Condition: Experimental 2	0.14	0.25	-0.34 to 0.62
Perspective Taking	-0.07	0.10	-0.27 to 0.13
Openness to experience	-0.05	0.11	-0.27 to 0.17
Allport's conditions: Equals	0.17	0.23	-0.28 to 0.62
Allport's conditions: Interests	0.19	0.23	-0.27 to 0.64
Allport's conditions: Goals	0.11	0.23	-0.35 to 0.56
Sigma (error)	5.00	0.64	3.91 to 6.42

I then extracted the posterior distributions and evaluated them to identify the probability that each variable's effect was greater than zero or greater than the set prior. Table 8 below reflects the posterior results for Model two:

Table 8 Model two posterior predictions relating to change in Intergroup Attitude from t1 to t3

Item	Prior	> 0	> prior
Condition: Control	0.05	62%	54%
Condition: Experimental 1	0.10	60%	44%
Condition: Experimental 2	0.15	72%	49%
Perspective Taking	0.30	26%	<1.0%
Openness to experience	0.30	31%	<1.0%
Allport's conditions: Equals	0.20	76%	44%
Allport's conditions: Interests	0.20	79%	48%
Allport's conditions: Goals	0.20	68%	34%

As with model one, I again ran a simplified model looking only at perspective taking and openness as predictors of intergroup attitude change. The results of this simplified model are presented in tables 9 and 10 below:

Table 9 Results of simplified model for the effects of perspective taking and openness to experience on change in Intergroup Attitude from t1 to t3

Item	Estimate	Est. Error	Credible Interval
Perspective taking	-.04	.10	-0.23 to 0.15
Openness to experience	-.02	.10	-0.22 to .18
Sigma (error)	4.95	0.63	4.39 to 7.06

Table 10 Simplified model two posterior predictions relating to change in Intergroup Attitude from t1 to t3

Item	Prior	> 0	> prior
Perspective Taking	0.3	45%	<1.0%
Openness to experience	0.3	33%	<1.0%

In the simplified model, neither perspective taking or openness to experience were likely to have a positive effect. Using loo_compare to compare the more complex versus more simplified models, I found that the simplified model was slightly better (EPLD of -0.5 for the complex model compared to 0.0 for the simplified model). However, as this difference was very small and both the complex and simplified models predicted similarly negative relationships, I

elected to rely on the more complex model as it allowed me to include all variables simultaneously.

Quantitative discussion

Model one

The results for model one supported hypothesis 1. All three conditions were likely to have a positive effect on immediately post-intervention intergroup attitude scores. The results also supported hypothesis 2, in that experimental condition 2 was more likely than experimental condition 1 to have a greater than zero effect (71% vs. 64%) and that, likewise, experimental condition 1 was slightly more likely than the control condition to have a greater than zero effect (64% versus 60%). Additionally, the posterior probabilities for model one suggest that the priors for condition were set appropriately as the probabilities that the results fell above the set priors all clustered close to 50%. The model also mostly supported hypothesis 5 in that Allport's criteria were highly likely to have a positive effect on intergroup attitude. It isn't clear from this study whether institutional support contributed to attitudinal change as there was no variability in this predictor. Nevertheless, it is probable that I set the priors too high as the likelihood that results fell above the set priors fell between 18% and 34%. The effect remains very likely positive, but future models may need to anticipate smaller priors for Allport's criteria than those used here.

The model one results provided evidence largely against hypothesis 4. Both perspective taking and openness to experience were very unlikely (27% and <1.0%, respectively) to have a positive effect on intergroup attitude immediately post intervention. The less optimal but

simplified alternative model did suggest a positive effect (65% likely to be greater than 0) for perspective-taking, but it still suggested a negative relationship for openness to experience (only 30% likely to be greater than 0). It should be noted, however, that both are self-report measures. One possible explanation for these results, then, is that participants may have intuited that I, society more broadly, or they themselves view these constructs as admirable, and thus participants may have over-reported their levels of perspective taking or openness to experience in order to present themselves more positively. Under this explanation, if they had given me more accurate responses in the survey questions, the actual relationships would have emerged more readily. On the other hand, a counter to this explanation could be that this type of study was more likely to attract participants who were already open to the experience of engaging with the perspective of people politically different from themselves. Those who were genuinely lower in these characteristics would be more likely to avoid participating in such studies. Without such people, my model may have had a harder time identifying the actual relationship between these variables.

Another possible and interacting explanation relates to the societal context within which the discussions took place. The pre-screening and discussions were conducted between March and August of 2020. During this time, the COVID-19 pandemic and the resultant lockdowns occurring throughout the United States limited many individuals both in their freedom to travel, but also in their opportunities to have conversation. The simple opportunity to have a conversation with someone outside of their houses may well have prompted many participants to respond to the intervention more positively than they otherwise might. Future research could attempt to explore each of these potential factors, both quantitatively and qualitatively, to get a better sense for their influence.

Model two

The model two results partially supported hypothesis 2. Experimental condition two remained the most likely (72%) to have a greater than zero effect of the three conditions. However, the contrasting probabilities between the control condition and experimental condition one was reversed from model one and too small to suggest a difference (62% versus 60%, respectively). The model two results supported hypothesis 3. The control, experimental one, and experimental two conditions were all likely to have a positive influence on the 30-day post-intervention intergroup attitude scores (62%, 60%, and 70%, respectively). The posterior probabilities also suggest that the priors for the three conditions were set appropriately as they again tended to cluster near 50% likely to be greater than the set prior.

Model two also supported hypothesis 5, with Allport's criteria being somewhat likely to have a greater than zero effect even with a substantially reduced prior (with posterior probabilities ranging from 68% to 79%). Of those, the most likely to have a greater than zero effect were equals at 76%, interests at 79%, and goals at 68%. My priors for Allport's criteria seemed to be more appropriate in model 2, with both interests and equals being closer to 50% likely to be greater than the set prior while goals was likely set too high as it was only 34% likely to be greater than its set prior.

Model two was more supportive of hypothesis 4 than was model one, but still did not suggest likely positive effects for either perspective taking or openness to experience. Perspective taking was only 26% likely to have a greater than zero effect (33% in the simplified model), while openness to experience was only 31% likely (45% in the simplified model). The set priors for both variables were very likely too high as the chance that results fell above the set prior was < 1%. One potential explanation for this is that 30 days is not enough time for more

stable characteristics to reassert themselves and outweigh the lingering effects of the intervention. There could also be additional societal influences at play. Depending on their intervention date, participants were completing the 30-day follow-up measure of intergroup attitude between July and September of 2020. 2020 was an election year in the United States, a time in which media become increasingly saturated with political competition and messaging. Simultaneously, protests and rioting following the killing of George Floyd and Breonna Taylor were also highly prevalent on the airwaves and in social media. It may have been that the more polarized environment suppressed participants' typical levels of perspective taking and openness to experience.

CHAPTER V

QUALITATIVE STUDY

Participant conversation analysis

Rather than deciding upon a method and then applying it to my research questions, I decided to let the research questions determine the method of qualitative analysis. As the combination of methods in this study are not well explored in the literature, I adopted a grounded theory approach (Ralph, Birks, & Chapman, 2015). Since this thesis is intended to serve as an initial testing ground for this intervention, the qualitative analysis was primarily exploratory in nature, seeking to identify emergent themes in both the participant discussions as well as during their post-discussion interview. These themes could then serve as the basis for theory generation and the creation of a formalized coding scheme for analyzing other political discussions both within and outside of a research context.

My guiding purpose in the qualitative analysis was to identify approaches to discussion that were conducive to creating common ground rather than alienating people from each other. That meant first developing a descriptive framework for what was happening in each discussion. I began by asking myself how participants were choosing to interact with each other, and what kinds of differences in interaction I would see in participants in the different conditions. Were they just stating their conclusions? Were they acknowledging mutual agreement or similarity? Were they trying to imagine what it might be like to be someone else (e.g., an immigrant)? Were they asking questions and trying to show that they understood the answers by summarizing or

asking for further clarification? Were they simply recounting anecdotes or sharing things they understood as facts?

These questions ultimately led me to approach the qualitative analysis similarly to Glaser's (1965) constant comparison method. I began by carefully reading the transcript of each discussion and categorizing (i.e., coding) each statement with as many codes as seemed relevant. I gave each code a name and a description to help me determine whether it was applicable in future instances. Every time I assigned a code to a statement, I would mentally compare how I was applying the code in the current instance to the previous instances. This process began informally and flexibly and, over time, became more formal as my codes began to solidify through these constant comparisons. In cases where I found potential overlap between codes, or when a particular statement contained elements of multiple codes, I noted this in a memo in QDA Miner.

To help me remember how my thoughts were evolving throughout the course of coding, I also maintained a coding diary to record ideas and questions that were arising during the coding process. Upon completing my initial analysis of all 28 transcripts, I ended up with 12 codes. I then met with my thesis advisors to discuss the codes and identify any areas for expansion or integration of codes. With their feedback in hand, I began a second round of coding and attempted to further clarify and add codes. After the second round, I ended with 13 distinct codes. Once I had all my codes finalized, I exported the coding results from QDA Miner into Excel 2016 for further descriptive analysis. To determine the prevalence of the codes, I first generated word counts by condition. The results are included below in table 11.

Table 11 Descriptive analysis of word count means and standard deviations in participant discussions

Item	Control	Experimental 1	Experimental 2
Mean	3328.75	3737.80	3359.60
Standard deviation	399.05	125.53	285.83

With overall word counts in hand, I was able to determine the prevalence of each code. I will present below a description of each code, a representative example excerpt from the discussion transcripts, and a summary of the prevalence of this code in each of the three conditions. To provide potentially helpful context, I also provide the self-identified political leaning for each quoted participant. To review an overall summary of code prevalence, see below tables 12 and 13. For ease of reference, I have elected to present the codes in alphabetical order.

My first code is "acknowledging ignorance." I used this code whenever I noticed a participant acknowledging gaps in their knowledge, understanding, or memory. One example of a discussion excerpt that exemplifies this code is from the experimental condition one discussion between very conservative participant Mildred B. and very liberal participant Daniel R[4]:

> I don't know it's a hard topic… because it's hard… it's like that middle ground… what to do with the people who are already here or what to do with the people who are illegal immigra[nts] and then had kids. So you know it's that gray line with that I think, and I just wish that everyone was legal… everyone did, you know, all the documents… everyone could have any job and the opportunity. But that's not real life. That's not true. It'd be too easy, yeah.

[4] All participant names are pseudonyms

As with several of the codes that follow, many of the excerpts to which I applied this code were not as extensive as the excerpt from Mildred B. Several consisted merely of a participant saying, “I don’t know.” Among the different conditions, “acknowledging ignorance” constituted 0.08% of the word counts in the control condition, 5.40% in experimental condition one, and 2.09% in experimental condition two.

The second code I will review is “agreement.” I used this code whenever I noted a participant acknowledging a point on which they agreed with the other participant. A straightforward example of this code comes from the experimental condition one discussion when somewhat conservative Andrew M. spoke about the many difficulties of legally negotiating the immigration system and very liberal Craig A. responded with, “Yeah I think that's pretty reasonable.” Simply responding with “Yeah” or “That definitely makes sense” or “Right” was also coded as agreement. The agreement code constituted 1.25% of the word count in the control condition, 4.01% in experimental condition one, and 1.86% in experimental condition two.

The third code is “ask question.” I used this code whenever a participant asked a question, whether rhetorical or directed at the other participant to request clarification or more information. An example of this would be from experimental condition two when mostly conservative Debra M. asked very liberal Nicholas A., “How do you feel about the borders being locked if you're an immigrant and you can't get back home and you're forced to stay here, you know? That's a whole nother ballpark in immigration.” The code “ask question” constituted 5.40% of the word count in the control condition, 3.84% in experimental condition one, and 8.49% in experimental condition two.

The fourth code is “conclusion.” I used this code whenever a participant spoke about a conclusion that they had arrived upon. These could be drawn from an experience, a stated fact, or an evaluation of an idea or argument. I generally saw phrases like “I think” or “I feel” as strongly indicating of an upcoming conclusion statement. An example from the control condition would be when mostly conservative Paula J. told mostly liberal Kevin A., “It’s rare that people don’t like music. You know, people have their opinions on music, and they like different kinds of music. But it is rare that you meet someone who doesn’t like music.” The “conclusion” code constituted 11.61% of the word count in the control condition, 30.79% in experimental condition one and 40.46% in experimental condition two.

The fifth code is “express admiration.” I used this code whenever a participant explicitly expressed their admiration for the other participant. An example from the control condition would be when mostly liberal Alan M. responded to very conservative Roy F. with, “So you're in the military… or you were in the military. So cool man. Thank you for your service.” This code constituted 0.56% of the word count in the control condition but was not present in either of the two experimental conditions.

The sixth code is “hope for an outcome.” I used this whenever a participant expressed a hope that something would occur in the future. An example of this code from experimental condition one was when very liberal Marie K. suggested to mostly conservative Nicole E:

> I can only hope that like it teaches people like to treat each other better. But, yeah, also to care for one another… like something as simple as me wearing a mask in the store […] somebody wearing a mask in a store could save another person. So, I would hope that […] that would be instilled. Like, okay, it's just not for me. It's for other people as well.

The "hope for an outcome" code constituted 0.12% of the word count in the control condition and 0.67% in experimental condition one but was not present in experimental condition two.

The seventh code was "restating the other's argument." I used this code whenever participants would attempt to summarize or restate an argument or conclusion made by the other participant. I did not differentiate here between summaries or restatements that were accurate versus inaccurate according to the other participant. Merely making an attempt was sufficient. An example of this code would be when mostly liberal Linda J. responded to very conservative Kenneth B. with:

> But I do want to […] go back to something that you said when you were stating your viewpoints. And that was about, like, assimilation and how there is sort of like less of a tendency to assimilate now.

The "restating the other's argument" code constituted 5.44% of the word count in experimental condition one and 6.92% in experimental condition 2 but was not present in the control condition.

The eighth code was "sharing fact or anecdote." I used this code whenever a participant made what they appeared to believe was a factual statement about the world or shared an anecdote from their own life or the life of others. I did not attempt to rate the accuracy of fact statements. One example of the "sharing fact or anecdote" code was from experimental condition two when mostly conservative Lisa J. told very liberal Randy E. "I actually took in a refugee a long time ago and because her father was trying to have her killed because she converted out of Islam." This code constituted 74.36% of the word count in the control condition, 34.31% in experimental condition one, and 23.44% in experimental condition two.

The ninth code was “similarity.” I applied this code whenever a participant acknowledged areas of similarity with the other participant. An example of “similarity” comes from experimental condition one in which somewhat liberal Martin R. tells very conservative Wayne M.:

> I think you may have actually touched on part of my view […] inadvertently when you mentioned that, you know, Shaw Industries [and] Conagra are paying sort of eight dollars an hour. And you're saying it's their fault, you know. […] are we gonna hold them responsible for paying so little for these jobs?

The “similarity” code constituted 0.23% of the word count in the control condition, 0.70% in experimental condition one, and 0.73% in experimental condition two.

The tenth code was “someone else’s shoes.” I used this code whenever a participant indicated that they were imagining what it might be like to be in someone else’s position. An example of this code comes from experimental condition one in which very liberal Nancy F. said to mostly conservative Rebecca W.:

> So, I can imagine I would feel really impatient if I was having to wait a year for my paperwork to go through and not having anywhere to live for that year and not having anywhere to go. Like, I would probably want to just like slip in and just hope that I can just like lay low until my paperwork passes.

Of all the participants, Nancy F. was the only participant to speak in terms of imaging herself in someone else’s position. As a result, this code made up 1.66% of the word count in experimental condition one and was not present in either of the other conditions.

The eleventh code is “speculation.” I used this code whenever a participant made a prediction about what they thought would happen in the future. I also used it when a participant speculated about what might be going through someone’s mind. An example of this comes from experimental condition one in which somewhat liberal Mark J. remarks to mostly conservative Shirley E.:

> […] like kind of how we point towards the no towards immigration where while I think that again when you break down the nuances of things like I mentioned earlier I think the economy if we somehow had a button right now that said we could press and say every illegal immigrant is just poofed like Thanos[5] […] I mean… you would have… there would be no one working these services.

The "speculation" code constituted 9.52% of the word count in experimental condition one and 7.41% in experimental condition two but was not found in the control condition.

The twelfth code is "suggesting additional examples." I used this code whenever a participant attempted to expand upon or support what the other participant was saying by presenting additional examples, details, or implications. When somewhat liberal Martin R. suggests that employers paying illegal immigrants a pittance under the table is worse than illegal immigrants accepting jobs from said employers, very conservative Wayne M. agrees and adds, "But the person without the green card in a lot of cases doesn't really even maybe even know the laws." The "suggesting additional examples code constituted 1.07% of the word count in the control condition, 5.02% in experimental condition one, and 5.63% in experimental condition two.

The thirteenth and final code was "understanding." I applied this code to any excerpt in which a participant indicated that they understood what the other participant was saying.[6] An example from experimental condition two was when mostly conservative Debra M. tells very liberal Nicholas A., "So I hear what you're trying to say that you support immigrations and certain immigration resources are to be used." The "understanding" code constituted 0.04% of the word count in the control condition, 0.24% in experimental condition one, and 0.50% in experimental condition two.

[5] The reference to "Thanos" likely comes from a character of the same name in the 2018 film Avengers: Infinity War.
[6] Understanding was not taken to constitute agreement. I already had a code for that.

Table 12 includes a frequency analysis of all codes while table 13 includes a summary of all codes in terms how much of the word count they accounted for:

Table 12 Overall frequency of codes by condition in participant discussions

Code	Control	Experimental 1	Experimental 2
Acknowledging ignorance	1	57	19
Agreement	20	87	50
Ask question	52	28	65
Conclusion	26	105	110
Express admiration	9	0	0
Hope for an outcome	1	2	0
Restating the other's argument	0	14	28
Sharing fact or anecdote	99	102	80
Similarity	3	3	7
Someone else's shoes	0	2	0
Speculation	0	40	21
Suggesting additional examples	3	13	19
Understanding	2	5	9

Table 13 Overall frequency percentages of codes by condition in participant discussions

Code	Control	Experimental 1	Experimental 2
Acknowledging ignorance	0.08%	5.40%	2.09%
Agreement	1.25%	4.01%	1.86%
Ask question	5.40%	3.84%	8.49%
Conclusion	11.61%	30.79%	40.46%
Express admiration	0.56%	0.00%	0.00%
Hope for an outcome	0.12%	0.67%	0.00%
Restating the other's argument	0.00%	5.44%	6.92%
Sharing fact or anecdote	74.36%	34.31%	23.44%
Similarity	0.23%	0.70%	0.73%
Someone else's shoes	0.00%	1.66%	0.00%
Speculation	0.00%	9.52%	7.41%
Suggesting additional examples	1.07%	5.02%	5.63%
Understanding	0.04%	0.24%	0.50%

Note: Percentages for each condition will not necessarily add up to 100% as some excerpts qualified for more than one code.

With these results in hand, I further elected to export my transcripts from QDA Miner into Wordstat to use its algorithmic word frequency and association capabilities. I used both condition and political affiliation as variables. After pruning out filler words (e.g., "um," or "uh") and other terms of negligible significance (e.g., "lot" or "bit"), I noted that the top 10 most

frequently used terms throughout all of the discussions were: people, kind, immigrants / immigration, feel, guess, work, country, good, money, and jobs. I also noted two main clusters in associations of terms. The first cluster contained the terms America, coming, immigrants / immigration, and border. The second cluster contained the terms country, good, kind, people, work, and guess. The term "feel" was also associated with both these groups, though seemingly more to the second cluster. When I looked specifically at the frequency of "feel" by condition and political affiliation, I noted that it was used in all three conditions and by both liberals and conservatives, but that it varied by both of these. It was used substantially more in the first experimental condition (condition 2) than it was in either of the other conditions. Additionally, liberals used the term "feel" far more frequently than did conservatives (see Figure 1).

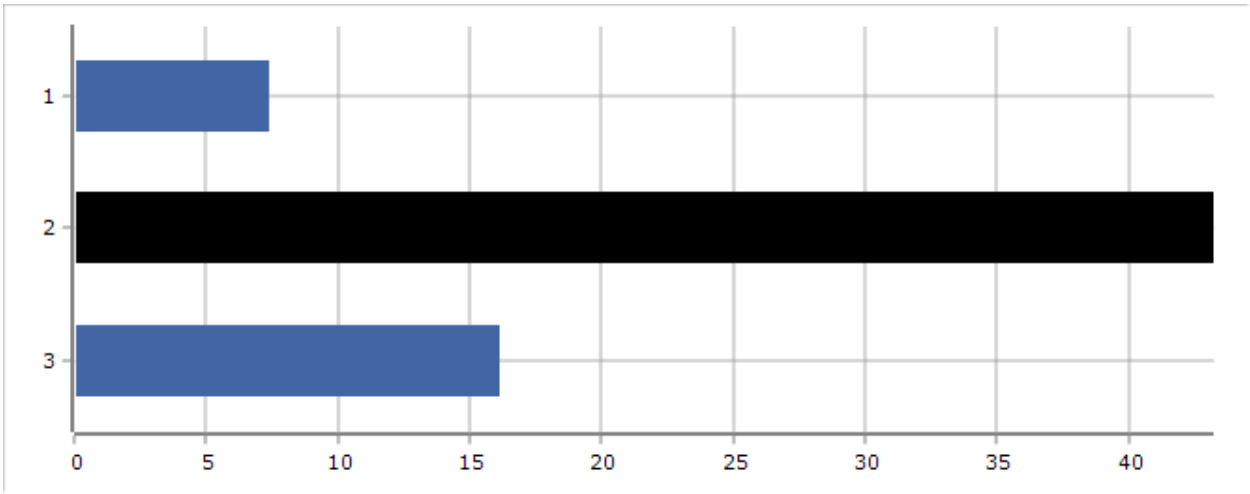

Figure 1 Rate per 10,000 words of the term "feel" by condition in participant discussions

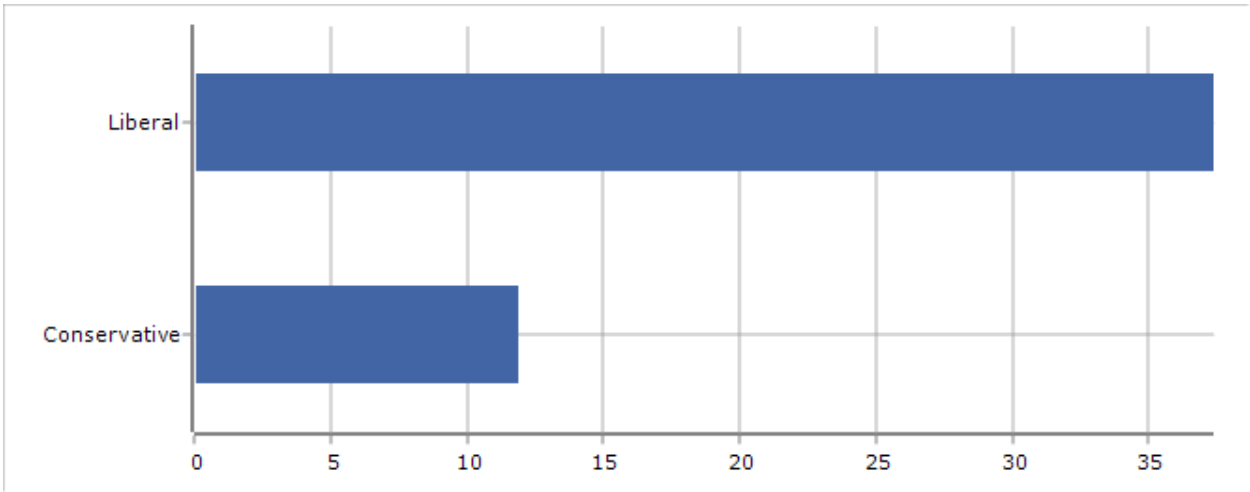

Figure 2 Rate per 10,000 words of the term "feel" by political affiliation in participant discussions

Figure 1 shows the differences in how frequently participants used the term "feel" across the three conditions. Participants in condition two (the first experimental condition) used "feel" at a rate greater than 40 per 10,000 words, while in condition one (control) and condition three (the second experimental condition) participants used the term "feel" at substantially lower rates (roughly 7 and roughly 16 per 10,000 words, respectively). Figure 2 indicates that liberals used the term "feel" at a rate of approximately 37 times per 10,000 words while conservatives used it approximately 12 times per 10,000 words.

I also noted several phrases that exhibited similar differences between liberals and conservatives. Only conservatives used the term "laws" and the phrase "southern border." And liberals tended to speak more of illegal immigrants (Figure 3) while conservatives tended to speak more of illegal immigration (Figure 4):

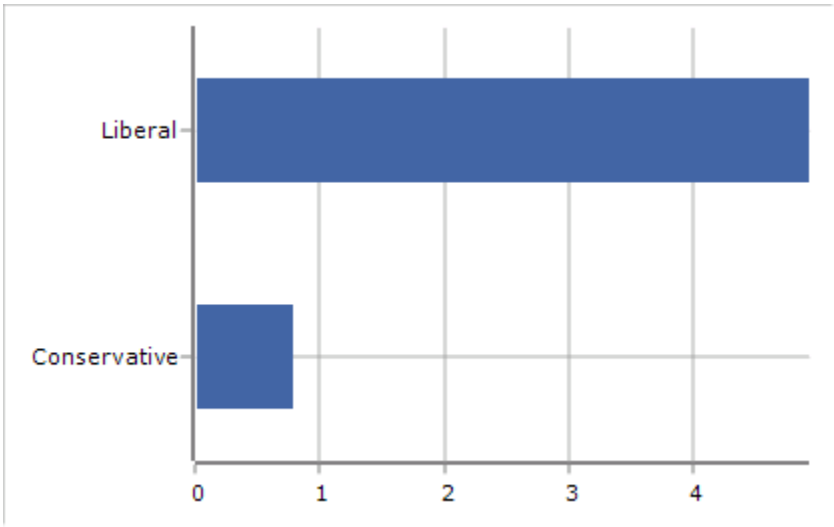

Figure 3 Rate per 10,000 words of the phrase “illegal immigrants” by political affiliation in participant discussions

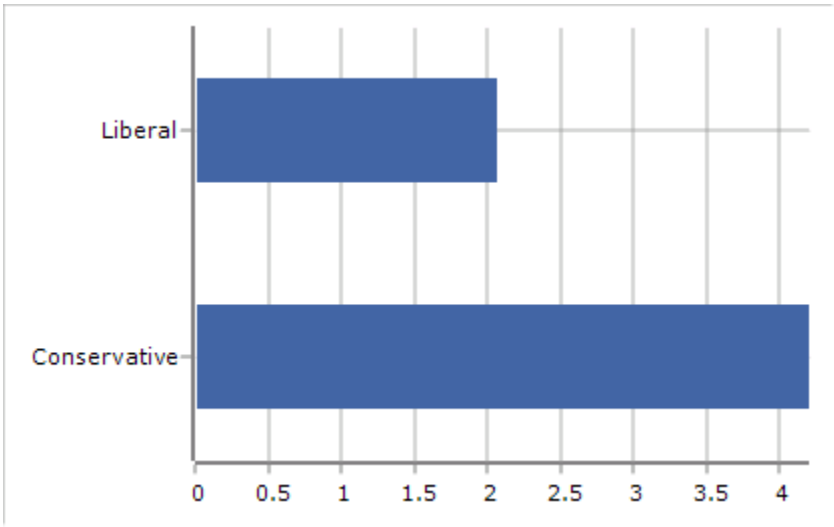

Figure 4 Rate per 10,000 words of the phrase “illegal immigration” by political affiliation in participant discussions

Figure 3 suggests that liberals used the term “illegal immigrants” at nearly five times the rate of conservatives, while figure 4 indicates that conservatives use the term “illegal immigration” at nearly two times the rate of liberals.

Participant conversation discussion

Several plausible interpretations of the analyses occurred to me upon reviewing them in conjunction with each other. Firstly, the control and second experimental conditions were roughly similar in terms of number of words, while the first experimental condition had consistently more words. All conversations were taking place in the same amount of time (20 minutes plus or minus a handful of seconds), which means that people in the first experimental condition were speaking at a higher rate of speed than the other two. This may have been because participants in the control and second experimental conditions felt the need to slow down and more carefully consider their words.

In the case of the control condition, many participants expressed surprise that they were to be discussing their recreational interests rather than a political topic given that they knew they were being matched up with someone on the other side of the political spectrum. This surprise may have contributed to a more tentative approach to the discussion, and thus more careful discussion as they reoriented themselves to their unexpected context. The second experimental condition explicitly encouraged active listening and analytical thinking. So it is, perhaps, unsurprising that people in that condition spoke less rapidly. The first experimental condition, on the other hand, was likely both more in line with participant expectations and did not include encouragement to think analytically or actively listen. This may help to explain why people in this condition spoke so much more in the same amount of time.

Secondly, the frequency of qualitative codes was suggestive of several differences between the conditions in terms of how participants spoke to each other. Some of these are to be expected, as in the high prevalence of "sharing fact or anecdote" in the control condition. Discussing their recreational interests is expressly what each participant was asked to do, after all. That said, the codes "acknowledging ignorance," "agreement," and "speculation" were all more prevalent in the first experimental condition compared to the other conditions. Acknowledging one's own struggle and tentative/lack of understanding of a topic plausibly illustrates something like intellectual humility (Whitcomb, Battaly, Baehr, & Howard-Snyder, 2017). It may be that participants are using this language to signal that they are attempting to act in good faith. Conversely, the code "ask question" was less prevalent in the first experimental condition than it was in either of the other conditions. This may suggest that participants in the first experimental condition are more focused on sending signals rather than seeking them.

In the second experimental condition, the codes "ask question," "conclusion," and "restating the other's argument" were more prevalent than in the other two conditions. This was the only condition in which participants were explicitly asked to listen to and summarize the other person's position to their satisfaction. Stating one's conclusions, restating the other's argument, and asking for clarification are all elements of this process, so it is not surprising that these codes are most prevalent here. The second experimental condition did present a somewhat higher use of the "suggesting additional examples" code over the first experimental condition, but the difference was very small (<1.0%). Thus, a tendency to extend the other's ideas or arguments with additional examples or implications was present in both experimental conditions.

Two codes, "similarity" and "understanding," were present in all three conditions but were nevertheless uncommon (<1.0% of the word count) in all of them. Perhaps seeing oneself

in the other may well be a task ill-suited to a 20-minute conversation? And explicit verbal expressions of understanding may simply be rare occurrences in general rather than something unique to these discussions. More uncommon was "hope for an outcome," which presented itself only in the control and first experimental conditions but was more prevalent in the latter. Its absence from the second experimental condition may relate to hope's relation to personal desires, something that the more analytical context of this condition may discourage.

I found the last two codes in only one condition. The "express admiration" code was only present in the control condition and was not particularly common (<1.0% of the condition's word count). It was, however, present in three of the four discussions in this condition. While it may not be a major piece of these discussions, it may be a consistent one. It may be that even a little admiration can have subtle yet significant effects. The other code present in only one condition was "someone else's shoes." This code was not only restricted to the first experimental condition, but it was also restricted to a single liberal participant. It may well be that this code's presence is more a function of that participant than the discussions more broadly.

One possible future means of testing some of the validity of these interpretations could be with something like Wordstat. Though a thorough statistical analysis of word use and associations is beyond the scope of this thesis, Wordstat did reveal some potentially valuable avenues for future research. The two clusters of associated terms may reflect different approaches to talking about the topic of immigration by liberals and conservatives. The first cluster (America, coming, immigrants/immigration, and border) may reflect conservative language, while the second cluster (country, good, kind, people, work, and guess) may reflect liberal language. That liberals used the term "feel" far more often than did conservatives may tie in to Haidt and Graham's (2007) theory of moral foundations, in which liberals are more likely

than conservatives to associate with the moral foundation of "care." Liberals may be thinking more in terms of emotional connection than in terms of abstract laws or principles. Additional support for this interpretation may be reflected in how liberals more frequently used the phrase "illegal immigrants" while conservatives more frequently used "illegal immigration." Liberals may well be focusing much more strongly on the human-interest element of the issue, focusing their attention on the specific individuals affected. Conservatives, on the other hand, may be thinking more abstractly in terms of policies, laws, and procedures. That conservatives were the only ones to use the term "laws" seems to support this.

Additionally, the term "feel" occurred substantially less often in the second experimental condition than the first. It may be that the summary task instruction encouraged a more analytical rather than emotion-based approach to the discussion, encouraging the liberal participants to speak more like their conservative discussion partners.

An additional means of validating these interpretations is the participants' own perspectives on the discussions. I will next review the process and results of those interviews and follow that with an overall discussion of the quantitative and qualitative results.

Participant interview analysis

For the analysis of the post-discussion interviews, I chose to separately code them from the ground up and then compare the results against the coding of the discussions. As this was an interview setting rather than a discussion, I anticipated that the context of the interview might elicit qualitatively different responses from my participants. I wanted my coding to have a better chance to capture that difference as independently as possible from the discussion codings. Admittedly, this was challenging for a single person to do given the potential carryover effects of

having done the previous coding already. Nevertheless, I continued to use Glaser's (1965) constant comparative method as in the analysis of the discussions.

One problem that arose early on in my coding process was that some of my participants gave much longer answers than others. Unlike the discussions, there was no hard time limit on the interviews. As a result, some interviews had many more words in them and thus were more likely to contain a larger number of ideas to be coded. When I coded each expressed idea, I found that some interviews were having a disproportionate effect on the final analysis compared to others. As an example, though I did not ask her to, the mostly conservative Nicole E. spoke at length during her interview about her position on immigration. Had I coded her entire extensive response; it would have disproportionately influenced the final analysis.

To address this problem, I elected to identify the central theme of each participant's response and assign a single code for each. (In essence, I was coding the modal theme of the response.) I then assessed the prevalence of each code rather than the prevalence of word counts for each code. While this did reduce the richness of possible codings, this approach ensured that each participant's answer was given equal weight in the final analysis.

After several full readings of the interviews and discussions with my advisors, I elected to focus in on coding participant responses to four specific questions from the interview. I anticipated that these four questions would have the richest responses and provide the most substantial implications for theory generation and future research. Those questions were as follows: 1) "What were your overall impressions of the discussion?" 2) "How did your impression of your discussion partner change during the discussion?" 3) "What is the value of these kinds of discussions?" 4) "What could have made the discussion better overall?"

Interview question one

For the first question (overall impressions of the discussion), I identified seven separate codes from the participant responses. Those seven codes were as follows: “better in person,” “common ground,” “I’m in a bubble,” “positive conversation overall,” “refining my ideas,” “summarizes the discussion,” and “unexpected instructions.” Several of these codes were present in only a single participant’s response. For brevity’s sake, my below analysis will primarily focus in on codes that I found to be present for at least 20% of the participants in at least one condition. But the prevalence of all codes is also listed in table 14.

There were two codes that met my 20% threshold for question one. The first code was “common ground.” I used this code whenever a participant primarily expressed that the discussion showed them that they had common ground with their discussion partner. An example of this code was when very liberal Randy E. remarked about mostly conservative Lisa J.:

> I was a little bit surprised that just how much in common we had right off the bat with our views. […] we had a lot of common ground that could have made for some very interesting discussion going forward I thought. […] that also made it for a very agreeable conversation. I don't feel… like … you know… unless one of us did something to provoke the other I don't think that we would have gotten into confrontation.

For question one, the “common ground” code occurred in 60% and 30% of the responses for experimental conditions one and two, respectively. It was not present in the control condition.

The second code that met my 20% threshold was “positive conversation overall.” I used this code whenever the participant’s response primarily expressed a generally positive impression of the discussion. An example of this code was when very conservative Wayne M. spoke of his conversation with somewhat liberal Martin R by saying, “I thought it went fairly well. Better than other discussions I've had in the past with […] people on the opposite spectrum.

So, I thought it went very well." I assigned this code to answers in 75% of the control condition, 20% of the first experimental condition, and 60% of the second experimental condition interviews.

To summarize, table 14 below contains percentages of code frequency within each condition.

Table 14 Frequency percentages of interview codes by condition for question one

Code	Control	Experimental 1	Experimental 2
Better in person	0%	0%	10%
Common ground	0%	60%	30%
I'm in a bubble	0%	10%	0%
Positive conversation overall	75%	20%	60%
Refining my ideas	0%	10%	0%
Summarizes the discussion	13%	0%	0%
Unexpected instructions	13%	0%	0%

Note: Question one was as follows, "What were your overall impressions of the discussion?"

Interview question two

For the second question (How did your impression of your discussion partner change during the discussion?), I identified nine codes in the responses. Those codes were "admiration,"

"discovered common ground[7]," "enjoyed the conversation," "from negative to positive," "increasing comfort," "I want to do this more," "no expectations," "neutral to positive," and "pleasant surprise." The codes that met the 20% threshold were more varied for question two and are described in more detail in the following and in table 15.

The first code that met the threshold was "admiration." I used this code whenever a participant indicated that they respected or admired the other participant or their ideas. An example of this code was when mostly conservative Nicole E. described very liberal Marie K. in the following way:

> Well I see that she's very… I don't really ask her age… but she's very mature for her age and I respected her very much - her opinions and everything. And she, verbally, she spoke very well - better than I can in words. I'm more of a, you know, I can't express myself - how I feel - too much in words. But overall, it was it was a good discussion, you know. I respected her.

This response includes elements of both "admiration" and "enjoyed the conversation," but the majority (mode) of the response relates to Nicole E.'s evaluation of Marie K. as a person rather than the discussion itself. I assigned the "admiration" code in 25% of the control condition responses, 40% of the first experimental condition responses, and 0% of the second experimental condition responses.

The second code to meet the 20% threshold for question two was "discovered common ground." As in question one, I used this code whenever a participant primarily expressed that the discussion showed them that they had common ground with their discussion partner. When mostly conservative Paula J. recalls talking about their mutual enjoyment of music and lack of interest in most sports with mostly liberal Kevin A., she remarks that:

[7] There was consistent conceptual overlap between this code and the "common ground" code used previously. I elected to give this concept a unique code for each of the four question so that I could easily identify which question was being responded to by looking at the code.

> I think it was interesting to get to know a little bit more about who he is as a person. […] Just as an overall, you know, male people are often into sports […] or, like, video games or whatever is like the niche type of thing. So it's, you know, it was kind of neat to see some different leisure activities or different hobbies. […] we had a similar sports view so that was nice.

I noted the "discovered common ground" code only in the control condition interviews, but it made up 25% of the answers to question two therein.

The third code I noted meeting the 20% threshold in responses to question two was "from negative to positive." I used this code whenever a participant indicated that they came into the conversation expecting a negative experience, but that they ended up finding it to be a positive one. An example of this code comes from mostly conservative Larry K. when he remarks of mostly liberal Raymond G.:

> At the beginning, you know, I thought he was going to be more confrontational. And then, as we were talking, it essentially… like, his concerns were my concerns. So, then it kind of changed for a positive, you know, at that point […] realizing we're actually talking about something we both agree on.

I assigned the "from negative to positive" code in 13% of control condition responses, 30% of experimental condition one responses, and 50% of experimental condition two responses.

The fourth code meeting the 20% threshold in response to question two was "neutral to positive." I used this code whenever participants indicated that they started out with neutral expectations of the discussion or their discussion partner, which then shifted to positive during the discussion. An example of this code comes from the mostly liberal Kevin A. when he remarks of the mostly conservative Paula J.:

> I tried to come into it with no expectations up front. That was totally my plan. Because… no idea what to expect. I don't know what we were going to be into. I try to come into these things like with, you know, I don't know what this person is going to be like. Are they going to be friendly? Are they going hostile? Are they going to be white? Are they going to be black? Are they going to be male? […] I don't know. And so, I made no expectations up front. And it was a pleasant conversation.

I noted the "neutral to positive" code only in the control condition, wherein it made up 25% of the responses. That said, overall results for the nine codes identified in responses to question two can be found below in table 15.

Table 15 Frequency percentages of interview codes by condition for question two

Code	Control	Experimental 1	Experimental 2
Admiration	25%	40%	0%
Discovered common ground	25%	0%	0%
Enjoyed the conversation	0%	10%	10%
From negative to positive	13%	30%	50%
Increasing comfort	0%	10%	20%
I want to do this more	0%	10%	0%
No expectations	0%	0%	10%
Neutral to positive	25%	0%	0%
Pleasant surprise	13%	0	0

Note: Question two was as follows, "How did your impression of your discussion partner change during the discussion?"

Interview question three

For the third interview question ("what is the value of these kinds of discussions?") I identified seven codes. The codes were "change public policy," "education," "encouraging understanding," "encouraging respect," "humanizes the other," "identifying common ground," and "outside the bubble." Five of these codes met the 20% threshold, and what follows is a description of each followed by an overall breakdown of all seven codes in table 16.

The first code that met the 20% threshold was "encouraging respect." I used this code whenever a participant primarily indicated that discussions like this were valuable because they encouraged respect between people on different sides of the political spectrum. An example of this code is when very liberal Randy F. answers with:

> […] especially in this sort of setting where you're very encouraged to be respectful of each other and to listen to each other. […] I think it's much more helpful for facilitating a good discussion where people come out of it thinking about things.

I assigned the "encouraging respect" code to 14% of the responses in the control condition, 0% in experimental condition one, and 30% in experimental condition two.

The second code to meet the 20% threshold was "encouraging understanding." I used this code whenever the majority of the participant's response focused on how these discussions encourage them to understand people on the other side of the political spectrum. An example of this code comes from the very conservative Roy F..:

> Because I enjoy having discussions with people on the other side of the aisle and to hear what it is that makes them tick and to, you know, even to find out things that are wrong you know my perceptions that I have about them that are wrong. Because it helps with the furthering of discussion. I think our country in general has gone to favoring echo chambers and those that want CNN go to, you know, that lean left just listen to CNN. Those that lean right listen to Fox News and we spend our evenings talking with each other about how stupid the other side is and never… We have lost the ability to debate and to raise hard questions and to talk through them civilly.

I found the “encourages understanding” code in 14% of the responses from the control condition, 0% of the responses for experimental condition one, and 30% of the responses for experimental condition two.

The third code to meet the 20% threshold for question three was “humanizes the other.” I used this code whenever a participant indicated that these discussions are valuable because they help to humanize people on the other side of the political spectrum. An example of this code comes from the very liberal Nancy F.:

> And the value in these discussions… […] I definitely think these discussions should be had by more people. I think it just really humanizes those people. […] I think it would be super valuable for there to be some sort of forum where we could like see each other as just humans who grew up in different worlds and have different ideas.

I found the “humanizes the other” code in 29% of the responses for the control condition and 10% of the responses for experimental condition one. This code was not present in experimental condition two.

The fourth code to meet the 20% threshold for question three was “identifying common ground.” I used this code whenever a participant indicated that these discussions were valuable as a means of identifying points of common values, perspectives, and/or interests. An example of this code would be from the very conservative Wayne M.:

> For one, it helps highlight, sort of, areas where there actually is common agreement. I think he and I both kind of agreed that the situation where you have someone coming in as an undocumented immigrant and an employer pays them in cash under the table and doesn't do withholding taxes… I think we both agreed that that's a problem, you know, and the employers - I think we've both agreed the employer probably should be penalized significantly enough to dissuade them from doing that. So, I think that's an area where you can find some commonality that maybe you didn't expect to find in that regard.

I assigned the “identifying common ground” code in 14% of the control condition, 40% of the first experimental condition, and 20% of the second experimental condition responses.

The last code to meet the 20% threshold for question three was “outside the bubble.” I used this code whenever a participant expressed that the value of these discussions was that it encouraged them to meet people who were not inside of their existing (often politically homogeneous) social circle. An example of this code comes from very liberal Craig A.:

> I think that it's really valuable in that I really do feel like we're in this world of polarization. I think that, like, the way that large media and social media companies are driving for like engagement and views and stuff is pushing people into these bubbles and pushing people into like extremist views. And honestly, like, the world I live in – I'm in grad school - almost everyone I know feels the same way about the world that I do. Like all my friends I got - there are some people I know who have opposing views - but even like my parents have started to become more in line with the way I see the world recently and, like, in response to like the Trump administration. So, I think in some ways I can start to view people that are more conservative - it's like I focused so much on extreme views that I lose sight of moderate people.

I noted the “outside the bubble” code in 30% of the first experimental condition and 20% of the second experimental condition responses. I did not find this code in the control condition responses. Table 16 below includes all codes identified for question three:

Table 16 Frequency percentages of interview codes by condition for question three

Code	Control**	Experimental 1	Experimental 2
Change public policy	0%	10%	0%
Education	0%	10%	0%
Encouraging respect	14%	0%	30%
Encouraging understanding	43%	0%	30%
Humanizes the other	29%	10%	0%
Identifying common ground	14%	40%	20%
Outside the bubble	14%	40%	20%

Note: Question three was as follows, "What is the value of these kinds of discussions?"
**One participant did not provide a codeable answer to this question in the control condition. Thus, the percentages here are out of seven participants rather than the standard eight.

Interview question four

Question four was "What could have made the discussion better overall?" I identified the following codes in the participant responses: "additional topic(s)," "advance knowledge," "more learning about the other person," "more participants," "more opportunities for common ground," "more structure," "more time," "nothing," "not sure," and "researcher present." Of those, five

codes qualified for the 20% threshold. Table 17 below provides a listing of all identified codes for question four.

The first code to meet the 20% threshold was “advance knowledge.” I used this code for any participants who indicated that the discussion would have been improved if they had been given advance knowledge of the topic they would be discussing. An example of this code comes from mostly conservative Shirley E., who responded:

> I guess, […] maybe like I said knowing a little more about the subject matter. Being able to give… I might would have had a little more insight and to be able to give my point of view better if I knew more about the subject matter. […] Being able to research a subject ourselves is important. I think […] having a little bit more knowledge base might have helped me a little bit, I think, in the conversation.

I assigned the “advance knowledge” code in 25% of the control condition, 0% of the first experimental condition, and 20% of the second experimental condition responses.

The second code to meet the 20% threshold was “more structure.” I used this code when a participant indicated the need for a more structured discussion. An example of this code can be found in very liberal Marie K.’s response:

> I guess having specific things to talk about because I think, for her, immigration was just like the border and jobs. And I feel like it encompasses way more than just that. But a lot of people just think border that stops people coming in, taking your job, and that's it. But it's so much bigger than that.

I assigned the “more structure” code in 38% of the control condition, 40% of the first experimental condition, and 0% of the second experimental condition responses.

The third code to meet the 20% threshold was “more time.” I used this code whenever a participant indicated that the discussion would have been improved if more time had been allowed for it. An illustration of a response given this code came from the somewhat conservative Andrew M, who noted:

> I think I would have liked to have just a little bit more time to […] finish talking with him about certain things. Just because, I think we were in the middle of talking about this situation with a friend of his […] who was a Muslim… who was talking about his personal experience. And I think we were kind of getting in the middle of that when the time limit stopped. So maybe just a few more minutes I think might have been a little bit helpful.

I found the "more time" code in 13% of the control condition, 20% of the first experimental condition, and 30% of the second experimental condition responses.

The fourth code to meet the 20% threshold was "not sure." I used this code whenever a participant couldn't settle on a suggestion for how the discussion might have been improved. An example of this code is from the mostly liberal Kevin A., who responded with:

> It was such an innocuous topic. So, I mean, I didn't want a contentious topic, right? You know. I guess, in some ways it would have been nice to think about it beforehand. But in other ways it's nice to be surprised with it.

I assigned the "not sure" code only in the control condition, of which it made up 25% of the responses to question four.

The fifth code to meet the 20% threshold was "researcher present." I used this code whenever a participant indicated that it would have been beneficial to have me present during the conversation to guide or mediate it. An example of this code comes from the very liberal Raymond G., who responded with:

> Maybe even have a moderator that was asking a question to both people. Almost like a debate format that you would have a moderator that would then kind of force someone … force both parties to give an opinion on something. Just like you would with a presidential debate or something.

I found the "researcher present" code only in the second experimental condition, wherein it comprised 20% of the responses to question four. For ease of reference, table 17 contains a full listing of all codes identified for question four and their prevalence in each condition.

Table 17 Frequency percentages of interview codes by condition for question four

Code	Control**	Experimental 1	Experimental 2
Additional topic(s)	0%	0	10%
Advance knowledge	25%	0%	20%
More learning	0%	10%	0%
More participants	0%	10%	10%
More common ground opp**	0%	10%	0%
More structure	38%	40%	0%
More time	13%	20%	30%
Nothing	0%	10%	10%
Not sure	25%	0%	0%
Researcher present	0%	0%	20%

Note: Question four was as follows, "What could make the discussion better overall?"
**Abbreviated form of "More opportunities for common ground" in order to preserve table spacing

Once I had the coding results in hand, I again elected to export[8] the interview transcripts into Wordstat to take advantage of its word frequency and association analyses. After pruning

[8] I first extracted my own words out of the interview transcripts to ensure that I was analyzing only what the participants were saying.

out filler words and words of negligible significance, I noted that the top 10 terms used across all participant discussions were: people, kind, discussion, good, person, feel, guess, talk, thought, and immigration. A visual inspection of the dendogram cooccurrences output revealed that, of these 10 terms, “discussion,” “kind,” “good,” “talking,” and “feel” all tended to cluster together. The term “good” clustered most with the terms “people/person,” “conversation/discussion,” and “kind.”

As in the discussions, the term “feel” was again used much more often in the first experimental condition than it was in the control or second condition (see Figure 5). Further mirroring the discussions, liberals used the term “feel” more frequently than did conservatives (see Figure 6).

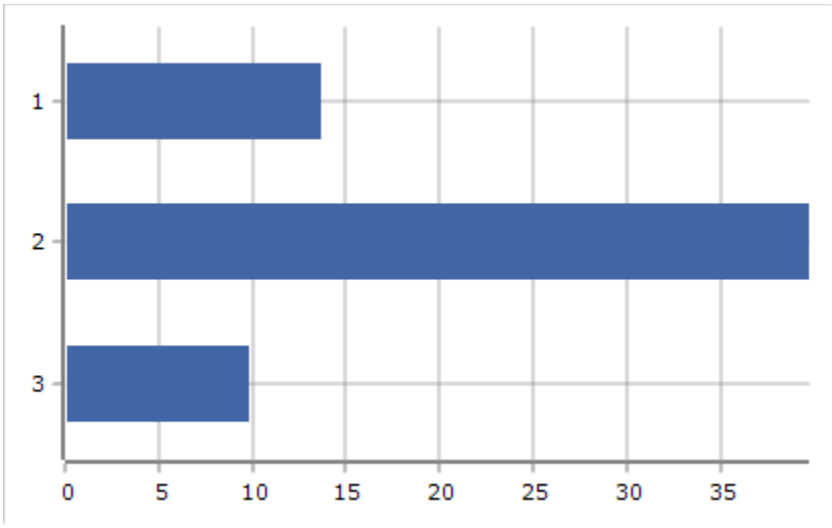

Figure 5 Rate per 10,000 words of the term “feel” by condition in participant interviews

Participants in the first experimental condition used the term “feel” roughly 40 times per 10,000 words compared to roughly 14 and nine times per 10,000 words for the control and second experimental conditions, respectively.

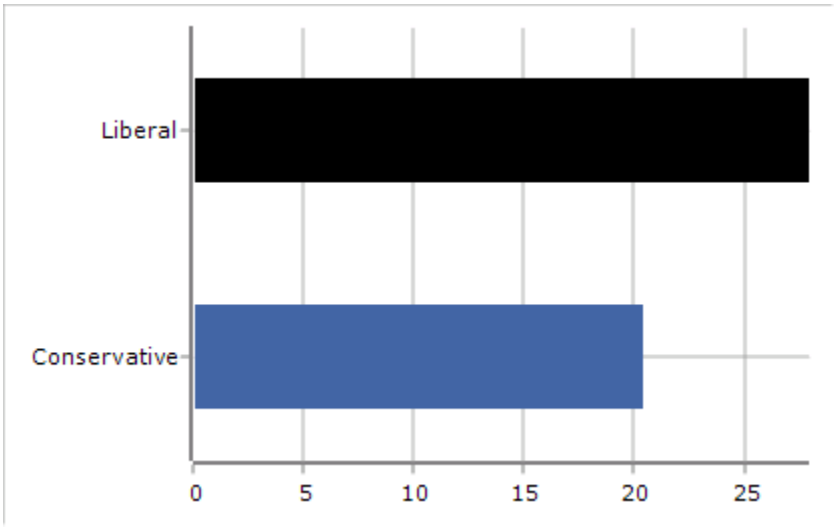

Figure 6 Rate per 10,000 words of the term “feel” by political affiliation in participant interviews

Liberal participants used the term “feel” roughly 28 times per 10,000 words while conservatives used it roughly 21 times per 10,000 words in the interviews.

The five most common phrases, in order of frequency, were “good discussion / conversation,” “point of view,” “subject matter,” “common ground,” and “good job.” The phrase “good discussion/conversation” was present in 17 out of the 28 interviews and was used nearly equally by both liberals and conservatives. The phrase “common ground” was used exclusively by liberals and somewhat more in the first experimental condition than in the second (and not at all in the control condition). There were not enough uses of “illegal immigrants” versus “illegal immigration” to determine whether liberals or conservatives were using these phrases more in the interviews.

Participant interview discussion

The qualitative coding and Wordstat term/phrase frequency and association analyses above suggest several general themes expressed by participants in their post-discussion interviews. Even when the specific phrase was not used, the "common ground" theme emerged consistently in responses to each of the questions. The consistent prevalence of this theme suggests that participants found this to be a very prominent outcome of their discussions. Further, that the most frequently used phrase was "good discussion/conversation" suggests that participants viewed their experience positively.

If we adopt a more restrictive minimum of 30% frequency threshold for codes across all four questions, the qualifying codes would be "common ground," "positive conversation overall," "admiration," "from negative to positive," "encouraging understanding," "identifying common ground," "outside the bubble," "more structure," and "more time." If we couple this finding with the consistent prevalence of the "common ground" theme, it suggests that participants largely considered the experience to be positively valenced (Solomon & Stone, 2002). It may simply be that participating in this kind of study may have interested people who were already more inclined to positively view these kinds of discussions. It could also be because it gave them a chance to find common ground with people outside of their group whom they assumed would be antagonistic or for whom there would be little to no common ground possible. For example, the very liberal Craig A. notes at the end of the interview how the discussion gave him a chance to rethink some of his stereotypes:

> I mean, if I'll be completely candid, I was surprised to see - when I heard… when I had an image of the kind of person I'd be talking to - and I heard I'd be talking to someone who's conservative… and I was surprised to see a black man. So just be to completely

> candid, I […] had this image of like a certain type of person who was a conservative and so that kind of put me in a place of… […] to bring myself out of viewing stereotypes… of, like, the stereotypes I hold about the right. So […] I doubt this person feels the same way that, like, I've seen topics affecting, like, race and immigration and stuff. So that was a little… that was interesting to me. I appreciated that.

Liberals in their interviews were, again, more likely to use the term "feel" than conservatives. They also used it more frequently if they had been assigned to the first experimental condition compared to either of the other conditions. As with many of these observations, a robust statistical analysis would help to determine whether these trends were more a function of condition, political affiliation, or some other variable like individual differences.

The principle suggestions for improving the discussions were that the participants wanted more structure and more time. Many of the participants expressed that they would have appreciated more guidance from me prior to and/or during the discussion. They commonly suggested that the topic of immigration was too broad, and that they would have liked me to narrow it down to specific questions for them to address. I can appreciate how the participants may have felt unsure of how to proceed given the broadness of the topic, and it seems plausible that narrowing it down would have alleviated that to some degree. At the same time, perhaps there was some value in confronting the fact that immigration is a big, complicated, messy topic? Perhaps part of the benefit of these conversations is in making that clearer? Perhaps this recognition encourages a more careful approach in which we assume less and open ourselves up more to the complexity of the topic? Easy answers based on stereotypes or our political in-group's usual talking points may be less attractive when we confront the extent of this complexity in conjunction with someone who may disagree with us.

Regardless, the prevalence of the "more time" code suggests that many of the participants found the discussions valuable enough that they wanted them to continue past the 20-minute limit. Some of this may well have been related to the COVID-19 lockdowns and the resultant decreased opportunities to have conversations with people outside of one's own house. On the other hand, the prevalence of positive evaluations of the discussion suggests that this desire for more conversation remained after the discussions. Though many of them expressed having felt trepidation beforehand, the participants generally enjoyed and found the experience valuable. Future research could attempt to disentangle these possible explanations with more extensive and robust methods, both qualitatively and quantitatively.

CHAPTER VI

LIMITATIONS

The first possible limitation of this study is the sample size. The 28 participants included in this study are likely not sufficiently representative of the broader population, and thus any inferences made from this study's results should be provisional and subject to broader confirmation. This limitation is partially mitigated by using a Bayesian approach. Future studies using Bayesian analysis could take this study into account in informing their own priors. Regardless, more study is needed.

The second possible limitation is that there may be more appropriate methods for running the Bayesian modeling. I am continuing to learn best practices in this area and will plausibly discover more elegant and effective ways to model longitudinally measured outcome variables.

The third possible limitation is the use of video conferencing rather than originally intended in-person meetings to facilitate the discussion. While unavoidable due to the COVID-19 pandemic, Allport's four conditions are likely best tested in a context that allows for each participant to engage in the full spectrum of modes of communication. While participants in this study were able to engage in direct conversation as well as see the expressions and some of the body language of their discussion partner, it likely imposed some limits on this communication that lessened the directness of the contact. On the other hand, this may not be so much of a limitation as a more conservative test of Allport's criteria. If contact works to reduce prejudice in

a virtual format, the effects could be greater in person where the social repercussions for bad behavior can be more severe.

The fourth likely limitation is the use of short self-report scales for the quantitative analyses. More comprehensive scales may better capture the constructs in question. Additionally, a behavioral assessment may be helpful as a means of validating the self-report results.

The fifth limitation is that the Wordstat results were not subjected to robust statistical analyses. This was more a function of the scope of the project than it was a limitation, but future research could improve upon this project by making use of more thorough analyses.

CHAPTER VII

OVERALL DISCUSSION

The quantitative Bayesian modeling results largely supported the study's hypotheses. Intergroup attitude was likely to increase after the discussions for participants in all conditions, and those increases were smaller but still present after 30 days. The addition of the summary task in experimental condition two was associated with the largest increases in intergroup attitude, both immediately after the discussion and 30 days later. Participants in the first experimental condition were more likely to increase their intergroup attitude immediately after the discussion than those in the control condition. At the 30-day mark, however, the difference between these conditions had shrunken to a negligible amount. All of Allport's conditions (equals, common goals, common interests, institutional support) were associated with a positive change in intergroup attitude at both time points as well, though the effect was lower at the 30-day mark as anticipated. The one hypothesis that the models did not support was a positive relationship amongst perspective taking, openness, and intergroup attitude. Only the sub-optimal alternative to model one suggested a likely positive relationship between perspective taking and intergroup attitude. Otherwise, the results from this study provide evidence that higher levels of self-reported perspective taking and openness to experience predict reductions in intergroup attitude. That is, the higher participants scored on measures of perspective taking and openness to experience, the less positively they viewed people on the other side of the political spectrum in general.

These results were unexpected given the results of other studies looking at this relationship. As noted in the earlier discussion, it may be that the context within which the participants were operating suppressed their tendency to make use of these characteristic, or that too many people were high in these traits such that the actual relationship couldn't be modelled. Another possibility is that, perhaps, when it comes to self-report measures of traits or approaches that are socially and morally admired, there is something of a Dunning-Kruger (1999) effect in play? Perhaps some percentage of those who rate themselves as most open to experience and tending to see the perspective of others are the least competent at doing so – and also are the least aware of their own lack of competency in these areas? Future studies could use more rigorous tests of these variables in addition to simple self-report to explore this possibility.

In terms of more exploratory qualitative findings, the initial descriptive analyses indicated that participants spoke more frequently in the first experimental condition compared to both of the other conditions. As noted, one possibility for this is that participants were more inclined to send signals than they were to seek them in this condition compared to the others. The Wordstat analysis adds an additional possibility with the increased prevalence of the term "feel" in the first experimental condition. This approach was more prevalent in liberals than it was in conservatives. Perhaps the liberal participants in this condition were more often drawing from emotional rather than analytical thinking? As analytical thinking seems to be a more laborious process than emotional thinking (Kahneman, 2011), this may also have contributed to participants speaking more rapidly when it was not encouraged.

The second experimental condition included less frequent use of the term "feel," more use of the "ask question" code, more use of the "conclusion" code, and more use of the "restating the other's argument" code than either of the other conditions. This would seem to reflect an

inclination for participants to make use of more analytic thinking as well as more of a tendency to seek out information from their discussion partner.

Each of these approaches to discussion have potential utility. It could, for example, be that the prevalence of emotional language contributed towards positive outcomes. In his classic work evaluating rhetoric and the characteristics of effective persuasion, Aristotle (350 B.C./1991) wrote on the value of using ethos, pathos, and logos – or establishing credibility, engaging with the emotions of the audience, and using logic and reasoning. Each of the three conditions in this study resulted in positive improvements in outgroup attitude, which suggests some degree of successful (implicit or explicit) persuasion away from political intergroup prejudice. Though the conditions were not explicitly designed to encourage ethos or pathos, it is plausible that the second experimental condition strongly encouraged logos. Haidt (2012) speaks to this as well, arguing that logos can be effective only if both ethos and pathos have already been engaged. Future research could attempt to isolate how different rhetorical approaches influence intergroup attitude, as well as whether and how they interact with Allport's four conditions.

The principle finding of the study, however, is that the participant interviews aligned with the quantitative analysis in that the most prevalent codes, terms, and phrases evaluated the discussion positively. All codes present in at least 30% of the responses in a condition were positively valenced. The Wordstat analysis also revealed that the most common terms and phrases that had an emotional valence were all positive. Thus, the qualitative and quantitative results suggest that most participants reacted positively to their experience as well as their discussion partner, and that their feelings about their discussion partner's political group also become more positively valenced both immediately after the discussion and 30-days afterwards.

To expand upon this research, future studies could investigate whether this intervention sees comparable results when the topic of discussion is varied. Researchers could include discussions on other significant social issues like abortion, gun control, race relations, LGBT+ identity or rights, or climate change. Providing training to participants on reflective listening (Sundararajan, 1995) prior to their discussions may improve the improve the likelihood of prejudice reduction. Exploring the use of additional factors like threat sensitivity (Carver, 2009) or dogmatism (Rokeach, 2015) may improve the model. Researchers could also look to whether the methods used in this study translate to similar effects between other groups defined by differences in ethnicity, sexuality, sexual identity, religion, etc...

The approach taken in this study is plausibly one of many effective approaches we might pursue when we seek to improve intergroup relations. It may turn out that others are more effective. It may turn out that prejudice based on certain types of group membership are less amenable to reduction through intergroup contact, or that additional variables provide moderating or mediating effects. Nevertheless, I hope that it contributes a useful data point towards a more robust exploration of political prejudice and how we might alleviate it.

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APPENDIX A

IRB APPROVAL LETTER

THE UNIVERSITY OF TENNESSEE
CHATTANOOGA

Institutional Review Board
Dept 4915
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Chattanooga, TN 37403
Phone: (423) 425-5867
Fax: (423) 425-4052
instrb@utc.edu
http://www.utc.edu/irb

TO: Matthew Durham
Dr. Ralph Hood, Jr.

IRB # 20-017

FROM: Lindsay Pardue, Director of Research Integrity
Dr. Susan Davidson, IRB Committee Chair

DATE: 2/5/2020

SUBJECT: IRB #20-017: The effects of in-person discussion on intergroup attitutde

Thank you for submitting your application for research involving human subjects to The University of Tennessee at Chattanooga Institutional Review Board. Your proposal was evaluated in light of the federal regulations that govern the protection of human subjects and approved via the expedited review procedure authorized by 45 CFR 46.110 and 21 CFR 56.110.

You must include the following approval statement on research materials seen by participants and used in research reports:

> ***The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project # 20-017.***

Please keep in mind that all research must be conducted according to the proposal submitted to the UTC IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an Application for Changes, Annual Review, or Project Termination/Completion form to the UTC IRB. Please bear in mind that significant changes could result in having to develop a new application for submission and approval. Your protocol will be automatically closed at the end of the proposed research period unless a change request application is submitted. No research may take place under a closed or expired protocol.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the UTC IRB as soon as possible. Once notified, we will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval.

For additional information, please consult our web page http://www.utc.edu/irb or email instrb@utc.edu.

Best wishes for a successful research project.

APPENDIX B

QUALITATIVE INTERVIEW QUESTIONS

Qualitative interview questions

1. Please rate on a scale of 1 to 7 how much you agree with the following statements

	1 – Strongly disagree	2 – Mostly disagree	3 – Somewhat disagree	4 – Don't know / Not sure	5 – Somewhat agree	6 – Mostly agree	7 – Strongly agree
My discussion partner and I were equals.							
My discussion partner and I had common interests.							
My discussion partner and I had common goals.							
The researchers were							

supportive of our having a quality discussion.							

2. What were your overall impressions of the discussion?
3. How did your impression of your discussion partner change during the discussion?
4. What could you have done better during the discussion?
5. What could your discussion partner have done better during the discussion?
6. What is the value of these kinds of discussions?
7. What could have made the discussion better overall?
8. Is there anything else that you noticed about your discussion that you'd like to talk about?

APPENDIX C

DEMOGRAPHICS QUESTIONNAIRE

Demographics Questionnaire

1. Your age: _____

2. Your gender: Male_____ Female_____ Other _____

3. What is the highest level of education that you have completed?

a) High school diploma

b) Associate's degree

c) Bachelor's degree

d) Master's degree

e) Doctoral degree

4. Please indicate how much you lean towards a liberal or conservative position on the issue of immigration:

1 **Very Liberal**	**2** **Mostly liberal**	**3** **Somewhat liberal**	**4** **Moderate**	**5** **Somewhat conservative**	**6** **Mostly conservative**	**7** **Very conservative**

APPENDIX D

PERSPECTIVE-TAKING

INTERPERSONAL REACTIVITY INDEX

Perspective-Taking

Interpersonal Reactivity Index (Davis, 1983)

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate letter on the scale at the top of the page: 1, 2, 3, 4, or 5. When you have decided on your answer, fill in the letter on the answer sheet next to the item number. READ EACH ITEM CAREFULLY BEFORE RESPONDING. Answer as honestly as you can. Thank you.

1	2	3	4	5	6	7
Does not describe me well						Describes me very well

_____ 1. I sometimes find it difficult to see things from the "other guy's" point of view.

_____ 2. I try to look at everybody's side of a disagreement before I make a decision.

_____ 3. I sometimes try to understand my friends better by imagining how things look from their perspective.

_____ 4. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.

_____ 5. I believe that there are two sides to every question and try to look at them both.

_____ 6. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.

_____ 7. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

APPENDIX E

INTERGROUP ATTITUDE

GENERAL EVALUATION SCALE

Intergroup attitude

General Evaluation Scale (Wright et al, 1997)

Please check the boxes that describes how you feel about people who lean the opposite direction of you politically in general:

	Extremely	Very much	Somewhat	Neutral	Somewhat	Very much	Extremely	
Warm								Cold
Negative								Positive
Friendly								Hostile
Suspicious								Trusting
Respect								Contempt
Admiration								Disgust

VITA

Matthew Durham was born in Berrien Springs, MI, to parents, Russell and Cynthia Durham. He attended a variety of private elementary schools within the Seventh-Day Adventist religious school system, including schools in Michigan, Minnesota, California, and Florida. He graduated from Forest Lake Academy in Apopka, Florida in 1997. While working full time at a variety of companies, he attended and graduated from Valencia Community College in 2007 with an Associate of Arts in Philosophy. He then began working in cancer research for Sarah Cannon Research Institute while attending the University of Tennessee at Chattanooga (UTC) at which he earned a Bachelors of Arts in Philosophy in 2015. Persuaded to return to academia by Dr. Christopher Silver and Dr. Ralph Hood, Matthew enrolled in the Masters of Science program for Psychology at UTC in 2018 while simultaneously serving as the project manager for an international research project studying faith development. Matthew plans to continue his education in interdisciplinary mixed methods research by pursuing a doctoral degree at UTC.