UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

CONSTRICTING THE BODY POLITIC: THREE STUDIES OF POLITICAL COMMUNICATION APPREHENSION AND WHY THEY MATTER

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

ANT WOODALL

Norman, Oklahoma

2024

Downloaded from SHAREOK. Persistent Handle URL: https://hdl.handle.net/11244/340390

CONSTRICTING THE BODY POLITIC: THREE STUDIES OF POLITICAL COMMUNICATION APPREHENSION AND WHY THEY MATTER

A DISSERTATION APPROVED FOR THE

DEPARTMENT OF COMMUNICATION

BY THE COMMITTEE CONSISTING OF

Dr. Patrick C Meirick, Chair

Dr. Justin Reedy

Dr. Ioana A. Cionea

Dr. Wayne Riggs

© Copyright by Anthony (Ant) Woodall 2024

All Rights Reserved.

DEDICATION

For the people who wanted me to realize I have a voice and that I should use it. Thank you for believing in me.

Acknowledgments

This work is the sum of everything I have experienced in my life (so far). In the 30 years I have lived, I have seen so much positivity and negativity in this world (let's not talk about the pandemic). I could not have made it without the assistance of a great many people. This section serves to thank just a small number of those people.

First, I want to thank my committee for their support and constant reminders that this work did not have to be 500 pages or more. You were right. To my advisor, Pat Meirick, you have been constantly supportive and encouraged me to explore every angle and avenue. Thank you for being so patient with me and for guiding me along this journey so that I become a better version of myself. I will miss our dueling Trump impersonations in class, so please don't stop doing them. When I started my degree, I planned on studying media but I fell in love with studying conversations, and my other committee members get the credit for that. To Justin Reedy, thank you for guiding me into the joys of political conversations and serving as my conscience in academia. As they say in *The Good Place*, you are forking awesome. To Ioana Cionea, the best math teacher I ever had, thank you for pushing me to try so many new things and giving me easy solutions I would have never thought of. You helped me turn a dumpster fire into a dumpster garden. To Wayne Riggs, thank you for helping me expand my worldview beyond the social sciences. There is so much philosophy hidden within academia, and I would not have caught it without your guidance. You helped me learn the different schools of thought and showed me ways to move past them. All four of you guided me in so many ways, and I appreciate all of them. To anyone who reads this work and dislikes it, it is absolutely their fault, not mine.

I also want to thank the large variety of academic mentors and peers I have in my life. To Kristopher Copeland, Hsin-I Yueh, Lindsey Meeks, Amy Johnson, Norman Wong, Jill Edy, Kyle Rudick, Kat Golsan, Timothy Betts, and so many others, thank you for the long hours of conversations, advice, and venting. Thank you to my cohorts for keeping pace with my jokes and matching them. To Brittney, Emily, Chris, Ellie, Pavitra, Caleb, Kyle, Doris, Val, Kaitie, Ryan, and everyone else. You all are brilliant scholars and I cannot wait to see where the world takes us. To the subsequent pranksters that go through our program, I hope to see a thousand tiny ducks in Burton Hall (to anyone in OU Comm who was not aware, yes, that was me). Remember to keep them out of reach of kids and pets. We may be menaces, but we are responsible menaces.

Next, I want to thank my friends and family for their support. When I worked in a restaurant, I learned existing scientific literature cannot explain what happens inside an Applebee's. The professional network cannot thrive without support, and you all have been there for me in times when I needed it most. Some of you even inspired the topic this work is about, shoutout to Ciara, Lydia, and everyone who told me to stop talking politics in the kitchen. To my friends James and Jenna, I would never have finished college without your help. Thank you for everything. Also, thank you to all the friends I made back at Northeastern State, to my fraternity brothers, my fellow TAs, Riverhawks rule.

To my family, I am who I am because of what you've taught me. To my dad, thanks for never scolding me for buying so many books and thank you for growing up with me. To my Aunt Tracy, thanks for making me do my homework. You taught me the importance of a network, and I'll never forget it. To my Buffy and Nana, thank you for always keeping me in your thoughts. Now that this is done, I promise to try calling a little more often.

Next, a few of the people that got me through all of this did not make it to the end to see this work completed, and I want to thank them too. First, to my mom. You would have been so mad to hear I became an academic instead of going to Broadway, but you also would have been ecstatic to hear I try to be the teacher I needed when I was younger. Thank you for doing your very best with me when you were here. Second, to my friend Steven English, who saw me through some of the worst periods of my life and encouraged me to become the best version of myself. I told you I would try to live up to your example. I am still trying.

This research was only made possible thanks to several grants from OU's Department of Communication and the Dodge Family College of Arts and Sciences. This kind of research is expensive and I would not have been able to do it without your help.

Also, I offer a brief thanks to the other academics whose graduate theses and dissertations I read to prepare for this. You might be equal parts surprised and horrified to know someone read it, but I did, and I feel much more capable for it. Thank you.

Dr. Hsin-I Yueh

Dr. Elizabeth Hurst

Dr. Pavitra Kavya

Dr. Haijing Ma

Dr. Britney Gilmore

Dr. Myiah Hutchens

Dr. Stewart Coles

Dr. Cassidy Hansen

Dr. Elaina Ross

Dr. Timothy Betts

Dr. Caleb Hubbard

Dr. Maria Shpeer

Lastly and perhaps most importantly, I would like to thank the sidewalk for keeping me out of the streets. Fund your local governments.

Table of Contents

Dedication iv

Acknowledgments v

List of Figures xv

List of Tables xiv

Preface: Reading a Dissertation for Dummies xvii

1: Introduction 1

Introducing Political Communication Apprehension (PCA) 5

Personal Interest 7

Significance of the phenomenon 9

Chapter 2: Literature Review 18

Contextual Framework 18

Political Communication 19

Interpersonal Communication 24

Contextual Intersection: Political Discussion in the United States 26

Theoretical Framework 30

Normative Theories of American Citizenship-How should citizens behave? 31

The Public Sphere: When and where do citizens learn? 35

Communication Accommodation Theory- How do we adjust to others? 39

Face Negotiation Theory: How do people want to be seen? 42

Spiral of Silence Theory: How do people decide when to share? 46
Conceptual Framework 49
Willingness to Communicate about Politics 50
Interpersonal Trust 52
Political Efficacy 54
Political Participation and Civic Engagement 55
Stress 57
Self-Esteem 59
Chapter 3: Study 1: Scale Design 62
Measure Development 63
Sample 66
Procedure 68
Data Analysis 69
Results 73
Discussion 78
4: Study 2: Scale Testing 81
Sample 82
Procedure 84
Data Analysis 84
Discussion 96

Chapter 5: Study 3: PCA, Political Behavior, and Well-Being 103
Sample 107
Procedure 107
Measures 109
Measures used in Study 2 109
Political Self-Efficacy 109
Interpersonal Emotional Trust 110
Political View Similarity 110
Stress 110
Self-Esteem 111
Civic Engagement 111
Data Analysis and Results 112
Discussion 120
Chapter 6: Discussion in The Big Picture 127
Translational Advice 134
Future Directions 137
7: Conclusion 145
Endnotes 148
References 149
Appendices 184

Appendix One: Measures 184

Measure One: Scale of Relational Political Communication Apprehension 184

Measure Two: Willingness to Communicate about Politics (Taken from Kleinman and Kleinman, 2015) 186

Measure Three: Alternate measure of PCA taken from Young (2023) 187

Measure Four: Emotional Trust- Taken from Johnson and Swap (1982) 189

Measure Five: View Similarity- (Adapted from Johnson et al., 2019) 189

Measure Six: Political Self-efficacy-(Taken from Craig and colleagues, 1990) 189

Measure Seven: Political Participation and Civic Engagement- Adapted from The Pew Research Center (2013) 190

Measure Eight: Stress (taken from Cohen et al., 1983) 191

Measure Nine: Relational Self-Esteem (From Rosenberg, 1965) 193

Appendix Two: Introductions to Methods of Analysis 195

Primer: Significance 195

Primer: Measurement 196

Primer: Data Normality 197

Primer: Correlations 199

Study One: Exploratory Factor Analysis 200

Study Two: Confirmatory Factor Analysis 201

Study Three: Hierarchical Regression Analysis 203

Appendix Three: Supplementary Tables and Figures..... 205

LIST OF TABLES

Table 1: Summary of Scale Development Procedures and Decisions 63

Table 2: Summary of Study One Participant Demographics 67

Table 3: Initial Rotated Factor Matrix 73

Table 4: Final Factor Solution 76

Table 5: Summary of Study Two Participant Demographics 82

Table 6: Confirmatory Factor Analysis Results 89

Table 7: Final Model Factor Loadings 89

Table 8: Typology of Political Conversation Orientations 96

Table 9: Summary of Study Three Participant Demographics 105

Table 10: Hierarchical Regression results for PCA (overall) and WTCAP 109

Table 11: Hierarchical Regression results for PCA subfactors 110

Table 12: Hierarchical Regression results for PCA (overall) and WTCAP 112

Table 13: Hierarchical Regression results for political communication and well-being 114

Table 14: Study One: Initial Factor Analysis Eigenvalues 192

Table 15: Study One Final Solution -Eigenvalues 194

LIST OF FIGURES

Figure 1: Hay's (2007) notion of the political realm ……..22

Figure 2: Final Factor Model Structure

……**Error! Bookmark not defined.**

Figure 3: Initial Scree Plot for Visual Check of Factor Retention ……...193

Figure 4: Final Factor Model ……195

Abstract

Much work has been done to capture people's discomfort with talking about politics. Previous research suggests people are uncomfortable with political conversations for a variety of reasons, though little has been done to synthesize these ideas together. This dissertation continues a research agenda from other graduate students around the United States by working towards a measure of political communication apprehension. Based on existing literature, I propose that political communication reflects a relational behavior as much as a political one and should be measured with both of these contexts in mind. To do so, I offer a review of literature surrounding the philosophies and issues that shape our discomfort with political conversations. I then talk through three studies: Study One builds a scale and tests in exploratory fashion with human respondents. Study Two refines the scale and tests it as a hypothesized model of measurement. Study Three takes the final measurement model and applies it to several hypothesized relationships about political communication apprehension and political behavior. I conclude with discussion about the cultural and relational factors that shape our political communication apprehension and what it means to study it.

Keywords: political communication, communication apprehension, civic engagement, well-being

Preface: Reading a Dissertation for Dummies

Before we jump into the big words and deep meanings. I want to take a moment to explain how to read a dissertation for the non-academic. This thing was a doozy to write and it is certainly a doozy to read. I have no doubt that anyone reading this book will find it useful but there are ways to increase its utility. To that end, I have a few suggestions for the non-academic and the non-communication folks that opt to browse this dissertation.

1) This work contains copious amounts of math. When I first started reading theses and dissertations, I had no statistical training and no way to understand a massive amount of numbers being thrown at me. I wanted this work to be accessible to the person I was when I was younger, so I made appendices to break down some of the statistical concepts for a reader that does not have the training I have had. If you have had statistical training, these sections do not matter to you and you are welcome to ignore them.
2) Communication research is predominantly split between two research paradigms: quantitative and qualitative. Each paradigm comprises multiple worldviews and each worldview changes how we think about an issue and studying it (Goertz & Mahoney, 2012). This work draws upon multiple philosophies to achieve this goal, some are made explicit, others are not. The majority of the methods used in this work are quantitative, though many qualitative theories are referenced as well. I explain what I can but there is a limit. Trying to explain everything would get us nowhere and defeat the purpose of explaining anything. Therefore, I try to unpack a few unspoken things but only when those unspoken things have a major part to play.

3) In academia, it is normal to have to reread something a couple of times. In my time as a Ph.D. student, I have found that science is far less about "sciencing" and much more about arguing that your science is worth examining. This dissertation is equal parts inquiry into a phenomenon and an argument that the phenomenon is worth understanding. If you reread something in this work several times and it still does not make sense, it's probably my fault.
4) This dissertation is complex. I want it to be accessible to the non-academic but that cannot come at the expense of depth. Throughout this book, I make efforts to make things as accessible as I can using plain language and deep explanations for some of our practices and why we do things the way we do. Some places will not have those explanations. It's normal for someone to not recognize every part of a scientific paper and it is okay to search the meaning of a word if you don't get it. I hope you will not need a thesaurus to understand my work, but it would not hurt to have one ready. Moreover, a dissertation is considered the pinnacle of a student's work. As a doctoral student, it is implied that this work should be greater than anything I have done so far. Because academic work leans on citing previous work to build their arguments, I want to remind you that websites exist to help you find the things I cite. I have a references section so that you can go find what I'm using in my work and read it.
5) If you move ahead and find yourself lost, double back and see where things make sense again. The thing with a good argument is that sometimes things get repetitive. It is part of what we are taught to do and it is a part of what we teach our students to do. (No. Seriously, it is in our public speaking textbook. Gamble & Gamble, 2020).

6) This book is highly informed by communication theory. I have been reading communication theories for a long time. Accordingly, I am aware of a wide range of theories and many of them inform how I think the world works. Some of them are at the forefront of this dissertation. Others are mentioned in passing. All of them are important to the extent that they inform this dissertation but if I tried to cover them all I would probably die with this thing unfinished. Accordingly, some theories take priority as core theories in this work. Others operate in the periphery because aspects of them inform this work but their depth is sacrificed for some small degree of simplicity. Even more theories are discussed in the end as potential directions for a research agenda inspired by this dissertation.

I wish you happy reading of this work. It was a pleasure to write and I hope I never panic when someone says they have read it. I believe it to be the next big step in my journey as an educator in both civics and relationships. I am excited to share what I have learned and I hope you enjoy it as well, as much as anyone can enjoy reading about the tensions of political conversations.

We run towards difficult conversations, not away from them.

-Ant

1: Introduction

"Citizen participation is at the heart of democracy. Indeed, democracy is unthinkable without the ability of citizens to participate in the governing process." (Verba et al., 1995).

"It is every citizen's duty to challenge their leaders, to keep them honest, and to hold them accountable if they are not." – Ahsoka Tano, Jedi Padawan and Inspiration to the Author (2010)

It does not take an academic citation for us to know that political conversations are stressful (Van Green, 2021) but it might take a few to admit that they are a core piece of our larger political problems (*Carlson* & Settle, 2022; Van Duyn, 2023). Some philosophers have noted the important role of communication in a healthy political culture of democracy: John Dewey (1927) argued that democracy is a system of relationships between people and that it requires connection for citizens to thrive. Murray Edelman (1971) noted that everyday political talk is vital to making sense of the political world. Hannah Arendt (1973) argued that a healthy sense of political self is vital to a democratic culture; Jurgen Habermas (1991) argued that conversations between citizens produce an informed public; Heidi Grasswick (2004) argued that knowledge is the product of individuals interacting with their communities. To quickly summarize a hundred years of democratic political philosophy: It is important for our well-being to be able to talk about politics and have ways of doing so comfortably for three reasons (Verba et al., 1995): for our society, ourselves, and our culture.

The first reason is social and rooted in obligation. Democratic social systems are dependent upon observant citizens to maintain their usefulness and avoid abuses of power (Mutz, 2006; Schudson, 1995) because citizens become more aware of issues and perspectives when they communicate with others. As the opening quotations of this dissertation suggest, our

political culture is built upon the efforts of people. Verba and colleagues (1995) argue this belief is at the foundation of every political act we perform. The argument is so embedded that is on the first page of their 638 page book on the subject: “voice and equality are central to democratic participation. In a meaningful democracy, the people’s voice must be loud and clear…”.

The second reason is personal and rooted in sensemaking. Personal elements of politics are deeply intertwined with identity (Papacharissi, 2015). Identity is negotiated through understanding and communication (Ting-Toomey, 2005). We rely on identities to help make sense of our world and our place in it (Jaggar, 1989). It is essential to be able to talk about politics for the sake of ourselves and our mental well-being because politics are becoming an increasingly pervasive part of our identity (Mason, 2018). Political identity forms a sort of shortcut between our other identities, knowledge, values, and political beliefs (Achen & Bartels, 2017). When we have very little information about a new political problem, we will rely on political identity cues of sources we trust in other contexts. These identities are very strong indicators of who claims to represent us (Kreiss et al., 2020), who we vote for (Achen & Bartels, 2017), how we process political information (Young, 2023), and who we are willing to talk to (Levendusky, 2023; Carlson & Settle, 2022).

The third reason is cultural and rooted in both obligation and sensemaking. Culture is both a reflection of individual and social actions, so it cannot properly fit into either of the former categories alone. This cognitive process is unique because it intertwines a person’s identity, behavior, and environment and seeks to find ways to make them fit together. Hurst (2021) argued that conversations inform our relationships and how we relate to others. Through discussion, we learn more about others, ourselves, and how those things fit together (Conover et al., 2002). Doing so individually changes a relationship and doing so en masse changes a culture

by changing the attitudes and customs. Edelman (1971) argued that political attitudes offer a unique form of cognition and response. Politics are special because they show us one of the many interconnections between the individual, society, and culture.

Political science research suggests that we feel more comfortable talking about politics with people who are like us (Settle and Carlson, 2019) because a sense of commonality produces trust, and with trust comes a willingness to engage and support others (Carlson et al., 2020; Fukuyama, 1995). Accordingly, we often have most of our political conversations with family and close friends (Carlson et al., 2020), but some people will still discuss with others. Over time, the connections that create trust have eroded (Putnam, 1995), and traditional sources of similarity such as the family do not always produce the comfort we expect (Johnson et al., 2019). These fraying social bonds have also been associated with a decline of trust in our political systems (Citrin & Stoker, 2018; Newton & Zmerli, 2008). Some political scientists and theorists have noted this decline also correlates with – but it not caused by – rising affective political polarization (Iyengar et al., 2019). Affective polarization refers to a state of hostility towards out-groups and friendliness toward in-groups. This hostility often manifests in the form of uncivil behavior (Jamieson et al., 2017) and affects the way we treat others (Iyengar & Westwood, 2015). With more affectively polarized citizens has come a critical choice between connection and engagement. In her book *Hearing the Other Side*, Diana Mutz (2006) evaluated several sets of evidence regarding how citizens consume political information and how that consumption relates to political behaviors. Mutz concluded that there is a trade-off between attitude tolerance and political participation: The more open we are to the other side, the more ambivalent we tend to become and the less we want to engage in the political process.

There is a long tradition of examining how different viewpoints can shape our willingness to talk about something. Elizabeth Noelle-Neuman (1974) argued that people have an inherent desire to belong and that this desire shapes the way they look at public opinion. If a person believes expressing their opinions will result in social backlash, they may refrain from sharing their opinions at all and maintain silence to maintain a positive relationship and avoid punishment. Noelle-Neuman's theory – known as the spiral of silence theory – has shaped a great deal of academic discussion about political argument (Scheufele & Moy, 2000). The theory is considered foundational to exploring political communication behaviors but, like any theory, it is not without fault.

Many communication theorists evaluate a theory by its scope (Littlejohn et al., 2021). The usefulness of a theory relies on what Dubin (1978) calls a paradox of precision: a theory about a series of relationships needs to be focused enough to offer a deep explanation of those relationships, but it cannot be too focused, or it has no use for people beyond those very specific examples. A theory about the world needs to be applicable to more than a couple of examples, but it must also be focused enough to offer some specific explanations. In other words, we use theories to offer a shortcut in our thinking and make simple sense of a complicated phenomenon (Dubin, 1978). The scope of spiral of silence is limited by focusing strictly on fear of social isolation and ignoring other reasons. It would be wrong to say this means we should disregard the theory entirely. Rather, I mean to say that the theory has limits, and there are things that function in proximity to, but still outside of, those limits. To explore those limits, this dissertation offers a conceptual argument for a term that can cover both the political strengths and weaknesses of spiral of silence theory by focusing strictly on the political realm of the theory

and arguing for the use of a concept called political communication apprehension (PCA[1]), which brings us to heart of this work.

It is my goal in this dissertation to provide a thoroughly convincing argument for the idea that you should incorporate PCA into the ways you think about political conversations. To focus more on the present moment, the rest of this chapter is organized to help you make easier sense of this wide volume. It includes several sections to explain my own interest and why you should care to read such a lengthy text. It also offers a preview of what you can expect later with details of later chapters.

Introducing Political Communication Apprehension (PCA)

Based on work from James McCroskey (1972), communication apprehension (CA) refers to a generalized state of discomfort a person has when communicating or thinking about communicating. As I have discussed thus far, this feeling can be and is often present when we talk about politics. Building off of McCroskey's work, Joy Jones-Carmack (2019) proposed a definition for political communication apprehension as "the fear or anxiety associated with real or anticipated communication about politics with another person or persons" (p.73). Subsequently, Montgomery (2020) explored apprehension in her thesis using qualitative interviews with college students. Her findings showed many participants feared disagreement or unpopular opinions. This finding suggests a strong connection between apprehension and spiral of silence theory.

This approach relies on a few contextual assumptions. The first is about the type of communication. While Jone-Carmack does not distinguish between informal conversation and structural practices of deliberation, other scholars have offered clues about what to consider here. For instance, Robert Wyatt, Elihu Katz, and Joohan Kim (2000) proposed that there is an

important difference between formal political deliberation and informal political conversation because one takes part within a political system while the other takes part out of it. This notion of political conversation also follows what Casey Klofstad (2010) called “civic talk”. Klofstad’s distinction between civic talk and civic participation is useful for understanding the difference between deliberation and discussion. Deliberation is a public action a person performs as a role within governmental or political spaces with the expressed intent of shaping the political process through problem solving. On the other hand, political discussion is not directly aimed at influencing political institutions such as government.

Based on these definitions, political discussion is not the same as political participation. Both are undeniably political behaviors, but they serve different purposes. Chip Eveland, Alyssa Morey, and Myiah Hutchens (2011) reach a similar conclusion and extend the argument from Wyatt and colleagues (2000) that discussion is best thought of contextually as informal dyadic and small-group interactions about politics.

With this idea in mind, a definition for political communication apprehension becomes easier to process. This behavior is not just about apprehension towards deliberation or formal political events such as political public speech. It deals more with intimate and informal notions of conversation. Doing so also helps us better understand how we can measure PCA (Fink, 2022). I have introduced a definition for political communication apprehension, but trying to measure it is a problem because of the diversity of literature on CA. Here are a few examples of what we know about CA. First, CA can exist as a temporary state of mind or as a continuous personality trait. Longitudinal research has suggested that apprehension is not stable as a trait and mostly ebbs and flows (Croucher et al., 2024). Second, CA can produce a variety of cognitive, emotional, or bio-physiological symptoms (Bodie, 2010). Third, CA can exist in a

variety of communication contexts such as dyads (one-on-one conversations), meetings, groups, or public speeches.

Given the vast and intersecting nature of this behavior, it is important to consult predictive theories that explain political behaviors in interpersonal contexts and vice versa to inform our choice on how to measure PCA. Because we also think of politics with morals and moral judgments, it is also important to consult normative theories that prescribe how we ought to live and how those theories might contribute to explaining PCA or explain its significance in our political culture.

Personal Interest

My interest in this idea came from the same place many other classical scholars had their great epiphanies: the swimming pool. I found myself contemplating some situations where friends and coworkers had been uncomfortable talking about politics. As I thought about them, I started to realize that theories I had read in school did not explain a friend who had very similar political beliefs but tried to avoid talking about politics because thinking about politics was stressful for her. These theories also did not explain some of my coworkers in the restaurant industry who seemed to enjoy discussed <u>everything</u> except for politics. The more I thought about these scenarios, the more I realized existing research did not explain them. The literature could only hint at solutions. I came up with the idea of PCA as the potential answer after multiple conversations with my cohorts. This research project is the result of my wanting to learn more about how my friends fit in with the larger world. I think they would find amusement in the idea that our conversations inspired my dissertation.

As I read about political conversations, I found great inspiration in Nina Eliasoph's (1998) book *Avoiding Politics: How Americans Produce Apathy in Everyday Life*. In this book

and related works, Eliasoph discusses a fascinating belief based on years of observation: people avoid politics even in situations where they may want to engage. During meetings with volunteer groups and social clubs, Eliasoph would note that political conversations would present themselves to others and that people would pass those opportunities up for a myriad of reasons. What interested Eliasoph about this issue is that it showed a form of political potential: people want to be politically minded and they want to discuss political problems but sometimes they do not. This is especially concerning because communication is the way we create these opportunities. Eliasoph (1998) explains this process with one of my favorite excerpts:

> With active, mindful, political participation, we weave reality and a place for ourselves within it. A crucial dimension of power is the power to create the contexts of public life itself…this power can [in addition to an immediate benefit] also be a means to more instrumental kinds of power since it opens up some aspects of life for public questioning and closes off others, allowing some aspects to seem humanly created and changeable and others to seem natural and unmovable. (p. 17)

By choosing not to engage, citizens ignore the fluidity of political conversation and let it evaporate. By letting the political discussion evaporate, the political public evaporates as well. Eliasoph's observation felt like a mirror of my own experience working in restaurants. As I worked in a restaurant bar that felt strangely like a panopticon, I would observe guests across the entire dining room as they discussed the world around them. Some days would revolve around sports, others around family life. In each occasion, topics would be brought up and passively dismissed because no one would contribute to their discussion. My experiences observing guests mention politics can be largely summarized as a mention in passing about something they cannot control. A sense of control encourages a sense of purpose, and so guests would talk about issues

they felt were within their control and let other topics fade from the conversation. By ignoring their chance to discuss these topics, guests set aside their civic potential to breathe life into a problem. The same problem was true with my coworkers, who would look at social problems surrounding their job such as low wages or sexual harassment in the workplace. These experiences were unwelcome but also felt uncontrollable. The popular saying "it be like that sometimes" was a frequent reaction to these experiences as we talked about them. Doing so surrenders the event to fate and reflects acceptance. Each person avoided engaging with issues for different reasons and they shared these reasons with me when I asked in private. This practice reflected a larger pattern that Eliasoph noticed: people are much more comfortable sharing their thoughts in private than they are in public.

Ultimately, this inspiration gave me the realization that it is important to understand PCA both for its political and personal impacts. This observation reflects one made by John Dewey: that democracy is an important system both for its political role toward an egalitarian system of representation and its social role. In the next section, I talk about the potential problems that PCA presents for knowledge gaining, for democracy, and mental well-being. Each of these problems are important to understand because they have different but related effects on our lives.

Significance of the phenomenon

Early epistemologists such as W.K. Clifford (1876) argue that most of what we know is the product of testimony, and classical political philosophers such as Jean-Jacques Rousseau (1764) believe education is the ultimate means of achieving autonomy. Conversation is necessary for improving both social and individual political agency (Achen & Bartels, 2017; Grasswick, 2004). Campbell (2005) defines agency as "the capacity to act, that is, have the competence to speak or write in a way that will be recognized or heeded by others in one's

community" (p.3). Agency is affected by a sense of self-efficacy – defined as one's sense of capability in handling a certain task – and apprehension implies a perceived inability or discomfort with political conversation. If we want to learn and grow our political understanding, we must talk with others because politics is a social activity. Accordingly, avoiding political conversations removes a primary source of political episteme and political agency.

Second, talking about politics is important for the larger political system, particularly in democracies (Conover, et al., 2007). Campbell (2005) argues that agency is communal and that agents tend to participate in actions collectively to practice efficacy. This sense of agency is what is essential to healthy democracy because it encourages participation in the political system. Habermas (1991 argues that many democratic societies rely on social spaces as both a bridge and buffer between intimate spaces (like family) and official spaces managed by government. Referring to this space as the "public sphere," Habermas argues that public space is useful for building consensus, criticizing tradition, and producing change, all of which are important aspects of public opinion and policymaking. Because democratic governments often rely on public opinion to determine policy (for more, see Burstein, 2003), political conversations are important for democratic systems to form and process public opinion. Additionally, political expression is important for understanding political trust. The Pew Research Center (2020) noted that political trust has continued to steadily decline for several decades. As trust in our political system declines, it becomes more important for people to express their opinions so that a government can be more sensitive to the wishes of its citizens (van der Meer & Zmerli, 2017). PCA may keep some people from expressing themselves, which presents an obstacle to understanding the public's actual opinion on an issue. A society needs open expression to

understand how it processes current events. This need is increased based on the epistemic impacts I mentioned in the previous paragraph.

Third, political conversations have both indirect consequences for our well-being. Indirectly the formation of public opinion affects policy, which includes health policy. Conversations about health certainly have political elements to them through lenses of race or class because it is important for (a) suppressed viewpoints with different health needs to have their voices heard and (b) the chance for upper-class groups to hear these voices so they can develop empathy and a desire to help those suppressed groups (Kawachi et al., 2005; Kraus et al., 2010). More directly, a culture that does not allow for healthy communication on serious topics like politics is likely to have negative outcomes for its populations' mental and physical health. I mean this argument in both a metaphorical and literal way. Political theory has long relied on metaphor to explain complex social systems, and a leading metaphor for understanding the political realm is the body politic: the comparison of our political space to a human body. This metaphor builds upon our understandings of human anatomy and biology. Each portion of the body politic performs a separate function in pursuit of a larger purpose: self-fulfillment and self-preservation. This pursuit can be selfish or selfless. If the body politic is the human body, than communication is at its heart, (Conover & Searing, 2005; Scheufele, 2000; Shah, 2016). Following this analogy, we might think of apprehension as cholesterol. Some apprehension can be healthy so that people are mindful of their place and do not speak recklessly. However, too much can constrict flow and affect the body.

When we say that democracy is sick, we do not refer to an actual bacteria or virus causing the illness. Rather, we allude to certain practices and what those practices mean for our desired social bonds and the health of those bonds. The impact that those bonds have on our

health is rooted in the argument that humans are social animals and need connection to survive. The reason for this claim is more theoretical than evidential: To understand this issue, one must look to philosophy, and I suggest starting with the work of Hannah Arendt. Arendt (1958) takes a similar stance to Dewey (1927) on the belief that politics is a space for public concerns to be articulated and solved. It is in these spaces that people learn about each other and can better solve problems. By discussing the world and how it affects us, we learn more about what might ideally solve such practices, but this understanding only comes from expressing ourselves. Such a practice is crucial to the cultivation of empathy and social bonds. Without this connection, the political self becomes tyrannical.

Arendt (1973) argues that a suppression of the political self can create a political culture where democracy wanes and people lean more into totalitarian ideologies to achieve their political wants. Arendt argues that this outcome occurs through a process of atomization, where people gradually lose all of their social bonds, leaving them feeling isolated and distrustful of others. In her analysis, Arendt use examples in the respective emergences of communism in Russia and fascism in Germany. To tame the masses and create loyalty to a totalitarian regime, Arendt argues that the regime utilizes policies of patriotism, self-reporting, and self-preservation to break down the social bonds in a community. As these relationships fracture, the masses become atomized and easier to control. In Arendt's view, the successful practice of atomization produces a fearful and broken population with little semblance of a public besides the official state message. Joel Bowman (2021) explains the connections between Arendt's observations and our contemporary political environment. Bowman proposed that a major component of the political problem comes from a highly diverse information environment:

> The result of this vast informational fragmentation is that, even two people living in the same house, with a lifetime of shared human experience, may come to harbor diametrically oppositional interpretations of exactly the same non-witnessed event, depending on the media sources/filters through which each person passively receives it. This is something akin to a phenomenon that mathematicians call parallax, whereby the position or direction of an object appears to change when viewed from different positions. Multiply this moment-to-moment separation by every single event consumed and you have a world of individuals moving further and further away from each other at increasing speed, like matter exploding outward from the Big Bang toward the distant corners of the universe. Thus, society is fragmented, its component parts isolated.

Through her description of atomization, Arendt portrays a society without social bonds and with a great amount of fear. Through Bowman's description, we can see more relevance to how this compares to our world today. If different perspectives are a way to separate us from each other, then communication is a means of sharing thoughts and reconnecting them. Arendt (1958) argues this point as well by suggesting words serve as a bridge between realities. If each person produces what Lippman called the picture in our head, then communication can be used to create a collage of perspectives and understandings. Eliasoph (1998) takes this a step further to propose that communication bridges different realities of people and weaves a place for the people to gather together through their communicative practices. It is this kind of connection that Dewey believed essential to healthy democracy. In theory, this idea is poetic, but it is quite serious. When we consider the kinds of experiences people must share, self-expression becomes both a form of self-advocacy and self-therapy. This form of expression is essential to establishing dialogue, building understanding, and creating liberatory social change (Freire, 2017). We can

fight for ourselves and heal ourselves at the same time. The pressure of these problems can put on a person is stressful, and communication apprehension also has effects on our well-being. Stress is a common concept related to CA (McCroskey, 1983)[1] but it is difficult to measure because of the uniqueness of experiencing CA. McCroskey explains that because CA manifests as a cognitive feeling rather than a behavioral practice, people may all experience the discomfort that comes from apprehension, but each person manifests that discomfort in different ways. This coincides with the uniqueness of stress. Each person has a different coping mechanism for high periods of stress. Stress can be thought of as a product of our perceived problems and our (in)ability to cope with them. A problem might be only somewhat stressful but made significantly worse by the belief that we cannot do anything about it. I discuss more about the relevance of stress as an outcome of PCA below.

To be clear, my point here is not that avoiding political conversations inherently ends up causing death and annihilation, nor does being afraid of political conversations inherently cause us to have a heart attack. Rather, I am claiming that PCA produces political problems and that those problems add up for our society, our relationships, and our well-being. When compounded, these problems worsen, but they rarely cause disasters on their own.

Significance and Purpose of the Study

While I want to justify this study by gesturing broadly toward everything, I believe PCA vital to begin measuring with several cultural phenomena at play in our status quo. These cultural phenomena are social responses to our political system, and they shape the way we navigate political discussions. To start, PCA may play an important role in public opinion work. A myriad of political culture trends have led to a substantial increase in the number of people who do believe it is not safe to express their opinions (Gibson & Sutherland, 2020) and while

disagreement is a primary reason for this belief, it is not the only one (Carlson & Settle, 2022). One popular example of a thing that drives this behavior is the rise of cancel culture: the increased demand for accountability when a person expresses an opinion that is seen as socially unacceptable. The choice to self-censor in the wake of these situations is the focus of the spiral of silence, a theory of human communication that I will unpack in the next chapter. For now, let us return to the notion of public opinion.

If PCA is an active predictor of a person's willingness to communicate with pollsters and interviewers, then public opinion sampling may be missing vital parts of the larger population. This problem is likely dependent upon other issues but is still something that is worth knowing. Distrust of public opinion polls continues to increase with political commentators arguing that polls are no longer an accurate representation of public opinion (e.g. see Sherman & Palmer, 2020). Understanding the role of PCA means looking into theories of public opinion and how they relate to political conversations. Additionally, an exploration of PCA should account for the impact this feeling has on the person as well. Much of the work I cite in this dissertation on political conversations has taken great care to unpack the political consequences of their findings. These scholars are right to consider the political impacts, but do somewhat of a disservice to people by ignoring the personal effects of these political behaviors. However, this work also glosses over the personal effects these conversations can have on people. For example, previous work discusses the impact of communication apprehension on our self esteem (McCroskey et al., 1977).Carlson and Settle (2022) considered something similar when tapping the effects of political discussion on the autonomic nervous system (ANS). They focused their investigation into two unconscious ANS responses: heart rate and electrodermal activity (the sweatiness of a person's palms. While they tap into unconscious health effects, I tap into

conscious mental well-being effects in the forms of stress and self-esteem. I choose these conscious reactions for two reasons: first, the unconscious has, in my opinion, already been well covered by Carlson and Settle. The second reason is that I want to understand how these conscious mental well-being outcomes pertain to problems that people will actively carry with them. We do not always feel capable of controlling our heart rate but we often do feel capable of controlling our stress level and self-esteem. Lastly, it means looking into various concepts that could be affected by PCA. I will explain each of these theories and concepts below in the next section.

Here's what to expect from the rest of this dissertation. In the next chapter, I review the existing literature to construct and refine an argument that this book is worth reading (and was worth writing). The literature review (also called a lit review) functions towards two goals. The first goal is to justify the given research context. I need to offer a compelling reason for why PCA is worth studying. The second goal is to justify given research questions and/or hypotheses. Anything mentioned should contribute to the argument or arguments being made that a phenomenon is worth studying in the ways I'm studying it. Because I am making a big argument with many predictions, I have to offer a big lit review with many justifications.

Where Chapter 2 sets up the argument for the rest of this book, Chapter 3 explains my research design and approach used in the rest of the book. The chapter will outline the steps, guidelines, and criteria I followed while conducting the research outlined in the Chapters 4, 5, and 6. Many of these details were things I learned in my doctoral coursework, but additional literature is referenced when I need to show where I get my standards from. The methods of this dissertation rely heavily on the use of statistics and the interpretation of statistics varies from

person to person. To ease this issue, the sciences follow various standards established in literature and those standards are cited when established.

Chapter 4 details the first study of three in this dissertation. I go through the process of designing a scale meant to measure a person's political communication apprehension. The scale is intended to be used by civics organizations and scholars in a variety of fields and should be used for assessing a person's discomfort toward talking about politics. I talk through the process of analyzing the data, its meaning and transition into the scale's confirmation. The scale's confirmation is tested in Chapter 5, where we look at the scale's reliability and validity.

With a tested scale in hand, I use the scale in a series of hypothesis tests. These tests are fleshed out, analyzed, and discussed in Chapter 6. I focus these tests on the relationships between political communication apprehension, mental well-being, and various political behaviors. With the studies concluded, I take a final, seventh chapter to discuss and unpack everything I have learned about political communication apprehension from a more critical perspective.

Chapter 2: Literature Review

Contextual Framework

Let us start digging deeper. To start this review of literature – a common part of dissertations, I must clarify that this subsection – a contextual framework – is not common to dissertations. However, I include it for two reasons. The first reason is accessibility: It is important to me to make this dissertation accessible to people outside of my discipline and to people who do not have the educational training that I have had. This means taking time to unpack assumptions and explain some of jargon and definitions our field uses on a regular basis. The second reason is theoretical. By unpacking these ideas and making them explicit, we can better trace how they shape and are shaped by the topic of this dissertation. In doing so, I can gain and offer a more robust reflection of PCA and consider more of what it claims to do.

Starting these observations means unpacking a simple question: What is communication? A basic communication textbook used at the University of Oklahoma organizes types of communication by how many people are engaged in the process (Floyd, 2022). This approach includes communication we have with ourselves (intrapersonal), communication with a single partner (interpersonal), and communication in small groups. Scale is a great way to focus the type of communication, but it can also be refined by specific roles and contexts. Examples of this type of communication might include communication in health contexts or communication between two cultures. We can also sort communication by the medium of communication such as non-verbal or computer-mediated communication. This dissertation focuses on communication at the intersection of two core contexts: the political and the interpersonal. As you may notice below, these two contexts are defined distinctly but they are not mutually exclusive.

Political Communication

Defining political communication requires a definition of politics, and a definition of "political" has trade-offs. The first trade-off is critical: Defining politics is inherently a political act. When we define some things as political and others as nonpolitical or apolitical, we contribute to a larger social structure of issue selection where issues get seen in a certain way and reflect a structure of power (Lukes, 2005). For instance, saying that one social movement is political but another is not rhetorically denies power to one of these movements. The second trade-off is academic: A definition heuristically shapes what falls into an academic conceptual population (Goertz, 2006; Swedberg, 2014). By defining things, we categorize them into sets of things that fit the definition and things that do not. Colin Hay (2007) makes this argument as well, noting a definition of "political" affects everything under the political realm. In other words, when we define politics, we also define political behavior, political attitudes, and a variety of other political systems. In doing so, we may miss a crucial piece of an explanation because it falls out of our set definition. With these trade-offs in mind, a careful definition of politics should be considered.

To reduce the harm of trade-offs caused by embracing a single definition, I propose here that it becomes useful to consider a hybridized definition of politics. Andrew Chadwick (2017) noted that hybridization is useful for considering our world from a more complex view. It is more instructive to look at something as "and/both" rather than "either/or" because doing so allows for a deeper and more inclusive understanding of a phenomenon we want to explore. Accordingly, I adopt a combined approach here using a conceptual model from an established space of academic literature in combination with a public perception. First, I adopt Colin Hay's (2007) notion of the political realm. Hay argues that all political behavior occupies the political

realm and its contents can be characterized by four criteria: 1) a choice to make surrounding an issue; 2) a capacity for agency on the issue, also known as the ability for a human to be able to control the object through action; 3) the hypothetical opportunity for humans to deliberate on the choice to make; 4) the ability for the choice to be made collectively. When we think of politics, we often think of political institutions like Congress, figures like the president, and events like elections. We might also think of political addresses (like the President's annual State of the Union speech), citizen panels (like juries), or of social movements (like Black Lives Matter). When a public thinks of these things, they may or may not associate them with politics depending on what they decide the function and affiliation of these ideas might be.

This is the second piece of this hybridized thinking: Stewart Coles (2020) argues that politics is processed through identities. Some topics are political for some groups and apolitical for others. As an example, the famous social debate of pineapple on pizza is not traditionally a political topic because we don't see it as a political issue concerned with political institutions or attitudes. However, pineapple on pizza may encourage thought about the historic US occupation of Hawaii or the use of pesticides, both of which are considered more political topics. Through this form of association, an apolitical topic becomes political when political elements are associated with it. Coles (2020) considers this issue to say "it's all political" as a signature argument in his dissertation. Moreover, individuals might classify things as political or not because of how they process the issue. Nina Eliasoph (1996) observed this in her ethnography of various community groups. For Eliasoph, imposing a definition of politics is troublesome because it both ignores the person's perspective and fails to reveal how political problems are made.

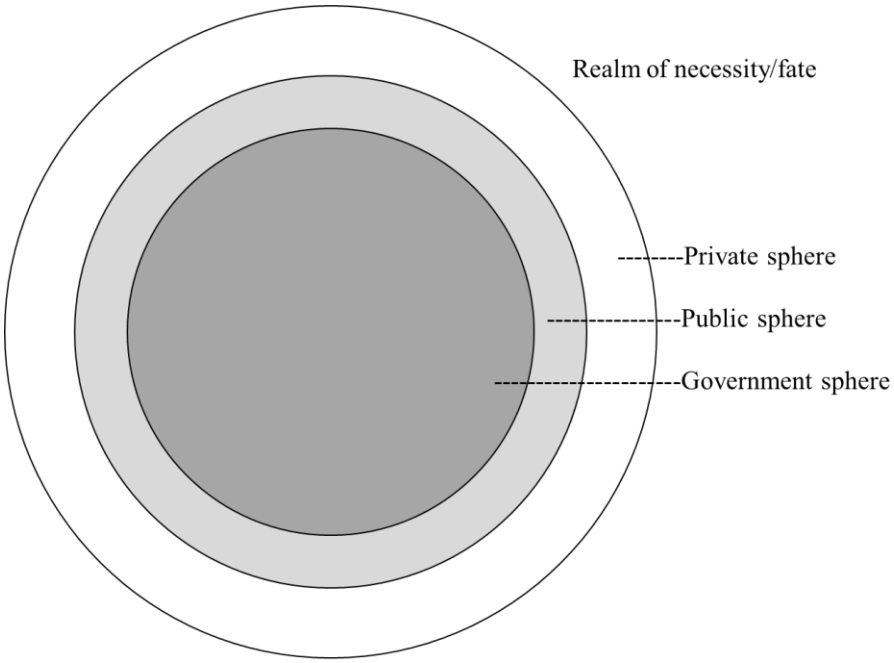
If I were either to accept speakers' explicit definition of "political" and ignore what didn't fit or apply my own definition and ignore what didn't fit, I would miss the whole point: what is interesting is precisely how citizens come to define some issues, and some contexts and "political" and some as "not political" (p. 15).

Each option for applying a definition of politics to a social behavior produces conundrums. For Eliasoph, it is troublesome to embrace the person's explicit definition *or* to apply one's own definition. For Coles, this issue is addressed by considering the internal reasons some might see something as political or not political. While I agree with Coles on this approach, I believe it can be more fruitful to consider both positions: A way for political science to better understand the public's problems is to consider both their own definition and the definitions used by citizens. Having both can let us better explore angles and opportunities for when the definitions align on the inclusion of a phenomena, when they differ, and what drives those patterns. Some things – like Congress – embody a political core, meaning they are the things that are almost always considered political. Other things can come and go from the political environment, like the pineapple on pizza example I discussed previously.

Following this idea, something is political when it becomes politicized. Hay (2007) argues that problems become politicized – and therefore political – after a critical mass of concern from society. Some problems are seen as uncontrollable or determined by fate, others are seen as concerns for a person. As more people are seen as responsible for resolving the issue, the probability of it being called 'political' increases. Once an issue is being discussed as controllable and also beyond an individual's responsibility, Hay argues it is politicized. Like efforts to resolve political problems, the process of politicizing or depoliticizing something can be considered a political behavior. See Figure 1 for a visualization of this process below. In other

words, political issues are political because the public (and the public's individual members) consider them to be political and the public considers issues to be political when the public is perceiving them as controllable by humans, requiring social intervention, and having some form of social consequence. An issue might be apolitical at one point in time and political in another. It might also be apolitical in one place and political in another. An example of this change is the freedom to consume alcohol. For a time, consuming alcohol was seen as a normal part of everyday life. Over time, people began perceiving problems with alcohol consumption as social problems that could be controlled. As this perception grew more common, activist groups

Figure 1:
Hay's (2007) notion of the political realm



advocated for temperance (a completely sober lifestyle) before falling out of fashion where a sense of control declined. In the early 1900s, temperance movements regained momentum. The Prohibition of alcohol became law and later repealed in favor of a legal drinking age. As a result

of these events, alcohol has rotated on and off the public's agenda of problems. In this rotation in and out of public concerns, alcohol enters and leaves a designated space of public conversation and discourse. This designated space is what I mean when I refer to political; political communication refers to any communication that is made about and/or within the pursuit of socially preferred order of things (Woodall, publication pending). Under this definition, anything can be political because anything can enter the political space, but things are more or less political for different people at different times. The public has a limited ability to focus on issues, and some groups of society disagree on what constitutes a problem. Conventional wisdom on the public agenda suggested that the public agenda had a set number of problems that could be held at a given time (McCombs & Zhu, 1995). Over time, this wisdom has been challenged to suggest the agenda can expand and has expanded (Edy & Meirick, 2018). While the agenda has grown, it still has limits. I consider this observation to offer the first two of several core assumptions in this dissertation: (1) *anything can be political but not everything is political. An issue becomes political when it enters the political space.*

Next, *different groups have different ideas of what is political* (Coles, 2020). Identity shapes the way we experience various issues and can lead to different conclusions as we make sense of something (Weick, 1995). A core driver here is the perception of control: if citizens feel they have agency in a situation, they are more likely to feel politically capable. This finding contradicts an important point from Eliasoph (1996), who found that many people separate themselves from politics by acting as though they have no power. Through discussion and private conversation, many public behaviors we would normally call political are made where they would otherwise be withheld in a public space. This problem is important to recognize: some people care about politics but will not speak publicly or openly if they feel the topic is

political. If we only observe what is visible and ignore the invisible, this problem would reach a baffling paradox of political communication. For Eliasoph, the answer lies in acknowledging the unseen and the unspoken. What people say about politics is not always aligned with how they feel, and this behavior can subsequently shape the inclusion of political criteria. This is where PCA comes into play. Because PCA is a feeling centered around communication about and within the political domain, *PCA is a political communication phenomenon that drives many elements of public life.*

Interpersonal Communication

Where political communication tells us what is being discussed, interpersonal communication tells who is discussing. If you open a basic communication textbook, you might get examples like talking on the phone with a friend, sending text messages to a friend, or having a conversation with your neighbor. Other definitions might emphasize the process. One textbook from Bruce Punches and Leslie Ramos Salazar (2022) defines interpersonal communication as "the process of assigning meaning to the messages you share with potential and established relational partners" (p.6). In other words, the usual goal of interpersonal communication is centered on the relationship (either romantic or aromantic) and is between two people. Many political behaviors serve social needs and are driven by social processes rather than political ones (Cramer, 2004). This process is shaped by social norms such as morality as we process political problems (MacKuen, 1990). Taylor Carlson and Jaime Settle (2022) argue "people do not arrive as blank slates at the moment a political conversation emerges. They bring with them their individual predispositions as well as the assumptions they have made about their potential political discussion partner" (p.37). To extend their argument further, Carlson and Settle argue that political conversations serve a variety of relational needs: some relevant examples here

include discussing politics to make sense of them (Woodall, in-progress; Weick et al., 2005), to gather information, to debate, to feel connected, and many other reasons. Past work on political discussions has pointed out that our behaviors in political conversations are shaped by our willingness to deal with relational issues such as conflict (Ulbig & Funk, 1999). Being political is a personal action and requires us to know how to act interpersonally to be better activists, friends, and relatives (Papacharissi, 2015). Because political discussion is a behavior guided by relational orientation and in turn shapes the relationship itself, an emotion that affects that process can affect the relationship as well. Given these observations, I argue *PCA is an interpersonal communication phenomenon.*

When we pursue relationships with people, they are – usually – a piece of a very busy life. We have many things to do and we have many different aspects of our identity like gender and race and some of these identities shape others. Our political identity is one example of an identity that might be influenced by others. In her book *Uncivil Agreement: How Politics Became Our Identity*, Liliana Mason (2018) argues that political identity has become a dominating force in our interactions with other people. When our political identity is activated in a conversation, it becomes a guiding agent for how we evaluate the conversation and our relationship with the other person. When people with two different political identities come into contact and the different identities are activated, this type of behavior can be categorized as intergroup communication. We also know from existing research that these intergroup interactions can produce a host of negative emotions and behaviors (Mason, 2018; Van Duyn, 2021), which is where the major focus of this dissertation comes into play.

In their dissertation, Cassidy Hansen (2021) argued that group identity can affect the way people feel about political conversations. More specifically, Hansen suspected that people

become more apprehensive because they are dealing with members of a different group. Eric Groenendyk and Yanna Krupnikov (2021) argue "politics evokes thoughts similar to conflictual contexts and dissimilar from deliberative contexts," (p.180) so it makes sense that it might arouse greater apprehension than other communicative contexts. Accordingly, this dissertation takes another look at political communication apprehension, an element from Hansen's dissertation as well as others that I will credit below.

Contextual Intersection: Political Discussion in the United States

Intersecting political and interpersonal communication requires understanding the ways the personal and the political intertwine in America. While PCA certainly exists in countries besides the United States, this work uses American citizens and American politics as the major starting point for this work, because we have to start somewhere. Understanding how political discussion works requires unpacking how politics appears in the minds of Americans.

Who Talks Politics and How

Political discussion has been the subject of a great deal of research. The most recent work has been published in books by Carlson, Abrajano, & Garcia Bedolla (2020) as well as Carlson & Settle (2022). These two books unpack two major elements of political conversations: identity elements of political discussion and how people navigate it.

First, identity affects political communication because people tend to talk politics with similar others (Carlson et al., 2020). In this case, gender, ethnorace, and nativity are major dividing lines for how Americans discuss politics. These identities are major dividing lines because of power dyamics that historically excluded women and people of color from political spaces (Fraser, 1990; Garner, 2005; King, 2000) Much political discussion in America is sex-

segregated (Huckfeldt & Sprague, 1995). Additionally, immigrants have different discussion networks compared to native-born citizens.

Second, there are multiple steps in the process of political discussion. In their book *What Goes Without Saying*, Carlson & Settle (2022) propose a framework for unpacking this process. Their 4D Framework suggests political discussion consists of four stages.

The first stage is the detection state, where people rely on tells, guessing, or explicit mention to determine the beliefs of their conversation partner. Political identity is increasingly useful as a shortcut for different livelihoods (Mason, 2018), so non political topics in popular culture can help a person try to guess their partner's political beliefs. The second stage is the decision stage. This stage is where people decide whether or not to engage in the conversation. This moment is where people often make a choice of whether to self-censor and keep their opinions to themselves. The third stage is the discussion stage. In this stage, the person navigates the discussion by deciding what is appropriate to share. This process is shaped by their decision to self-disclose or self-censor. The fourth stage is the determination stage. When a conversation has ended, people make sense of it and what it means for them, the other person, and the relationship they have. This process is rooted in sensemaking and changes how people think about their world, their relationships, and themselves (Weick, 1995). By unpacking a conversation, we make sense of a wide variety of aspects, such as whether we want to have another political conversation with that person, whether we want to discuss the topic agai, whether we were a good person or good citizen in the conversation.

What makes PCA interesting here is that it can manifest for any person at any stage in the communication process. Apprehension can manifest in anticipation of a conversation, when a

concerning tell is shared, when a person is deciding whether to self-disclose, or when a person is unpacking a conversation.

American Political Culture: A Tale of Two Problems

Most of American politics is dominated by two political parties: the Democratic Party and the Republican Party. These two parties control the overwhelming majority of political offices in the United States and they also field candidates that receive an overwhelming majority of submitted votes in each election. This two party system has several trade-offs that are worth unpacking.

First, American politics often encourages competing philosophy of tribalism and compromise. Tribalist mindsets stem a great deal from group theories such as self categorization theory (Tajfel & Turner, 1979). Group identities become important shortcuts in politics. Citizens rely on group identities for evaluating information (Kahan, 2015), misinformation (Young, 2023), how we speak to each other (Gervais, 2014), how we treat each other (Iyengar & Westwood, 2015) and how we justify violence (Kalmoe & Mason, 2022). Of particular interest here are communication patterns. American politics exist in a state of polarization, rooted on increasingly different ideological positions (Abramowitz & Saunders, 2008), affective outlooks on people in political in-groups or out-groups (Iyengar et al., 2019), and political engagement (Krupnikov & Ryan, 2022).

In this polarized climate, compromise is largely discouraged (Gutmann & Thompson, 2010), political incivility is fairly common despite a public belief that it is usually a negative behavior, though this belief is reduced when we see a member of our own political group be uncivil (Muddiman, 2017). The wide practice of incivility amplifies polarized voices and

encourages discrimination on the basis of political identity (Iyengar & Westwood, 2015). This practice leads to many people opting out of sharing their opinions (Norris, 2023).

Second, information environments are ripe with misinformation and disinformation to the extent that many scholars believe we live in a post-truth era (Goodstein, 2017; Neville-Shephard, 2019). Most American political information is mediated (Billard, 2023) and so exposure to false information on media is an extremely pressing concern (Young, 2023). This phenomenon is made worse by many citizen's insistence on consuming media and ideas that only reinforce their existing viewpoints (Iyengar & Hahn, 2009). This media is selected based on identity relevance and stunts the chance for empathic development and understanding (Jennings, 2019). This echo chamber effect causes many people to become increasingly intolerant of views besides their own (Jamieson & Cappella, 2008). This practice is concerning because it both discourages independent truth-seeking and also encourages holding misperceptions that reinforce political attitudes (Meirick & Bessarabova, 2016).

These problems carry over because each practice leads to the other. Conversation can lead to information seeking and socialization (Shulman & DeAndrea, 2014) and information sought is subsequently shared in other conversations. When citizens are polarized, they spread the effects of political polarization through discussion (Druckman et al., 2018).

These cultural phenomena only scratch the surface in a vast political culture. There are other issues at work here, but to add more of them would produce a considerable amount of bloat and increase the risk of overload. Rather than continue with a cultural analysis, we need to keep focused on how these things affect the interpersonal elements of political communication.

Understanding the contextual cues of political communication apprehension also means understanding the various theoretical underpinnings that guide political and/or interpersonal communication. The next section introduces several normative and explanatory theories that guide my thinking about PCA.

Theoretical Framework

Consider a very tight knot of string, one so tight and complex that it cannot be undone with one's hands alone. Undoing this knot requires tools and a great degree of patience. While we can learn a great deal of how tools work in this process, we can also learn more about the intertwined threads and after we undo the knot, we can restructure the threads in a more organized manner. This analogy suits the complexities of political communication apprehension and that is part of why this concept has not been unpacked in detail before.

Typically a theoretical framework is used to guide a study design and be tested in the study itself. I take a somewhat different approach here. These theories are not being directly tested. Some of them (the public sphere and citizenship) are normative theories and cannot be tested like traditional scientific theories Others (such as accommodation theory) have become far too complex to be properly tested in a single concept like PCA. Rather they are assumed to be at least somewhat supported and thus are being used as aids for informing and formulating my argument to study PCA. Theories provide explanations of how the world works as well as how it ought to work. Weaving them together can give us a more accurate picture of what is happening and what it means. By weaving these five theories together, I believe we get a much closer picture of how PCA is formed and what impact it has on the people who experience it.

To undo this knot, I use these theories as tools to distinguish between different threads of the larger problem. Each theory connects to the other in the larger sense, but each theory applies

to apprehension in different moments and these moments are not necessarily linear. I first offer two normative theories of ideal public life, and then supplement them with three predictive theories of human communication.

Throughout the rest of this work, I make reference to other theories as well, though I limit my discussion on these theories to keep a specific focus on what is presented in this section. I keep this specific focus because these five theories are the most important starting points. If I tried to cover every relevant theory, this work would be substantially longer and harder to read. For accessibility purposes, these five theories will do as a starting point, with other theories hinted at for future directions in studying PCA.

Normative Theories of American Citizenship-How should citizens behave?

A major issue in American political culture is that political participation is still encouraged despite the tense environment and the relevant risks it contains. This issue worsens when we consider the obligations citizens have in political systems.

Standards of citizenship vary based on the expected duties and knowledge of a citizen. These standards in turn shape the obligations of other institutions such as journalism (Strömbäck, 2005). One common but also ambiguous example is the level of knowledge citizens need to vote in an educated manner. In the late twentieth century, political scientists and public opinion scholars were somewhat baffled by the point that many people held a wide array of opinions but did not know much about them. Gamson (1992) offers an example of this matter:

> The mystery, for those who accept this conventional wisdom, is how people manage to have opinions about so many matters about which they lack the most elementary understanding…How do people manage to express opinions about civil rights legislation,

> economic assistance for the newly-freed nations of Eastern Europe, or President Bush's performance at the international drug summit when these matters are so remote from matters of daily life and so few citizens are politically informed? (p. 5)

I say this example is ambiguous because it is hard to say how much people need to know and how we can test that. The most common approach I have seen in my time reading about political knowledge is the approach offered by Michael Delli Carpini and Scott Keeter (1996): asking participants to name specific actors, policies, or institutions in the government. Some examples here might include asking people to give the names for the Chief Justice of the U.S. Supreme Court, the President of France, Joe Biden's 2021 infrastructure bill, the 2020 COVID-19 stimulus relief bill, the branches of ICE, or members of the National Security Council. Some scholars have looked to Delli Carpini and Keeter's findings to argue that the citizenry is woefully underequipped to make informed decisions. Another point here is not that citizens need to know more. Rather, it is that citizens need to have realistic standards to meet. Arthur Lupia (2006; 2015) argued that these standards may encourage the wrong type of knowledge needed. In place of strict structural knowledge, Lupia proposes that required knowledge is situational and depends greatly on what a citizen is being asked to do. Citizens don't always need to know who the Chief Justice of the Supreme Court is, but they might need to if the Supreme Court is reviewing a case that could drastically affect their lives.. What they do need to know is the major information that will directly impact them. Chris Achen and Larry Bartels (2017) argue something similar in their book *Democracy for Realists*, where they argue that standards of citizenships need to be realistic about how much time a citizen can invest in political life. People have a lot of other things to do and they cannot always set aside the time to learn about how our political system works. Samuel Popkin (1991) has argued something similar. In his book *The Reasoning Voter,* Popkin proposes

that citizens frequently vote despite having low levels of knowledge and that they use what information they have to make rational decisions about which candidate to vote for. To achieve that goal, we often lean on experts to help us process information, but this behavior has become less common (Van Zoonen, 2012). Having to rely so much on shortcuts has been a source of concern for many democratic theorists and have been for some time.

These observations are not new. In fact, these arguments are essentially repeated from a debate that took place a century ago between education philosopher John Dewey and mass communication theorist Walter Lippman. For those who want a thorough summary of this debate, I recommend looking online to podcasts like *Philosophize This* or the number of papers written about the debate. For now, the most important information to note is about the future of democracy. After analyzing a great deal of propaganda during the first World War, Lippman had reached the conclusion that public opinion could be manufactured by organizations and institutions. Lippman believed that if public opinion could be shaped so easily, then authentic democracy would be hard to sustain because citizens could not know what was truly going on in the world. Instead, they would rely overwhelmingly on information provided from organizations. This finding concerned Lippman a great deal, and he expressed his concerns in several works, with arguably the most influential being his book *Public Opinion*. One of Lippman's most important points from these observations was that democracy was doomed if citizens were expected to be omniscient and omnipresent (Schudson, 1995). Dewey offered a different view. While demonstrating concern, Dewey argued that democracy is more of a culture than a system of government. Dewey agreed with Lippman that democracy cannot expect citizens to be omnipresent, but Dewey countered this concern by arguing democracy was built to avoid this need by encouraging people to rely on each other. When a citizen cannot meet a need, they can

lean on their community for assistance. Dewey believed this practice occurred in every space, not just politics, and that doing so allowed for politics to avoid some of the dangers that Lippman predicted. The Lippman-Dewey debates have been a driving force for many political and mass communication scholars who have to decide what their research means for democracy and what democracy should look like.

As I feel I have implied in this section: Many scholars have observed Lippman's arguments and concluded more pragmatic standards of a good citizen need to be established. A few political scientists have made it a point to offer such a standard, and I use one of them in this dissertation. In his book *The Good Citizen: A History of American Civic Life*, Michael Schudson (1995) offers a detailed picture of what it means to be realistically civically engaged. While he acknowledges the problems of political knowledge, Schudson takes this point a step further to talk about social knowledge and the specialization of experts in all walks of life. While it is an issue raised by Lippman, it goes largely unresolved in the Dewey-Lippman debates. Schudson argued it remained unresolved but offers his own reconciliation by demonstrating the need for both an informed expert and average citizen. One example Schudson uses here is how Americans in urban areas delegate firefighting to professional organizations, but fire safety is still taught. Schudson uses this point to demonstrate the need for both ends of an epistocracy – the average citizen and the specialized expert — to work together. Where the expert is expected to inform the public on how to practice fire safety, the citizen is expected to monitor the environment and identify fire presence. Schudson likens a good citizen to a parent at a community pool: ever alert for danger by scanning the landscape for problems. A critical problem of the monitorial citizen is the ability to get some of the information they need that comes from political conversations.

This moment is where PCA comes into play. Political conversations produce several benefits I will discuss in the following sections, but in the immediate moment, it is most important to note that, among other sources, a monitorial citizen gets their information through communication with other citizens regardless of medium. People do not watch news in lockstep. We each practice different kinds of political news diets, and they lead to different perspectives on a problem. Citizens engage and withdraw from politics at different times, and these patterns of engagement and withdrawal combine with different values and varied news diets to produce complex perspectives. By discussing these perspectives, we make sense of them and have opinions reinforced or changed (Cramer, 2004). The result can lead to a more robust understanding of a political issue and influence political participation (Scheufele et.al, 2004; Gamson, 1992). Based on these ideas, the discomfort of talking politics can produce concerns for performing our duties as citizens because it can interrupt our ability to contribute to political understandings. In the rest of this section, I will explore some of how this happens and why it matters so much to our political system.

The Public Sphere: When and where do citizens learn?

Jurgen Habermas (1991) proposed that public opinion is the product of political conversations by examining the bourgeois sectors of Western societies. People talk about current events to refine their opinions and become more educated. As they talk, their opinions change and so does the culture surrounding norms of discussion. To create such a system takes active effort from each citizen. As Eliasoph (2010) eloquently argues:

> We make the road by walking it; we create the public in practice. Our civic etiquette takes our perceptions of our own power into account, but is not simply *caused* by an objective wider world. Participants constantly "contextualize" any interaction, trying to

> make sense of it and the wider world, simultaneously. Through this process, civic practices inevitably empower or challenge institutions… (p. 38)

Eliasoph (2010) also points out this practice requires what she calls a public spirit: a connection between our personal lives and political issues that makes us want to speak openly. By seeing these things as connected, people find more reasons to become engaged, form their interpretations, share their opinions, and learn from each other. This practice sounds idealistic and in many ways it is. Subsequent critiques have improved the theory by observing notions of power and influence and how they create counter-publics where subordinated groups can voice opinions that go against acceptable norms of discussion (Fraser, 1990).

Though these counterpublic spaces exist, they are not omnipresent and citizens still experience discomfort with politics in a variety of places. In her work with civic volunteers, Eliasoph (1998) observed that many citizens wanted to engage in politics but chose not to, letting political potential "evaporate" from public spaces.

A core argument of this dissertation is that people perceive the public sphere and counter publics through a lens of group identity that is strengthened by political polarization. This lens filters how citizens view talking about politics and can lead to skewed understandings of how to engage in political communication. Group identity has been highlighted as an important element of how people process political information. Young's (2023) book *Wrong*: *How Media, Identity, and Politics Drive Our Appetite for Misinformation* provides a compelling summary of this issue. Citizens increasingly rely on two modes of thinking to process information. The first mode emphasizes intuition and feeling. The second mode emphasizes evidence and reflection. Young notes that most people use both modes at different times, but the mode used is based on a identity cue. Young argues the question "What does my [group] think?" is a crucial factor in

deciding how to process information. Young applies this argument to epistemic contexts to explain how people may be misdirected. I believe it is important to consider Young's argument from another angle. When we think of truth-seeking and misinformation, we are typically prompted to think of we might call objective truth. Young mentions examples like the stealing of the 2020 U.S. Presidential Election to illustrate this point. This angle is an important one but it can leave us to forget the relational sides of these arguments and the relational side of information. What makes this problem so fascinating is not just that this issue has political consequences, it is that the issue has relational causes. Our relationships with others work alongside our sense of belonging and how we should process information. The election is a noteworthy example of this that has reaching consequences, but so is the interpersonal element of who we can converse with. This interpersonal element has political consequences as well.

Habermas (1991) argued that communication is a vital part of the public sphere because society is dependent upon a criticism of its own traditions. Habermas also argues the public sphere is related to a behavior of "communicative reason," the act of communicating justifications and reasons for our behavior. Public opinion textbooks (e.g. Glynn et.al, 2016) argue the concept of public originated with the rhetoricians of ancient Greece, where public speech was the primary means of political expression. Habermas argues something similar of social spaces such as coffeeshops that produce the opportunity for conversations between citizens who do not otherwise regularly interact. Democratic theorists have referred to these actions as foundations for deliberative democracy, a form of democracy where citizens discuss their issues to identify problems and solutions to them (Guttman & Thompson, 2010; Strömbäck, 2005). These conversations produce the expression of attitudes and beliefs, the basic building blocks of public opinion.

Habermas (1991) argues that these attitudes are often shaped through what Edmund Husserl (1936) called the lifeworld, a sum of shared understandings and experiences that are shaped through consciousness. While Husserl's notion of the lifeworld is focused on consciousness, Habermas interpreted the lifeworld through a communicative lens and argued that shared meanings are social products. It is because of these shared meanings that a public sphere can exist and citizens can learn from each other.

Habermas's opinions have been supported more recently in communication research as well. Scholars such as Dhavan Shah (2016), Cristian Vaccari and Augusto Valeriani (2018) have argued that political conversations increase the likelihood that citizens will participate in the political process through voting and other acts. Because politics are inherently a social activity, other interactions with people can shape information processing. Shah argues "that all kinds of political conversations—including the most incidental and cluttered ones—offer participants expressive and informational opportunities that, in turn, can foster their political participation—a core value for democratic governance" (Vaccari & Valeriani, 2018). Although political conversations are not always a high-level form of political participation, they can be a gateway to those higher levels of activism and participation (Vaccari et al., 2015).

Though Habermas emphasizes the potential of the public sphere, other work has expressed skepticism for the true potential for deliberation. Fraser (1990) argued that the public sphere is rooted in elements of patriarchy and the interests of bourgeois men, while other groups such as women were excluded from participation. This exclusion is one example of Lukes' (2005) dimensions of power[3]. The potential for power imbalances based on social structures can produce stress for certain groups of people who are not as likely to be heard. It is possible that PCA is a manifestation of this stress.

To my knowledge, no research has ever been done connecting PCA to the public sphere. As a largely theoretical construct, such an argument would be difficult to test. The best proxy measures currently rely on public opinion and a person's willingness to contribute to it. This produces a logical connection with PCA. Public opinion pedagogy often involves discussing nonresponse error where participants are unwilling to disclose their opinions to a pollster or interviewer. Distrust is often mentioned as a potential reason for this behavior, which is distinct from but still related to PCA. Behaviors of political trust have often been tracked to political socialization: How we are raised to view and discuss politics influences our political behaviors. Socialization effects are further complicated given the tendencies of both political parties to sort themselves (Bishop, 2008) to avoid interacting with each other, and to be harsh toward people from groups besides theirs (Iyengar & Westwood, 2015).

Communication Accommodation Theory- How do we adjust to others?

In the public sphere, people are diverse along many lines. While the critiques in the previous section offer an insight into how the public varies in power or knowledge, it is also worth noting that people vary in communicative style. While Habermas is not particularly concerned with this element, other theorists and theories are. This section focuses on one of them. Communication accommodation theory (CAT) is largely attributed to the work of Howard Giles (for an external primer, see Giles, 2008), and its main purpose is to explain how people adjust their communication to accommodate different people. The reason for this accommodation is to better understand communicative differences, reduce uncertainties, and determine how to interact with our communicative partner.

CAT's primary focus is on when, how, and why people adjust their communication. Giles (2008) argues this practice has become a core assumption of communication competence: We

tailor our message to the person we are speaking to. One good example of this practice might be the use of specialized jargon. Academics are taught to write for different audiences depending on the setting they are in. This is also true for politicians, who may change their language based on the setting they are communicating in. This process is subjective and prone to actions based on misperceptions (Thakerar et al., 1982). People may try to accommodate others based on how they perceive their partner rather than relying on their partner's actual behaviors.

CAT operates on three assumptions: 1) People communicate in a sociocultural context. Their cultural practices and history shape how they communicate and what they communicate about. 2) Identity is negotiated throughout the communication process. As we communicate, identities are performed based on our understandings of them. 3) Communication partners will regulate their communicative behaviors to improve the communication and reduce uncertainty about each other.

Under CAT, people may adjust their communication using three strategies: convergence, divergence, or maintenance. Convergence is the process of adjusting one's own communication to reduce difference. This approach is used when the person wants to accommodate their partner by reducing social distance. This approach requires the person to interpret the other person's communication style and figure out how to adapt based on their interpretations (Giles et.al, 1987). Divergence is the act of distinguishing oneself from the other. Divergence is used when a person wants to reinforce group or individual differences. Some reasons for this might include emphasizing different identities or wanting to express a disdain for the other person (Gallois et al., 2005). Maintenance is the act of keeping our natural self in the moment rather than adjusting the communication.

To accommodate, people change their behavior both psychologically and linguistically. Psychological accommodation adjusts our beliefs and attitudes towards the communication while linguistic accommodation changes the speech and language used (Thakerar et al., 1982). There is both a subjective and objective component to this process. Objectively, for example, a person be diverging their communication from the other person, but subjectively the person believes they are converging their speech. Gallois and colleagues (2005) note that this theory has historically assumed both parties hold the same beliefs about what they are doing. Politics throws a bit of a wrench in this theory, since many people can have different identities on what is political and what is not (Carlson & Settle, 2022; Coles, 2024).

CAT has also been previously applied to political communication by another doctoral dissertation. Popal (2022) argued that people will use convergence tactics in communication when they see a likelihood for future interactions in group or social settings. I take a similar stance here by connecting it to an influential work I've mentioned several times already. When Eliasoph (1998) first proposed the process of evaporation, she observed that volunteer groups would embrace some political topics while avoiding others. Participants in these groups defended their choice as necessary for making people feel welcome in their space. Eliasoph noted that what went unsaid in this process was a sense of powerlessness. Political problems were called political problems because the citizen felt powerless to address them. Eliasoph noted that these group members did not even know what the group member's political interests were, but the group would remove some political issues to make sure a newcomer felt welcome to discuss.

Evaporation and accommodation are intertwined in this action. Evaporation and accommodation are both communicative acts, but each act is of interest to different groups with

the former of interest to political communication scholars and accommodation to interpersonal communication scholars. The problem is that these different academic interests splinter off different aspects of the phenomenon and lose parts of what makes it interesting in the process. PCA is intertwined into evaporation because of communication accommodation practices, and accommodation contributes to evaporation.

Face Negotiation Theory: How do people want to be seen?

If people believe it is important to be seen in a certain way, then they will likely try to act on the belief and behave in a way that fulfills that need. Erving Goffman (1955) believed this might be true and spent a great amount of time observing people and how they interacted. By observing groups doing their jobs and interacting in everyday life, Goffman concluded each person constructs a "face" or a preferred public image. This image is based on our desire to be seen as competent and trustworthy communication partners (Metts & Cupach, 2008). Goffman concluded people tend to structure their behaviors to better perform certain roles and that certain face elements become active in relevant in certain situations. For example, one might desire to be seen as a good teacher, but that face concern only comes into play when teaching is part of a present social context (e.g. as a topic of discussion, or as something being done by the person or by another). To this end, Goffman uses drama as a metaphor for the performance of face in front stage, backstage, and off-stage environments. Front stage environments refer to public performances, like acting as a citizen in the Public Sphere. Backstage environments deal with private encounters, such as talking about politics at home with a relative. Off-stage environments deal with the subconscious and how a person acts when they feel they are not being observed by anyone. To achieve this desired goal, we have positive faces and negative faces that we respectively pursue or avoid. When a negative face may be presented, we may work to avoid the

situation and therefore the experience of embarrassment or ridicule (Goffman, 1967). An example of this practice is a family member telling an embarrassing story to someone else in front of us. The experience is embarrassing because it goes against how we want to be seen by the other person. We experience embarrassment because of the desire to maintain a face and a threat to it causes us distress. To avoid this experience, we may try to change the subject or wish we could withdraw from the interaction. Some might wish they could die on the spot rather than deal with this situation, but I have not found any scientific evidence that supports this claim.

Something to note here is that Goffman's ideas have already been applied to political conversations in multiple ways. The first manner comes from Eliasoph (1998), who argued that existing political theory suggests we'd want people to be comfortable expressing their opinions in the public sphere, a front stage environment. This is something indicated by standards of ideal participation in the public sphere but over and over, Eliasoph found people sounded more eloquent and comfortable expressing their opinions in backstage environments. Eliasoph speculated this process was a sign of conflict avoidance: that people's interpersonal desires and perceptions affected their decision to share political beliefs if they believed that sharing could lead to relational disruption. The second application of face to political conversation is Papacharissi's (2015) work on affective publics. In her research on the Internet as a public sphere, Papacharissi argued that people use the Internet as a unique blending of public and private spaces, where people could perform public roles from the privacy afforded by place and/or anonymous posting. Papacharissi notes the importance of face in how people perform political roles and intertwine public and private role. This argument is rooted in her view of performativity: that every identity we bear has an expectation of role and that performing that

role reinforces the social system we have. These actions require a person to both distinguish and mix the personal and political identities. Papacharissi (2015) argues,

> [T]weets are interpreted as expressive gestures, aimed at representing the self in the context of public conversations about the practice of everyday life. In this context, tweets are self-referential attempts to connect the private to the public and the personal to the civic. By articulating private thoughts, people presence the personal and by doing so infuse it with political potential. (p. 112)

Papacharissi's argument is addressed towards the use of social media but her argument is just as important in conversations because they rely on the same performative premises. People are expected to rehearse their messages and actions before they present them, meaning a degree of self-reflexivity is necessary for someone to perform their role well. This is also true of political conversations where people feel the need to check their understanding before they contribute to a topic. An example of this practice lies in socialization of children. Parents and family are a strong force in helping children learn how to perform their social roles, including political ones (Meadowcraft, 1986). This role was once seen as uni-directional, with parents only impressing this role on children, but we have since learned this practice informs both parties. For example, the basic nature of children asking political questions encourages parents to research political issues so they can be informed enough to answer those questions (McDevitt & Chafee, 2002; Shulman & DeAndrea, 2014)

Given the literature I have discussed thus far about the duties of a good citizen, how people learn, and how people want to be seen, there is likely an expectation for citizens to be knowledgeable about politics when they talk about them. I abduct all of this expectation to mean there is a clear face expectation of political roles. Underlying all of this performance is the

expectation of epistemic preparation. People are welcome to talk about politics, but there is an expectation they know enough to talk about it. Friction can occur when there is a discrepancy between what people feel they know and what they feel they are expected to know and so the friction becomes more intense when this discrepancy increases. Goffman (1967) calls this situation wrong face: a position where "information is brought forth in some way about [their] social worth which cannot be integrated, even with effort, into the line that is being sustained for him" (p. 8). A similar subject called motivated reasoning (Kunda, 1990) has taken interest in cognitive psychology. People are motivated to seek political information on the grounds of being right (Lodge & Taber, 2013) but for several reasons. The first reason is internal: people typically epistemically prefer to be right. This has been found in other research on political knowledge, with political partisans believing they are much more knowledgeable on politics than others (Anson, 2018; Lee, Kim, and Jeon, 2023). The second reason is relational. People want to be right in the pursuit of a particular goal (Kunda, 1990). We want to be right in the presence of others.

While motivated reasoning is a common concern, there are also cases where people find and acknowledge their position on the less knowledgeable side of the duo. In their book, Carlson and Settle (2022) find that people tend to prefer conversing with others who have similar beliefs and similar levels of knowledge. Carlson and Settle unpack this idea as evidence of both belief and knowledge sorting: that people tend to flock together and stay together based on their beliefs as well as their level of expertise. While they mention some of the political ramifications for this, they do not mention an explanation for why[XX], which happens to be the second idea I present here and serves as a major focus of this dissertation: that people fear being wrong not just for their epistemic preferences but also their relational ones. People value intelligence when it is

combined with character, and that means we tend to dislike ignorance. People dislike being wrong in front of other people for this reason. Social scientists have seen this idea manifest in the form of the social desirability hypothesis (Krumpal, 2011): Participants will answer questions in a way that feels more socially acceptable. In other words, we express opinions both because we believe them to be true and because we want to be seen as knowledgeable in our relationship. This idea is also a basic assumption in epistemology. When we listen to another person, we generally take what they say to be true unless we have reason not to. A core question of this dissertation is whether citizens are concerned about being smart enough for political conversations and whether being too uninformed makes a person's opinion unpopular. The last theory for us to ponder implies this might be true but does not offer a concrete answer.

Spiral of Silence Theory: How do people decide when to share?

Rod Hart and Rebecca Lavally (2017) argued that political opinions are universal, not in that they are the same, but in that they exist.

> Everyone has an opinion about political news, and for good reason: (1) it is political and (2) it is news. Because it is political, it trades in power – who has it and who does not - …because the news is news…it reminds that problems persist and the future is vexingly uncertain. (p.109)

Opinions are universal, but they are not universally expressed. As I mentioned earlier, Noelle-Neuman's (1974) spiral of silence theory operates on the affective assumption that people fear ostracization and the epistemic assumption that people have a (not necessarily accurate) sense of public opinion. Based on these assumptions, spiral of silence theory argues that people will avoid social isolation by not discussing their opinions on various topics if they perceive their opinions to be unpopular. This practice of self-censorship is a survival skill. The silent speaker sees their

opinion is worth less than the sense of belonging. From a more critical perspective, Noelle-Neuman (1984) also notes that the spiral of silence is more common among women, people of color, the older, and the less educated.

Spiral of silence theory has subtle connections to other theories I've discussed thus far. For example, spiral of silence and CAT both take on the assumption of preferring convergence in in-group settings. This similarity is a subtle one that matters for adjusting communication behaviors, particularly sense self-censoring is itself a form of accommodation. Such practices matter most for members of the same social groups, while communication with members of different groups is less susceptible to the spiral of silence unless power dynamics become involved (Van Duyn, 2021).

Spiral of silence has been closely tied with political talk. In her original methodology, Noelle-Neuman (1974) included a number of political topics in her interviews about which topics people will discuss. Other work has also identified outcomes of a spiral of silence: Self-censorship can contribute to groupthink and more homogenous political discussions, leading to reinforcing beliefs rather than challenging them (Wojcieszak, 2011). Spiral of silence work has also been conceptually connected to PCA. Jones-Carmack (2019) argues that PCA is conceptually grounded in spiral of silence theory. "Certainly, if individuals are uncertain about what the majority thinks about a political issue, such uncertainty may increase perceptions of dissimilarity and unpredictability, potentially leading to political communication apprehension" (p.75).

Additionally, Montgomery (2020) found that conservative college students expressed PCA over – among other things – fear of social isolation. Both works suggest PCA is a feeling that acts within spiral of silence. However, there are several gaps in the theory that exhibit

explanatory possibilities for PCA. First: the increase of echo chambers and epistemic bubbles (for more, see Jamieson & Cappella, 2008 and Nguyen, 2020 respectively), as mean people should feel more comfortable to express themselves if they focus on consuming media that reinforce their beliefs. While the theory would support a notion that people's perceptions of public opinion can be skewed (meaning they might think their opinions are welcome when they are not), it does not account for people who do not care or for how people might intentionally avoid some groups to disclose their opinions with others (Van Duyn, 2021). Second, political incivility continues to increase (Mason, 2018) and produces a slew of unhealthy communication behaviors (Stryker et al., 2016).

While incivility is generally considered detrimental to rational discourse, it is considered more acceptable in private forums compared to public ones (Muddiman, 2017) and also has some problems in the way it can be used. Some scholars argue that policing incivility can be used to further oppress marginalized groups whose emotions are deeply intertwined with a political topic (Jamieson et al., 2017). The involvement of anger is an idea that challenges the notions of spiral of silence theory because it works to inhibit individuals from self-censoring (Hayes & Matthes, 2017). While we know that the theory can be defied in the actions of the angry, we do not know as much about how perceiving anger shapes other behaviors.

These types of behaviors can produce attitudes that are not clearly explained by spiral of silence. People may know their opinions are popular with part of the public but still will not share those opinions for other reasons such as their immediate safety (Van Duyn, 2018). PCA provides a new way to consider the mindset that predicts this behavior. Additionally, spiral of silence is a theory that focuses on how people perceive the world to shape their communication. PCA is state of mind or feeling that affects how we communicate. While these two concepts

share some overlap, they are still theoretically distinct. Only theory-testing can provide an empirical distinction between these two concepts and find out how related they really are.

Conceptual Framework

Where theories aim to posit relationships, concepts are pieces of those theories. In this section, I introduce several concepts as they relate to PCA and theorize about potential connections between them. Where the previous section explored existing theory, this section identifies various pieces that could extend theory with PCA. As I discuss each concept, I offer various research hypotheses and questions as they relate to PCA. These hypotheses are subsequently tested in later chapters of this book. There are two important things to note here.

- Each hypothesis is labeled based on the study it is tested in and the number it is presented in the corresponding chapter. For instance, the first hypothesis of Study 3 will be labeled as 3-H1. After offering this notation, hypotheses are referenced in text only by their number, so in this case, 3-H1 will be called Hypothesis One in Chapter 3.
- Not every hypothesis of the studies are listed in this section. Some are given shorter rationales in their respective chapters. I take time here to unpack these particular hypotheses because they are the biggest theoretical players, while others are natural parts of the process. For example, one of my hypotheses deals with a particular methodology, which is not covered here and therefore should not need to be listed here.

Willingness to Communicate about Politics

Engaging with a conversation requires a person's willingness to communicate (WTC). A definition for this concept relied strongly on exploration and development of relationships to define the practice (for more, see Fink, 2022). Our field's understanding of WTC began with a conference paper from McCroskey and Baer (1985) proposing a theoretical opposite to an unwillingness to communicate (Burgoon, 1976). The concept showed promise and was developed further when McCroskey and Richmond (1987) defined WTC as a person's personality orientation towards talking. Like CA, WTC reflects parts of a person's personality, but it can also change across different situations based on immediate factors such as mood and past communication with the other person (Barraclough et al., 1988).

Willingness to communicate has had demonstrable effects on relationships and individual growth. McCroskey and Richmond (1987) note one example of this effect manifests in education contexts. A student with high WTC may receive some backlash from teachers for talking too much, but it still sets high expectations on the student for growth. They are also more likely to express satisfaction with their schooling experience. On the other hand, students with low WTC struggle to build relationships with their peers and find themselves unhappy with their social environments. McCroskey and Richmond note this practice also unfolds in organizational environments as well, with willing communicators receiving more preference in hiring and promotion processes. These sorts of effects can be damaging to a person's self-image as well.

Effects between willingness to communicate and mental-health is harder to trace. McCroskey and Richmond (1987) posited that it seems sensible for low self-esteem to lead to low WTC. McCroskey and Richmond tested this idea with data and could not find strong support for their suspicion.

WTC also has effects on others as well. A person's willingness to communicate can affect their willingness to participate in voluntary practices that request their attention. One example of this problem is in social science (Zakahi & McCroskey, 1989). If a person is generally unwilling to communicate, they are less likely to agree to take part in social science work where communication is an expected part of the process. Removing this group of people can skew results of research to say only what willing communicators think. When this process is applied more broadly, a confound can occur in the research itself that makes it harder to study the behavior effectively because the WTC keeps the researcher from seeing everything going on.

This concern is also true in political spaces and political conversations. The previously mentioned example of pollsters produces one area of concern (Keeter et al., 2021), but another concern stems from the social issues of being unwilling to communicate about politics. In social science, this issue compounds with the ways we think about and measure political conversation. Chip Eveland and Steven Kleinman (2013) note political conversations can occur in a variety of spaces and that it is important to account for those situations when we ask about willingness to communicate. Literature suggests that most prefer political conversations with people they know and trust (Carlson et al., 2020; Morey et al., 2012), but they will still have conversations with others that they're less acquainted with. Alyssa Morey and Masahiro Yamamoto (2020) argue these 'weak tie" conversations can be personally and socially beneficial so it is important to consider their role as well. Steven and Erin Kleinman (2015) make a similar argument as grounds for understanding WTC in political spaces because it can capture the gap between a person's desire to communicate and opportunity to communicate. Kleinman and Kleinman make this argument to propose a new way to measure a person's willingness to communicate about

politics and suggest it is important to consider how people think and feel about political conversations.

The argument from Kleinman and Kleinman makes it seem natural to include WTCAP with PCA. McCroskey and Richmond (1987) advocated for this pairing heavily when dealing with the larger concepts of WTC and CA themselves. In other work, McCroskey and Richmond (1990) proposed that CA is likely one of the best predictors of WTC, but they offer little evidence to support this claim. While I do think it is likely that these two ideas would correlate, it may turn into a chicken or the egg debate as to which comes first and this debate is less productive than seeing how the two interact with other phenomena. Because they capture inversed states of mind, I take this idea to consider a hypothesized correlation between these two practices and posit that they interact to create theoretically distinct groups. This relationship will be tested before the others, so I offer it as the first hypothesis of this dissertation.

2-H1: PCA correlates negatively with WTCAP.

Interpersonal Trust

Trust refers to extent that we have faith in other people to treat us in a certain way (Fukuyama, 1995). Ken Newton and Sonja Zmerli (2011) distinguish between two types of social trust: 1) *General social trust* refers to our general trust in people. The more we tend to think people are good at heart, the more general social trust we have. 2) *Particular social trust* refers to our faith in a person or particular group of people. Newton and Zmerli use surrounding communities as an example of particular social trust. The more comfortable you are with going jogging in your neighborhood, the more particular social trust you have in your community.

Both types of social trust could have implications for PCA, though I argue that particular social trust has a more immediate impact for two reasons. First, general social trust would be less likely to predict PCA because a low trust in people does not replace a person's need to communicate unless trust is low enough to produce a sense of threat or discomfort from being around people in general. 2) This sense of threat or discomfort is more likely to stem from group behaviors or identities and this means particular social trust would serve as a more reliable predictor of PCA because group identity typically comes from a sense of hostility towards an out-group (Brewer, 1999). Newton and Zmerli (2011) observe, "Distrust of out-groups depends partly on competition for resources, how much the in-group feels threatened, and on the trade-off between the benefits of closure of in-group boundaries of opening up to outside groups" (p.175).

Trust between citizens is vital for the growth of social capital (Putnam, 2000). Citizens do not always see eye to eye, and when they do not, sharing bonds besides politics can help keep things from getting messy (Levendusky, 2023). Without these shared bonds, we lose incentives for compromise and have increased reasons to maintain a problematic status quo (Gutmann & Thompson, 2010).

Predispositions such as trust have an effect on our willingness to discuss politics (Carlson & Settle, 2022; Klofstad, 2009). Our confidence in our partner also reflects a particular kind of social trust called emotional trust (Johnson-George & Swap, 1982). A trusting relationship gives us a greater sense of comfort and willingness to share sensitive subjects. This is a core assumption of social penetration theory (Altman & Taylor, 1973; Carpenter & Greene, 2015) and communication privacy management (Petronio, 2002; Petronio et al., 2021). Some people will openly share their political opinions, but trust increases that chance.

Based on these observations, I offer the following hypothesis:

3-H1: Interpersonal trust will be negatively related to PCA.

Political Efficacy

One of the most popular concepts in political science, efficacy is generally a person's sense of powerfulness or powerlessness in the political realm (Morrell, 2003, p. 589). Efficacy is a critical practice for democracy and is widely considered a good reflection of the health of a political system (Craig et al., 1990). When citizens do not have a strong sense of efficacy, they are less likely to follow politics or participate in the process (Finkel, 1985). Examples of this capability might include a person's perceived confidence to navigate political information, elections, or conversations. This mindset is based on the belief that one believes that political participation is important and a civic duty (Campbell et.al, 1954).

Efficacy has also been tied to influential theories in social science. For instance, Bandura's social cognitive theory (2001) defined efficacy as a person's perceived sense of effectiveness in handling a process or problem. Additionally, Bandura (2005) argues that efficacy should be conceptually distinguished between self-efficacy – our perceived ability to do something – and response efficacy – our confidence that doing something will fix the problem – as well as between efficacy of various actors such as the self, the society, and a proxy -in this case, government-. If PCA limits our ability to talk about politics, it would likely be influenced by our self-efficacy, which has its own impact on political agency. Moreover, if the isolating feeling of a spiral of silence influences PCA, it is likely a result of perceptions of society.

Efficacy is a major component of a person's political activity (Verba et al., 1995) and has been one of the most widely examined political behaviors (Morrell, 2003). Efficacy has a major impact on a person's belief that they can make sense of politics and navigate the political realm. Accordingly people who feel efficacious are more likely to think their actions make a difference

and feel capable of communicating as a result. This sense of confidence should theoretically reduce concerns of talking about politics. After all, one of the most influential measures of efficacy includes an item about out comfort with talking about politics.

Efficacy has mixed effects on well-being and mental health based on political culture. For instance, in democratic systems, a strong sense of efficacy is related to higher reported health, while higher efficacy is related to lower related health in less democratic contexts (Acar & Uluğ, 2022). It is hard to say wheter efficacy would have a significant impact on mental-well-being, but it could have an effect on communciation apprehension.

Therefore I posit the following hypotheses:

3-H2: Political self-efficacy negatively predicts PCA and positively predicts WTCAP.

Political Participation and Civic Engagement

Political participation refers to the extent that citizens take part in the political process or political system. Like efficacy, participation in the political process is a major reflection of the health of a political system (Finkel, 1985; Schudson, 1998). Participation refers to engaging in political events as part of a mass public: Examples might include donating to campaigns, attending rallies, displaying candidate merch, or voting. Each of these practices has a varying level of importance based off what we expect citizens to do. Note that while voting is part of the participation process, it is not the only thing. There are other things to do and each action can contribute to a better democracy (Verba et al., 1995). Additionally, some scholars such as Klofstad (2010) propose a distinction between civic participation and political participation. To Klofstad, political practice centers around changing government or policy, while civics are things outside of this realm. In this work, I use political participation and civic engagement as

interchangeable terms based on my more inclusive definition of political communication. Accordingly, one's definition of politics will change how they process these arguments.

We donate to candidates, we attend rallies for candidates and display their campaign slogan on yard signs and buttons. As one might guess from this list of examples, there are many different ways to measure political participation, and they stem greatly from one's conception of democracy (Strömbäck, 2005). Here we will focus on two conceptions: participatory democracy and deliberative democracy.

In a participatory system of democracy, participation centers citizen action around candidates and leaders. Participatory democracy is a system of citizen engagement where many people take part in the political process and all of these actions are necessary for the political system to take shape (Pateman, 1970). Voting is an important part of the process, but it is not the only important part (Strömbäck, 2005). In a participatory model, social capital is an essential resource for getting a democracy to thrive (Putnam, 2000). Through the establishment of shared bonds, political opinions are shared and compromise is encouraged because it gives citizens a chance to see each other as autonomous political agents (Gutmann & Thompson, 2010).

Where participatory systems have citizens work to build the system, deliberative democracies place citizens in the political system by asking them to talk together to help resolve problems (Fishkin & Laslett, 2003; Habermas, 1991; Mansbridge, 1980). Rather than defer to leaders, average citizens are expected to become leaders and contribute to the political system to ensure a fair and proper decision is made. Juries are an example of this system. Citizens are asked to come together, listen to a presentation of information, deliberate, and make a collective decision. Others such as the Citizens Initiative Review (CIR) encourage citizens to help inform the public on policy decisions – e.g. state questions – that are turned over to them. Though

deliberative systems are typically less common in America than participatory systems, there is a fairly large degree of support for deliberative democracy as an alternative to conventional politics (Neblo et al., 2010).

Past work has found a relationship between civic talk and civic engagement (Klofstad, 2007; 2010a; 2010b; 2015). When people talk about politics more, they can be more willing to take part in the political process. When people feel incapable of participating, they're less likely to discuss politics (Carlson et al., 2020). Reasons for this relationship vary. In some conversations, people learn about new opportunities to engage that they would otherwise not know about. In other conversations, people might be encouraged or pressured into participating. However, the same researcher who found this relationship also found there were also cases where this did not happen and people would be unmoved.

Given that political feelings tend to impact our political behavior, I give the following hypothesis:

3-H3: PCA negatively predicts political participation.

Stress

In physics, stress is defined as a force exerting pressure on a body. In medicine, this philosophy expands forces to consider physical or mental pressures and the body is refined to focus on the human body. In other words, stress puts pressure on the body and affects its ability to perform. Philosophically, a certain level of stress is healthy because it causes us to think and actively try to better ourselves and empathize with others, (Rifkin, RSA Animate, titled "The Empathic Civilization" on YouTube). In excess, stress has negative effects on both our physical and psychological well-being.

As I mentioned above, politics are stressful because politics are associated with a variety of risks. These risks are distinct concerns but do not function independently of each other. The first stressor is the relationship: Bringing in public topics – such as politics – to an interpersonal relationship can contribute to arguments that affect the perceived stress of individuals in the relationship (Johnson et al., 2014). This possibility increases with the presence, anticipation, and/or perception of negativity (Johnson et al., 2019). Disagreement can lead to conflict and anticipating this possibility can be distressing if a person does not have adequate coping mechanisms to handle it (Mutz, 2006; Patterson, 1989). The second stressor is epistemic: There is the sense that politics are stressful because they require people to learn about each other and that unknown makes us uncomfortable (Berger & Calabrese, 1975; Eliasoph, 1996). The third stressor is personal; there is also the fact that politics sometimes directly involve us. When a bill or candidate speaks to an issue that directly involves us, we become stakeholders in the situation because the potential policies affect our ability to live comfortably based on our identity, our job, our place of residence, our medical history, as well as other factors. Feeling a personal investment in the issue leads to a personal connection and can also contribute to difficulty processing disagreements of feedback (Copeland & Woodall, 2020).

As I mentioned in the previous paragraph, there is a relational side to political communication with individuals and those communications can undermine a variety of things we care about. Myiah Hutchens (2010) points out that we are afraid of expressing our political opinions based on the number of different reactions that might occur. We might be trolled, “canceled”, harassed, or ostracized for expressing our opinions. Accordingly, talking about politics can bring us into very unfamiliar terrain and stress us out. This increase in stress might

disrupt not only our stress level, but our ability to cope with that stress. Little things build up and can affect our ability handle otherwise easy problems.

These things matter because as I said, a certain level of stress is healthy. It is my belief that we are well past that healthy level but I do not have enough evidence to explain why. Understanding the extent to which political conversations contribute to stress is vital for two reasons. The first reason is social. Understanding the extent and causes of social stress can offer explanations for what ills plague a culture and why. The second reason is individualistic. When we break down the social causes of the relationship between stress and political communication, we can start exploring how to help people identify that stress and find ways to cope with it. Accordingly, I posit the following hypothesis.

3-H4: PCA positively predicts stress.

Self-Esteem

Self-esteem is a person's confidence in their own worth, capabilities, or worldviews (Hewitt, 2009). When a person begins to develop a concept of the self, they also begin to form positive or negative judgments about themselves that subsequently affect their self-esteem. Self-esteem is typically a self-concept that is desirable in a person because high self-esteem is associated with positive psychological and social outcomes, such as happiness (Baumeister et al., 2003) and relationship satisfaction (Orth & Robins, 2014). On opposite end, low self-esteem is associated with self-destructive behaviors such as substance abuse, anxiety, or depression (Sowislo & Orth, 2013).

Esteem is a pivotal part of a person's ability to self actualize. Maslow's classical hierarchy of needs (1988) suggests that a person typically requires a sense of self-esteem before

they are able self-actualize, a practice deeply associated with performing political duties. Moreover, self-esteem is pivotal to support for the democratic process (Marchlewska et al., 2019). Trusting in other people is made easier by having a secure, non-narcissistic sense of self.

Self-esteem has been classically connected to communication apprehension, with more apprehension leading to lower self-esteem (McCroskey et al., 1977). This relationship might exist for a variety of reasons. Discomfort with communicating can lead to self-doubt, self-pity, or self-deprecation. In other words, we beat ourselves up when we're anxious about communicating. It is likely that this relationship would apply in political communication as well. Each theory would suggest apprehension could threaten our sense of self by compromising social bonds such as social connections (spiral of silence theory), self-awareness (sensitivity), or self-worth (face theory and normative theories of citizenship). In addition, past research has shown a relationship between political homphily, relationships, and self-esteem that suggests people feel better about themselves when they have stronger senses of connection (e.g., Morrissey & Woodall, 2022).

Based on these observations, I offer the following hypothesis.

3-H5: PCA negatively affects self-esteem.

There are other things that could relate here, but I think we have covered more than enough ground to stop and start investigating these hypotheses. Before we can test relationships in the conceptual framework, we must test the theoretical framework by building and validating a measure of PCA. The next chapter begins this process by detailing the process of measure development.

Now that we've explored relevant literature, it is time to return to our original task: measuring PCA. This chapter outlines the methodological approaches I take to producing a measure of political communication apprehension. Study One talks through the process of designing a scale. I break down the process I took to writing my instrument of measurement and the first steps taken towards testing it in exploratory fashion. Study Two builds on the results of Study One to test a hypothesized version of the scale versus an actual version indicated in data. This result is used to refine the scale further and produce a final version that is used in hypothesis testing in Study Three.

Chapter 3: Study 1: Scale Design

Study 1 built a scale its factor structure. The study was broken into several steps centered around scale development. First, I went through a process of scale development informed by best practice in the field, then I explored the scales initial viability using data collected in surveys and analyzed in exploratory factor analysis (EFA).

Given the vast amount of foundational work, a critical question should be posed about the research approach I take in this work. Building a quantitative measure of PCA is an appropriate next step in the study of PCA for several reasons. First, previous research has taken both qualitative and quantitative approaches to communication apprehension. Qualitative research from scholars like Montgomery (2020) are well executed but offer a skewed answer and incomplete picture. Montgomery's work found most people thought about fear of disagreement in their reasons for staying silent, but I suspect that is based on who was asked and who was willing to answer. If I asked people what made them nervous about political conversations, I would likely replicate Montgomery's findings and get answers that only center around spiral of silence theory. This question presumes political involvement, which is not always the case for the political communication apprehensive. I know from other research that other reasons might exist such as a fear of looking uninformed. Those reasons may not be expressed by participants unless I ask them directly. This issue could still be solved by qualitative research if it were the only issue.

The second issue makes a qualitative approach inappropriate and cements the need for this study as a quantitative study: analysis. Qualitative and quantitative research serve different purposes (Mahoney & Goertz, 2006). Qualitative research is meant for within-case analysis, where the goal is a deep understanding of a singular subject, with the possibility of transferability

from case to case. Quantitative research is meant for across-case analysis, where the goal is a deep understanding of many cases, with the possibility of generalizability across cases. I need to use a quantitative approach here because I have a hypothesis about how a measure works across cases. I believe my measure will work for multiple people, and it needs to compared in its applicability to multiple people, so an across-case analysis is most appropriate for investigating my hypotheses. A proper investigation of my hypothesis will rely on quantitative work to reject or support my arguments.

RQ2-1: Is there empirical support for my measure?

Measure Development

Effective measurement of a behavior requires a great degree of care. Aspects of how questions are worded and how answers are provided can shape the way participants respond to questions (DeVellis & Thorpe, 2021). Serena Carpenter (2017) offered a best practice guide for developing scales. I am following that guide with little deviation. For a breakdown of Carpenter's guidelines, see Figure insert number here below, adapted from Carpenter (2017).

Table 1
Summary of Scale Development Procedures and Decisions (based on practices prescribed by Carpenter, 2017)

1. Research the intended meaning and breadth of the theoretical concept.
    a. Select appropriate conceptual labels.
    b. Select conceptual definitions.
    c. Identify potential dimensions and items.
    d. Conduct qualitative research to generate dimensions and items.
    e. Solicit expert feedback to assess face content validity of dimensions and items.
2. Determine sampling procedure (5:1)
3. Examine data quality.
4. Verify the factorability of the data.
    a. Bartlett's Test of Sphericity ($\leq$.05)
    b. Kaiser-Meyer-Olkin test of sampling adequacy ($\geq$.60)
    c. Inspect anti-image correlation for sampling adequacy (>.60)
    d. Inspect correlation matrix ($\geq$.30)
5. Conduct Common Factor Analysis

	a.	Select factor extraction method (exploratory model or principal components)
	b.	Determine factors to extract
	i.	Theoretical convergence and parsimony
	ii.	Eigenvalue interpretation rules (Scree test, >1 rule, parallel analysis)
6.	Rotation method (orthogonal/varimax, or oblique/promax)	
7.	Evaluate items based on a priori criteria.	
	a.	Theoretical convergence and parsimony
	b.	Poor factor loadings ($\leq$ .32)
	c.	Cross-loadings
	d.	Inter-item correlations
	e.	At least three item factors
8.	Write up results	

The process of developing a scale starts with conceptualization. What do I mean when I am talking about PCA? What is a definition of it? What are the relevant aspects connected to PCA and details about PCA? Using the literature I have discussed thus far, I brainstormed items that might represent PCA the way I understand it: as a state of mind where someone is uncomfortable talking about politics. Creating items that properly represent the presence or absence of PCA is the first step to ensuring a valid scale by assessing the content of the scale itself. Using the theories I outlined in the theoretical framework section, I created 36 scale items along three dimensions: isolation, sensitivity, and knowledgeability. Fear of isolation is based on the spiral of silence theory, aversion to harm is rooted in ideas from communication accommodation theory, and knowledgeability is based on face theory. The public sphere and normative theories of citizenship did not need their own factors because they informed every factor. In other words, the normative notions of the public, politics and relationships shape the feeling of apprehension. To move on from item generation, I set a cutoff criterion of around twice as many items as I expected to maintain. This offers some wiggle room for the scale to change later if needed. This approach is common and considered a best practice for item generation (DeVellis & Thorpe, 2021).

As I wrote items for the scale, I considered potential influences that would affect how people would answer each question. Biases within each item and within the respondents themselves can both shape the process (Tourangeau et.al, 2000). If a question is written to indicate too many different things, it can complicate or confound an otherwise straightforward answer (Fowler, 1995). I tried to keep each item concise and intended to capture one specific symptom of PCA. For example, I could only ask a respondent about one factor at a time, meaning each item should capture only a piece of that dimension and not the others. Next, I took time to consider the social cues that shape how respondents might answer my questions. Regardless of their thoughts towards politicians, many people see political participation as a positive trait, and indicating a discomfort with a political behavior might cause some participants to tailor their answer towards a more favorable answer. This problem has been seen in political science in the form of polling and manifested itself in the 2016 and 2020 presidential elections (Keeter et al., 2021). Due to the general social taboo about supporting Donald Trump, many pollsters struggled to capture public support for the former president. This issue, known as the social desirability bias, leads to a distortion of how people answer questions.

Once the items were ready, I contacted experts in the field to ask for their feedback on my questions. I ask ten experts and five agreed, so I sent these five experts the scale for review. I processed their feedback iteratively in three waves. One expert received the rough draft scale and offered feedback that I used to produce a second draft. This second draft was then sent to three experts. Once these three experts gave feedback, I incorporated their ideas and sent the third draft to the fifth and final expert. This approach was chosen for two benefits. The first benefit was pragmatic. Each expert had different timetables when they could evaluate the scale. Rather than waiting for each of these timetables to pass before I made any changes, I wanted to keep

working on the scale so that the scale could develop along an overall timetable. This approach also produced the second benefit of incremental improvement. The first expert was able to offer feedback that made the rough draft considerably better and so did the group of three who helped me prepare the next draft for the final expert. Once I had received and incorporated feedback from these experts, I prepared my scale for a survey that would be administered to potential participants using Qualtrics survey software. I then obtained approval from my university's Institutional Review Board to collect data, and proceeded to the next step of Study 1.

Sample

Participants (N = 303) were recruited from a convenience sampling of paid individuals on the crowdsource platform Prolific. Prolific offers a sample distribution that is representative by US Census standards for an additional fee. This sample is worth the added cost for two reasons: 1) academics are increasingly skeptical of relying on college students for their points. Student samples tend to be White, educated, industrialized, rich, and Democratic (WEIRD) and are not always a good source of information for larger patterns of behavior, such as political issues (Henrich et al., 2010). Accordingly, academics are having increasingly high standards of data sampling. A representative sample based on the US Census helps meet these high standards because it closer to a generalizable finding than other convenient sampling methods such as surveying undergraduate students. Generalizability matters in these instances for insuring my research can tell us more about how the world works compared to an isolated set of examples. 2) Outside of survey services such as Prolific, a comparable sample would be much harder to recruit. While the company charges a service fee for a representative sample, it is well worth the time saved.

Gender diversity in the sample was good. Of the 303 participants in the sample, 149 identified as men, 142 identified as women eight identified as non-binary or third gender, and four preferred not to say. Racial diversity was not ideal albeit expected, with 234 participants (77.2%) identifying as White, 28 identifying as Black or African-American, four identifying as American Indian or Alaska Native, 42 identifying as Asian, two identifying as Native Hawaiian or Pacific Islander, and 18 identifying as "Other." Age diversity was acceptable: 52 participants (17.2%) were aged 18 to 24 years old, 125 participants (41.4%) were aged 25 to 34, 65 participants (21.5%) were aged 35 to 44 years old, 50 participants (16.6%) were aged 45 to 64 years old, ten participants (3.3%) were aged 65 or more, and one participant preferred not to answer this question. Political party membership skewed Democratic (n = 170, 56.1%), with another 99 participants identifying as Independent (32.7%) and 34 participants identifying as Republican (11.2%) These characteristics are summarized in Table 2 below.

Table 2
Summary of Study One Participant Demographics

		N	%
Gender			
	Man	149	49.2
	Woman	142	46.8
	Non-Binary / Third Gender	8	2.7
	Prefer not to answer	4	1.3
Race			
	White	234	77.2
	Black or African American	28	9.2
	Asian	42	13.9

American Indian or Alaska Native	4	1.3
Native Hawaiian or Pacific Islander	2	.7
Other	18	5.9
Age		
18-24	52	17.2
25-34	125	41.3
35-44	65	21.5
45-64	50	16.5
65 or older	10	3.3
Political Party Membership		
Democratic	170	56.1
Independent	99	32.7
Republican	34	11.2

Procedure

After obtaining Institutional Review Board approval, I posted this study online to Prolific on December 18th, 2023 at 2:00pm. Data collection concluded on the same day around 6:15pm.

Participants (N = 303) were offered the chance to participate in this study through Prolific's interface. If they agreed to participate, they were directed to the survey page and began by reviewing information about the study so they could provide informed consent. If they agreed to participate, they were directed to the questions on the PCA measure. If a participant declined to participate, they were automatically directed to the end of the survey. All participants recruited gave informed consent for their participation.

After providing consent, participants completed the scales portion of the survey. After completing the questionnaire, participants were offered the chance to provide comments or questions for the researcher in the form of an open-ended text box. After this question, they were given a completion code to give to Prolific. The median completion time for this study was four minutes and 48 seconds.

Once a participant completed the survey, their data was reviewed by me to determine if it was eligible for payment of $2.50 USD based on expected time of completion. The survey took an estimated 15 minutes to complete, meaning the compensation awarded averaged about $10 an hour. To ensure the quality of the data, payment was denied for incomplete surveys, repeated surveys, repeated answers (e.g. 6,6,6,6,6,), and/or failing at least one of two attention verification questions. If a participant is denied credit, Prolific's system reviews their demographics and provides another participant of similar identity. All participants passed these checks and were paid.

Data Analysis

Prior to analysis, data were screened for details mentioned in the previous section. Any case was deleted if it negatively impacted the quality of the data. In this case, a negative impact of quality was based on the belief that a case could not be considered trustworthy and included in analyses. All participants passed checks of time to completion and attention verification. Based on these criteria, no cases were deleted. Once data passed this screening, it was analyzed using Exploratory Factor Analysis (EFA) to assess the factor structure. Common practices of EFA were followed: maximum likelihood was used for the estimation method, and Promax rotation was employed to capture oblique factor structures. Eigenvalues less than one were suppressed in the solution displayed.

To assess the suitability of the data, several statistical tests were performed with preset criteria: The Kaiser-Meyer-Olkin [or KMO] (Kaiser, 1960) measure of sampling adequacy should produce a value of at least .6, Bartlett's (1954) test of sphericity should be significant, and anti-image correlations should produce a value of at least .6 for each variable to demonstrate item sampling adequacy.

Once I assessed the factorability of the data, I examined how connected the data were using guidelines proposed from Carpenter (2017). Statisticians use correlations to assess this possibility. To this end, the correlation matrix was analyzed for multiple correlations less than or equal to .3. This value cutoff was used because it signals that an item in the scale is not correlating with the rest of the items well enough. Because all of the items are intended to capture the same phenomenon, they should correlate to at least some degree. Accordingly, we want correlations greater than or equal to .3. Next, we want to check for communalities, values that indicate how much the variance of an item overlaps with the overall model. We want communalities of at least .50 (Tabachnick & Fidell, 2007). Lastly, the model chi-square test should be non-significant. In this case, the chi-square test is calculated using maximum likelihood estimation an approach designed to demonstrate the suggested number of factors is likely to be observable in a larger population (Lawley & Maxwell, 1963). If all or most of these criteria are met, we are ready to begin examining factor structure.

To assess factor structure, an important initial question is how many factors should be considered from the solution produced by the EFA. To this end, we use three tests: the Kaiser-Guttman rule (Guttman, 1954; Kaiser, 1970), a scree test (Cattell, 1966), and a parallel analysis (Horn, 1965; Humphreys & Montanelli, 1975). All three of these tests rely on eigenvalues: values that reflect a path that captures a certain amount of variance in the data. EFA relies on the

covariances or correlations between a set of variables to produce a list of eigenvalues reflects the number of factors available and higher values indicate more captured variance. Under the Kaiser-Guttman rule, we use a cutoff criterion value of < 1 to determine where to stop considering additional factors. This cutoff point is used because a value of 1 indicates representation of one item in the scale. Accordingly, any eigenvalue less than one indicates the factor is capturing variance that is less than one item's worth. We can visualize this concept with a scree test, which produces a graph of the eigenvalues of each factor from greatest to smallest. A scree test produces a line that can be likened to a human arm. We use a visual criterion of taking the number of eigenvalues based on the "elbow" of the line. This elbow represents diminishing returns and signifies a point beyond which eigenvalues would be retained at the expense of parsimony. Both of these criteria are fairly subjective and have produced concern from statisticians (for Kaiser-Guttman concerns, see Zwick and Velicer, 1986; for scree test concerns, see O'Connor, 2000), so we can also apply a third criteria of parallel analysis (Horn, 1965; Humphreys & Montanelli, 1975). This approach assesses eigenvalues of a randomly generated dataset using the same possible numbers. We run this analysis many times and calculate the mean number of eigenvalues. We then compare this mean to our analysis results and retain any factors with eigenvalues greater than the mean number for the same eigenvalue in the parallel analysis. Each of these criteria are used to assess how many factors we should extract for the scale. The contents of each factor is based on item correlation and factor loading.

In an EFA items are allowed to float freely without being forced together. Items that correlate together strongly indicate factors. The goal is to identify the common threads in these factors to identify a factor structure and see how it aligns with the scale that was theorized. To this end, we want to look for items that have one of two problems: poor loadings and cross-

loadings. A poor loading means that the item is not fitting into the factor the way its other items are. This is similar to the correlation issue I mentioned in the last paragraph. Cutoff criteria vary, but Serena Carpenter (2017) influentially proposed a floor of .32 with any lower scores indicating an item is not fitting into the scale and should be removed. It is my intention to start with this criteria and move up to .4 as my loading floor if the opportunity arises. Whereas a poor loading indicates no fit, a cross-loading indicates that an item loads well into multiple factors. This produces a problem, because each item should be intended to capture a single aspect of the behavior we are looking at. If it loads into multiple factors, it can undermine the simplicity of the scale and cause trouble for chi-square calculations. To this end, any item that cross-loads into two or more factors at our cutoff criteria of .32 should be removed as well.

With all of our standards set, I set the analysis to run. Here is a brief recap of that plan as it would appear in a research report.

To examine the factor structure between the 36 items, an exploratory factor analysis (EFA) was performed. EFA was chosen over other methods (e.g. principal components analysis) because our primary interest here was in exploring how the data intertwine with each other (Tabachnick & Fidell, 2007). Measure reduction was a secondary goal of this study. Because these two goals clash for the selected test, the primary goal of exploration took precedent and EFA was chosen. A combination of the < 1 rule, scree plot, and 95th percentile parallel analysis (O'Connor, 2000) were used to determine how many factors should be extracted. Promax (also known as oblique) rotation was used to improve factor interpretability.

The next section provides the results of the analysis and revisits an answer to our research question.

Results

Prior to assessing factor structure, the data were examined for normality and factorability. Data normality showed some signs of kurtosis (maximum value = -1.2 while all skewness values were below 1. This result led to the conclusion that the data was suitable for further analysis and answering my research question. Initial factor analysis suggested the data was diverse enough for factoring. Barlett's test of sphericity was significant, the KMO Measure of Sampling Adequacy was . 91. The initial solution suggested 6 factors that captured about 65% of the variance. This approach was supported by the < 1 test, and scree plot. This model showed significantly different fit from a nested model (χ^2= 797.93, *df* = 429, *p* < .000). The rotated factor matrix showed some items also cross loaded. These loadings are summarized in the table on the next page.

Each factor captured a different element of the items, with each theoretical having a "home" factor where most of its items loaded, with knowledgeability face in Factor 1, isolation in Factor 2, and Sensitivity jn Factor 4. Others split or load onto other factors based on capturing other things. Factor 3 seemed focused on capturing the notion of an anticipated reaction. Factor 5 focused on a connotation between conflict and disagreement. Factor 6 focused on visibility and captured on items that reference credibility or being seen as credible.

Table 3

Initial Rotated Factor Matrix

	Factor Loadings					
	1	2	3	4	5	6
*S1- I am unafraid of expressing political opinions that others will disagree with.			.76			
*S2- I do not worry about how others will react to my political opinions.			.86			
S3- I would rather keep my opinion to myself than start a political disagreement					.43	
*S4- I am unafraid to express my political beliefs around others.			.68			

S5- I worry about how my friends would react if I expressed my political opinions.		.53				
*S6- I rarely stress about how others might react to my political opinions.			.53			
S7- I worry that people will stop talking to me if I express my political beliefs.		.90				
S8- I worry that expressing my political opinions could cost me a few friendships.		.94				
*S9- I never worry about losing friends when I talk politics.		.57				
S10- I worry my friends might exclude me if they knew my political beliefs.		.96				
S11- I worry that my political beliefs would not be tolerated by others.		.69				
S12- I have wondered if my political beliefs would be considered taboo by others.		.52				
E1- It is hard to talk about politics without hurting someone's feelings.					.51	
E2- I avoid talking about politics because it will upset the person I'm talking to.					.80	
E3- My friends react emotionally when we talk about politics.				.79		
E4- I am afraid that bringing up politics will cause distress for the person I'm talking to.					.73	
E5- I worry the person I am talking with will get really worked up over politics.					.80	
E6- My friends get tense when we talk about politics.				.69		
E7- In my experience, talking about politics always seem to end with someone getting upset.				.56		
E8- I dislike watching people get worked up over politics.					.56	
E9- My friends take political discussion personally.				.76		
E10- I have seen people get upset just from thinking about politics.						
*E11- I rarely worry about hurting someone's feelings when I talk about politics.			.44.			
*E12- My friends talk politics in a very calm way.				.68		
F1- I am worried about looking stupid when I talk about politics.	.85					
*F2- I feel confident in myself during political conversations.	.74					
F3- I feel dumb when people around me talk about politics.	.89					
F4- I am concerned about appearing unintelligent in a political conversation.	.88					
F5- I want other people to see me as knowledgeable in political conversations.						.64
F6- I feel lost in a bad way when people around me start talking politics.	.85					
F7- I worry someone would call me out for not knowing enough about a political issue.	.77					

F8- I am self-conscious about my intelligence in political conversations.	.79					
F9- I feel very embarrassed if I get political facts wrong in front of others.	.48					
F10- I rarely feel uninformed in political conversations.	.65					
F11- I want to look credible when I discuss politics.						.62
F12- I beat myself up when I get facts wrong in political conversations.						.48

Note: Coefficient values below .4 have been removed.
*Indicates a reverse coded item

The research question was based on dimension reduction and asked if there was empirical support for the scale I had designed. The preliminary answer was yes, but with some modifications needed based on factor structure. After examining the loadings, I noticed underlying threads of connection between some of the items that might cause them to load together. The most common cross loaders were between items in the isolation and sensitivity factors. Many of the cross-loadings likely occurred for connotative reasons. For instance, some of the items that reference friendships loaded together but not with other items within the same factor that I had proposed. In the isolation factor, many of the negatively worded items loaded together as their own factor.

After considering the underlying connections of the factors, I decided to remove some of the items in pursuit of the research goal. The friends factor captured a more descriptive nature of friendship groups rather than a state of discomfort, so its items were removed from the analysis. Additionally, the credibility factor focused on a desire to be seen a certain way, but not a state of discomfort, so its items were removed as well and the analysis was rerun. The remaining variables produced eigenvalues that, according to the < 1 rule scree plot encouraged a four-factor solution capturing 67% of the variance. While the initial criteria was set to remove any factors below .32, this solution produced no factor loadings below .45, exceeding my criteria. This

solution showed some improvement in terms of model fit as well ($\chi^2 = 427.12$, $df = 186$, $p = .000$). This solution used twenty-four items across four factors and is summarized in Table 4 on the next page. The face and sensitivity factors each loaded as expected and the isolation factor was split between items that were positively or negatively coded to indicate PCA. A double check of the codings here indicated all items had been correctly coded and re-coded, but the negatively worded items still split into a separate factor. The descriptive details and item fit for each remaining question and is included in Table 4 with factor loadings.

The factor analysis showed most of these criteria were met. The correlation matrix (available in the Appendix) held multiple correlations above .30, which is an important guideline for determining whether the scale items fit together. Ultimately, I retained three factors and named them based off the theoretical ideas that inspired them. The first factor, rooted in spiral of silence theory, was termed the isolation factor. The second factor, rooted in accommodation theory and evaporation, was termed the sensitivity factor. The third factor, rooted in face theory and normative citizenship, was termed the face factor.

Research question one was exploratory and asked if people think of these things as distinct behaviors that can be empirically measured. The initial answer is a “somewhat yes”. Some of the questions asked cross loaded between multiple factors, and several of them did not load together either, which reflected error in item crafting. After further development of the scale, RQ1 showed additional support for distinction in the minds of participants. There are at least some elements of each practice that are distinct from each other, though some things overlap. I will talk more on these distinctions in the next section.

Table 4
Final Factor Solution

			Factor Loadings			
	M	SD	Factor 1	Factor 2	Factor 3	Factor 4
S1	3.82	1.59				.79
S2	4.91	1.63				.75
S4	3.61	2.04				.72
S5	4.88	1.66		.62		
S6	4.35	1.88				.49
S7	4.90	1.59		.84		
S8	4.90	1.62		.91		
S9	4.24	2.01		.61		
S10	5.18	1.54		.98		
S11	4.83	1.60		.71		
S12	5.08	1.60		.52		
E1	3.25	1.46			.60	
E2	3.95	1.57			.74	
E4	4.14	1.58			.79	
E5	3.68	1.73			.94	
E8	2.88	1.59			.49	
F1	4.40	1.79	.89			
F2	4.31	1.88	.67			
F3	5.05	1.62	.84			
F4	4.52	1.78	.94			
F6	5.08	1.50	.78			
F7	4.55	1.76	.83			

F8	4.40	1.77	.85
F10	3.80	1.87	.57

Note: Loading coefficients below .4 have been omitted.

To achieve the research goal, a viable measure was needed that would need a minimum of three (Carpenter, 2017) items (per expert feedback) per factor. The final solution offered four factors with eight items on factor one, seven items on factor two, five items on factor three, and four items on factor four.

Discussion

There is much to unpack from these results. Some elements of the discussion for this section should be discussed here, while I will save others for a synthesized discussion of all the studies in Chapter 6.

The first thing to discuss is the presence of PCA itself. It is important to be wary of fetishizing the instrument before it is finished, but there is some support for my argument in the respondent answers. The data's normality statistics tell us these feelings are normally distributed across the sample, meaning some people experience these feelings and others do not. Of the 303 people who answered the questions, most respondents wound up somewhere in the middle. This basic descriptive statistic offers evidence to support my arguments that PCA exists and manifests in different ways. This observation leads me to revisit the research question for this chapter. There is some evidence to suggest elements of overlap as well as distinction between the factors I posited earlier in this chapter. The data suggest overlap or distinction will come based on which characteristics we are talking about. However, the data also suggest people do see a distinction between causing an emotional reaction and losing relationships. Disagreement likely prompts the

difference between these two things. While the fear of disagreement is likely one of the larger concerns in political talk, my findings do suggest we are uncomfortable talking politics for other reasons.

Next, the research goal for this study was accomplished. In addition to some insights on PCA, I have the foundations for a useful measure that can be applied to a wide variety of communicative contexts. The scale's brevity makes it suitable for a variety of methodological contexts such as large public opinion panels as well as network research (Borgatti, Everett, & Johnson, 2018). These approaches allow us to better capture the larger nature of political behavior since many people communicate about politics across networks rather than basic dyads (Morey et al., 2012; Sinclar, 2013). Moreover, the scale is also useful for capturing feelings in timely political contexts. Cancel culture is the first context to come to mind. Cancel culture underlies each factor of the scale but with different consequences being considered. On face value, the scale certainly captures people's discomfort with political conversations for fear of various consequences that could all logically follow from being canceled. This offers an additional contribution to both the public and academe that take interest in such problems.

The major goal of this study is to serve as a springboard to more applied use. To do so, it must be reliable and valid. This study provides the first initial support for such use, with initial promise in reliability analyses and the achievement of face and content validity. This being said, there is more to be done before the scale can be more widely applied. The next form of validity to consider is convergent and discriminant validity. Once these criteria are met, the scale's exploratory factor structure is ready for hypothesis testing as a proper model of PCA. An EFA cannot accomplish this goal and it is considered a poor theoretical practice to use the same data

set for an EFA and a confirmatory factor analysis (CFA), the test needed to properly test the structure (Beavers et al., 2013). This issue leads me to the next study of this dissertation.

4: Study 2: Scale Testing

Presuming Study 1 produces some promising results, we now have a scale to start playing with, but we need to make sure participants answer the scale's questions in the same way they would answer a similar questionnaire. To this end, Study Two will use the refined scale from Study One to test a refined scale overall and examine convergent and discriminant validity.

In Chapter 1, I investigated if people think of PCA as related but distinct concepts. Based on the analyses, I now have a hypothesized model to test. Study One concluded with four factors being proposed: face, sensitivity, and isolation, with isolation being split into two factors based on positive or negative coding. This approach requires testing a hypothesized model against model constructed from data. This practice is performed to answer my first hypothesis.

2-H1: A four factor model of PCA will be supported.

PCA reflects a discomfort with political communication but not a disdain for it. When comparing PCA to other practices, I can reason to say that discomfort might be related to engagement, but not that this relationship is linear. One of these feelings does not predict the other. Instead, they exist together in the mind of a person. One example of this relationship is a person's willingness to communicate about politics (WTCAP). A person might be apprehensive but still be willing to communicate. Similar behaviors have been studied in general communication contexts, where students might be anxious about speaking in front of a group but still willing to do it (Burroughs et al., 2003). An important test of convergent validity is the correlation between a measure and related measure. If two measures each claim to measure the same phenomenon, they should correlate. To do so, I compared my measure to Young's (2023) measure of PCA in Thai undergraduate students. Young's measure was designed for educational

contexts instead of relational ones so for clarity purposes, I will term it classroom political communication apprehension (CPCA).

Accordingly, I propose the following hypothesized correlations.

2-H2: PCA is negatively related to WTCAP.

2-H3: PCA is positively related to CPCA.

Sample

Participants (N = 301) were selected similarly in the same manner as Study 1. Additionally, I added a screen that kept Study 1 participants from participating in Study 2.

Gender diversity in the sample was good. Of the 301 participants in the sample, 134 identified as men, 163 identified as women, 3 identified as non-binary or third gender, and 1 preferred not to say. Racial diversity was less diverse, with 234 participants (77.2%) identifying as White, 28 identifying as Black or African-American, 4 identifying as American Indian or Alaska Native, 42 identifying as Asian, 2 identifying as Native Hawaiian or Pacific Islander, and 18 identifying as Other. Age diversity was okay. 49 participants (16.3%) were age 18 to 24, 93 participants (30.9%) were aged 25 to 34, 69 participants (22.9%) were age 35 to 44, 78 participants (25.9%) were aged 45 to 64, 12 participants (4%) were age 65 or more. Political party membership skewed Democratic (n = 182, 56.1%) with 83 participants identifying as Independent (32.7%) and 36 participants identifying as Republican (11.2%) These characteristics are summarized in Table 5 below.

Table 5
Summary of Study 2 Participant Demographics

	N	%
Gender		
Man	134	44.5
Woman	163	54.2
Non-Binary / Third Gender	3	1.0
Prefer not to answer	1	0.3
Race		
White	226	75.1
Black or African American	45	15.0
Asian	37	12.3
American Indian or Alaska Native	1	0.3
Native Hawaiian or Pacific Islander	2	.7
Other	10	3.3
Age		
18-24	49	16.3
25-34	93	30.9
35-44	69	22.9
45-64	78	25.9
65 or older	12	4.0
Political Party Membership		
Democratic	182	60.5
Independent	83	27.6

Republican	36	12.0

Procedure

Similar to Study 1, the study was submitted for Institutional Review Board approval. Once approval was granted, participants were recruited through Prolific. Each participant was able to follow a link from prolific to Qualtrics where they went through the informed consent process first. They were informed about the details of the study before being asked to consent to participate in the study. After providing informed consent, participants were given a revised version of the PCA scale that was produced at the conclusion of Study 1. To test convergent validity, related measures were administered as well: Kleinman & Kleinman's (2014) measure of willingness to communicate about politics and Young's (2023) PRPCA scale, as adapted from McCroskey (1985). Each participant answered these questions, was given the chance to offer comments or feedback to research team and was then redirected to Prolific to receive completion compensation for the survey.

Data collection for Study 2 began on January 19th, 2024 around 3:45pm Central Time and concluded around 6:25pm. The median completion time for participants was seven minutes and 48 seconds.

Data Analysis

To conduct a CFA, there are several steps that need to be accomplished first. A CFA tests a predicted variance-covariance matrix against the sample's variance-covariance matrix. During a CFA we examine whether relate to their corresponding factors the way we are hypothesizing—that is, that each item in a scale is a good indicator of the latent factor. To this end, there are two

major areas we investigate in a CFA: absolute model fit and factor loadings. For the non-academic reader, please be aware the next section will get very ‘math-y.

Model Fit

When breaking down a factor analysis, we want to compare a hypothesized model to an actual observed model based on data. For the non-mathematician, this is like how someone might compare albums from the same artist. Model fit is assessed using several criteria because we can assess it based on indices to examine absolute fit or relative fit. Absolute fit indices assesses the model as it is with no considerations for alternatives. This would be like comparing Taylor Swift’s *Tortured Poets Department* as it is to what you were expecting the album to be. Comparative fit indices consider the model alongside alternative solutions that would be considered null. This would be like comparing *Tortured Poets Department* against ten random, unconnected singles. To assess these fits, we use several indices of model fit.

The first index is a chi-square (symbolized as χ^2) goodness of fit test. This test is an absolute fit index that assesses whether the model implied by the data is significantly different from the hypothesized model (similar to whether *Tortured Poets Department* was what you expected it to be). This chi-square can be calculated using several approaches, but the most common for CFA is maximum likelihood estimation (Brown, 2005). Maximum likelihood estimation has a particular objective of minimizing the differences between the model implied and the theoretical matrices. When evaluating a chi-square test, a higher value indicates a greater difference between the two matrices, and we interpret this pattern to mean poorer fit. A significance test using $p < .05$ is used to confirm this difference, where a significant difference indicates the data matrix differs significantly from the hypothesized matrix.

The chi-square is a useful test, but it is also prone to issues due to high sample sizes, which also happens to be a requirement of factor analysis in order to achieve the necessary power to conduct analyses. Brown (2006) points out this is true but necessary for model over-identification, but it also means that it is nearly impossible to achieve perfect fit in large models. For a deeper dive on this, I recommend reading Brown's (2006) book on confirmatory factor analysis. Therefore, chi-square should not be the sole index of model fit and should almost always be used in addition to several other criteria. Our other three judges of model fit in this study are taken from the suggestion of an influential study by Hu and Bentler (1999): the comparative fit index (CFI; Bentler,1990), root mean square error of approximation (RMSEA; Steiger & Lind, 1980, Steiger, 2016) and standardized root mean residual (SRMR; Bentler, 1995). I will go over them briefly before moving on.

First, the CFI is a comparative test of fit between two models compared to a null hypothesized model where no relationships exist (Brown, 2005). We run this test to ensure that the tested model is significantly different from the null model (remember the unconnected singles?). The test produces a value between 0 and 1, with higher values indicating better model fit. The most common criterion for evaluating CFI is that values above .9 are acceptable (Bentler, 1990), with values over .95 preferred (Hu & Bentler, 1999).

Second, the RMSEA is a form of parsimony correction in the model to account for the idea that our models rarely converge perfectly. One's expectation rarely matches reality in perfect lockstep (same with our perceptions of *Tortured Poets Department)*. To do so, the RMSEA is designed to assess whether a model fits fairly well rather than exactly well (Brown, 2006). When they do not, we need a way to assess the extent of reasonable fit. The RMSEA is used for this goal and is expressed as a value between 0 and 1, with lower values indicating more

reasonable fit between the hypothesized model and the sample model. Cutoff criteria for the RMSEA vary, though some common viewpoints suggest anything above or equal to .1 should be rejected (Browne & Cudek, 1993), anything from .08 to .06 indicates mediocre fit (MacCallum et al., 1996), anything below .08 demonstrates adequate fit, and anything below .05 demonstrates good fit (Browne & Cudek, 1993). Given the variety of standards (and other reasons), it is also useful to report confidence intervals for the RMSEA (Brown, 2005).

Finally, the SRMR is an absolute fit index based on discrepancies between the hypothesized correlation matrix and the sample's correlation matrix. This test is used to examine how much residual information goes unexplained by the model. Like our other criteria in this paragraph, the SRMR can take on a range of values between 0 and 1. Lower values indicate less discrepancy between the two correlation matrices, and our field typically applies a standard of less than or equal to.08 (from Hu & Bentler, 1999) to indicate acceptable fit.

As I mentioned earlier, model fit is assessed through several means, not just the overall fit. The other approach we consider are localized sources of strain, relationships in the model that are very clearly not working the way I would expect. Signs of strain manifest in the factor loadings and residual variance. Poor factor loadings result in higher residuals that indicate poor overlap between the hypothesized relationship and the actual relationship. A lower factor loading indicates more residual variance, which means more strain on the model. To this end, I set a prior criteria of considering factor loadings beginning with the poorest loading item and based on whether the item's loading makes sense.

Sometimes, these residuals are present because the items being asked may share some underlying variances, such as, for instance, when their wording in similar (Brown, 2015). To account for this issue, modification indices can also be considered to deal with localized sources

of strain. A modification index is a proposed change to the hypothesized model that can change the way two or more items' errors relate to each other. When we assign each item to a latent factor in CFA, we are setting their item cross loadings and error covariances to zero because we assume each item is representative of only its associate factor and nothing else. By allowing items' errors to covary, we say their residuals are related. Allowing such modifications can cause the chi-square to decrease in value. These modifications can improve the model's fit, but they also reduce the model's parsimony. There is a tradeoff, and the decision to make modifications should hinge on defensible theoretical criteria besides the model's fit (MacCallum et al., 1992). I set one such criteria here: the modification should be defensible on the grounds of overlapping meaning of the items in question. If two items are worded similarly or get at a similar idea, they can be allowed to covary (Jöreskog, 1993). These signs of strain also tend to impact the goodness of fit criteria I mentioned in the previous paragraph, so when we resolve strain, we need to reassess the goodness of fit criteria in addition to the sources of strain.

Similar to Study 1, data went through a cleaning process to ensure all cases meet the expectations of an attentive respondent. Additionally, data were examined for a normality assessment. Normality in this context refers to the extent the data match what we call a normal distribution. A normal distribution is best exemplified by the Gaussian bell-curve - Google this if you are unfamiliar with the term, it helps to visualize it and I do not have the patience to find an image that is not copyright protected. The curve is considered non-normal if it is skewed in a positive or negative direction, indicating the items have a positive or negative bias with respondents and people are answering them in an unexpected way or if the answers have would trend towards in a positive or negative direction. For example if you asked 1,000 random people "how often do you go to space each week?" and give them the choices of never, sometimes, and

often, you may find a negative skew in your answers, since most of these people have never been to space. Skewness is calculated as a non-zero value along a range of possibilities with a positive number indicating positive skew and a negative number indicating negative skew. We usually take values between 1 and -1 to indicate acceptable skewness (Osborne, 2009). A distribution is also not normal if its kurtosis is different from zero, that is if it is lepto- or platykurtotic, indicating sharpness or flatness in the curve and an unusual number of scores within a certain portion of the distribution.

Once data were considered suitable for analysis, I conducted a confirmatory factor analysis based on best-practice criteria. To calculate these details, I followed several common practices of CFA: I used the raw data from my participants to produce a correlation matrix and calculate a chi-square comparing the observed model and hypothesized model. Like in Study 1, the chi-square was calculated using maximum likelihood estimation. The first item in each scale was fixed to 1 to make the metric assumption and provide the software an understanding of how items are to be scaled. With these criteria and guidelines set, the analysis was ready to run. The procedure and results of this study can be summarized as follows.

To test the hypothesized model of political communication apprehension, a second-order confirmatory factor analysis was conducted using LISREL 11 (Jöreskog, & Sörbom, 2021) with PCA set to be a second order factor and isolation, sensitivity, and face as first order factors. The model was estimated by using the raw data from which the software generated a variance-covariance matrix. The estimation method was maximum likelihood. In accordance with best practices, each factor had the first item in the measure set to serve as a metric for the software.

Initial results showed promise but also signs of strain. The goodness of fit was below acceptable levels [χ^2 (249) = 976.87, RMSEA = .099, CFI = .87, SRMR = .065]. Analysis of

factor loadings showed localized signs of strain with four items' factor loadings being notably poor. The four items removed were S4, S1, E8, and F10. These items were iteratively removed and the analysis rerun to reassess model fit after each of them was dropped. The removed items improved fit to a more acceptable range [χ^2 (167) = 617.29, RMSEA = .095, CFI = .91, SRMR =.050]. To further improve model fit, items were examined to consider whether any item errors should be allowed to covary. The software offered several suggestions and four of them were considered acceptable additions on the grounds that their wordings were similar and/or they captured similar aspects of the phenomena. For example, one of the added covariances was between items S5 and S10 which respectively read as "I worry about how my friends would react if I expressed my political opinions" and "I worry my friends might exclude me if they knew about my political beliefs". These items do not necessarily read the same but they capture the same aspect of the fear of apprehension: an anticipated and unwanted reaction from one's friends. This type of similar was true for the other three covariances I added to the model. These covariances were added iteratively and resulted in further improvements to model fit as well as a final solution [χ^2 (164) = 525.45, RMSEA = .085, CFI = .93, SRMR = .049]. These results are summarized in Table 6 below, and the final model is depicted in Figure 3 below. Additionally, the factor loadings for the final solution can be found in Table 7 below.

Table 6
Final Solution Model Fit

Model	X^2	*df*	RMSEA	CFI	SRMR
Initial CFA	976.87	249	0.099	.87	.065
Revised CFA, Items Dropped	617.29	167	0.095	.91	0.050

Final CFA, Item Errors Covaried	524.45	164	0.085	.93	.049

Hypothesis 2-1 proposed that I would find support for a four factor solution. In the process of dropping items, one of the isolation factors became unsustainable on its own by having less than four items, and I decided to bring the two factors back together to create a three factor solution. These items had originally been expected to load together and rerunning the analysis with the three factor solution suggested the split isolation factors loaded together again. Based on this change, Hypothesis 1 was rejected.

Table 7
Final Solution Factor Loadings

	Factor Loadings		
	Factor 1	Factor 2	Factor 3
S2 I do not worry about how others will react to my political opinions.	**.72**		
S5 I worry about how my friends would react if I expressed my political opinions.	**.86**		
S6 I rarely stress about how others might react to my political opinions.	**.70**		
S7 I worry that people will stop talking to me if I express my political beliefs.	**.88**		
S8 I worry that expressing my political opinions could cost me a few friendships.	**.90**		
S9 I never worry about losing friends when I talk politics.	**.75**		
S10 I worry my friends might exclude me if they knew about my political beliefs.	**.89**		
S11 I worry that my political beliefs would not be tolerated by others.	**.88**		
S12 I have wondered if my political beliefs would be considered taboo by others.	**.76**		
E1 : It is hard to talk about politics without someone getting uncomfortable		**.69**	
E2 I avoid talking about politics because it will upset the person I'm talking to.		**.84**	

E4 I'm afraid that bringing up politics will cause distress for the person I'm talking to.	**.87**	
E5 I worry the person I'm talking with will get really worked up over politics.	**.83**	
F1 I am worried about looking stupid when I talk about politics.		**.91**
F2 I feel confident in myself during political conversations.		**.72**
F3 I feel dumb when people around me talk about politics.		**.84**
F4 I am concerned about appearing unintelligent in a political conversation.		**.84**
F6 I feel lost in a bad way when people around me start talking politics.		**.80**
F7 I worry someone would call me out for not knowing enough about a political issue		**.81**
F8 I am self-conscious of my intelligence in political conversations.		**.72**

Factor loadings are completely standardized lambda values.
Loading values below .35 have been removed.

We have talked through a variety of approaches to refine the scale and ensure everything fits together. Another test needed for the scale is a reliability analysis. Putting things in a circular way, we use reliability analysis to determine how frequently a measure would be able to achieve similar results. In other words, we want to ensure the scale will produce similar results in similar circumstances. Measures serve as tools for capturing the phenomenon we are investigating; just as a knife should reliably cut, a scale should reliably measure the same behavior. Perfect alignment is unlikely, but the closer we get to that, the more reliable the scale is. To test reliability, I used two options. The first reliability analysis was performed by calculating Lee Cronbach's (1951) alpha, hereafter labeled as α. Alpha is a popular test of reliability due to its focus on internal consistency using inter-item correlation. Reliability is higher if answers for the items fall into similar patterns. Because we want to be able to use each factor of the scale

independently or together, we need to test the reliability for items within each factor as well as the overall scale.

In this analysis, α represents a value of inter-item correlation, or the extent to which all the items in the scale correlate together. Because it reflects a correlation, α is always expressed as a value between 0-1, with higher values indicating a higher level of inter-item correlation and more reliability. Cutoff criteria for alpha vary from discipline to discipline but I intend to use .7 as my threshold because it is one of the more commonly held standards of communication and other social sciences, though it is worth noting this standard is based on a somewhat faulty interpretation of a highly influential text (for more, see Lance et al., 2006). Anything lower indicates that the items do not correlate together the way I think they do and that they will not work together reliably to predict PCA. This test is the most common approach to assessing reliability (Tabachnick & Fidell, 2007). Alpha values were very good with values of .93 for isolation, .85 for sensitivity, .91 for face, and .76 overall.

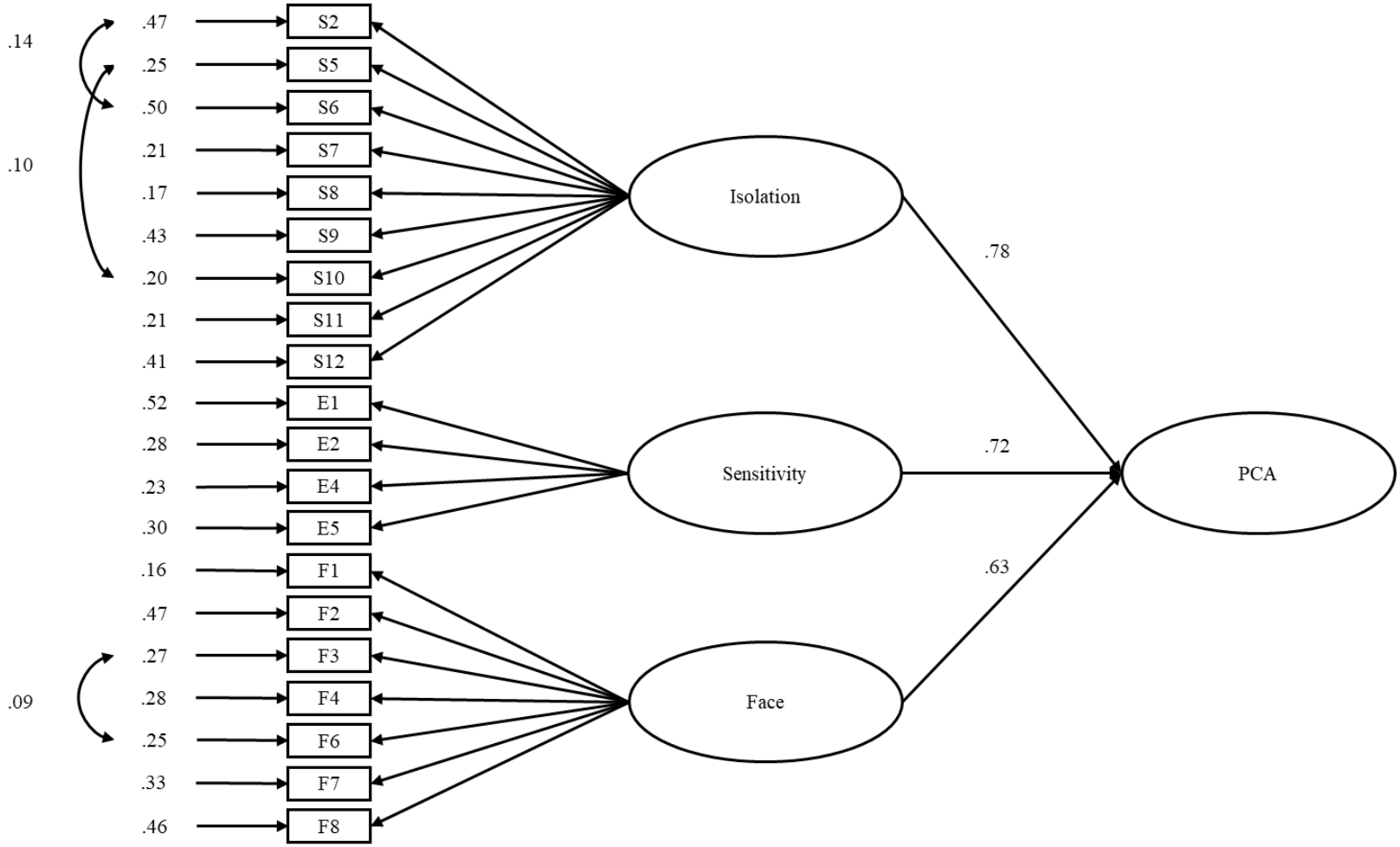
The second reliability test is performed by calculating coefficient *H* (Hancock & Mueller, 2001). Where α uses the correlation between the observed items themselves, *H* assesses the reliability of the latent factor. Gregory Hancock and Ralph Mueller (2001) proposed that *H* can be considered a test of reliability because it checks to see how all of them items fit together to represent a single, combined variable (i.e., latent factor). Like α, *H* represents a coefficient value that is expressed between 0-1 and higher values indicate more reliability. To set a cutoff point, Hancock and Mueller (2001) use a criterion set by Nunally and Bernstein (1994) of .7 as a minimum. For the subscales, calculations produced *H* values of .95 for isolation, .9 for sensitivity, and .94 for face. These values offer support for a reliable measure.

Correlations

To address Hypotheses 2 and 3 about correlations, I calculated Pearson's correlation coefficient (represented as *r)* to determine how related these two things are. I chose Pearson's *r* for two reasons, the first is that it is the most commonly used statistic for reporting correlation, and the second is because other options such as factor correlation in LISREL were not suitable.

Figure 2

Final Model Factor Structure



Note: Factor Structure, completely standardized solution

Because the items for the WTCAP measure were already validated by past research (Kleinman & Kleinman, 2014), I decided not As I mentioned in Chapter 2, I am not going to see if one of these things predicts the other, but rather I am more interested in their associations. This approach offers more educational value for me, my community and the few who will read this work. The goal of this work was not to address the old argument from McCroskey and Richmond, but instead to simply explore the relationship. To address these hypotheses, Pearsons *r* was calculated for correlations between willingness to communicate about politics and political communication apprehension, as well as its three subfactors. Of these four correlations, three were significant at the .01 level: the correlations with face (r = -.34), sensitivity (r = -.35), and apprehension overall (r = -.29). The correlation between willingness to communicate and the isolation factor was not significant (r = -.05). Based on these results, Hypotheses 2 was partially supported.

To address Hypothesis 3, correlations were calculated between Young's CPCA and the new relational measure of PCA. These correlations were all significant at the .01 level with CPCA correlating positively with isolation (r = .26), sensitivity (r = .40), and face (r = .55). The overall factor of PCA also correlated positively with place oriented PCA (r = .56). Based on these results, Hypothesis 3 was supported.

Discussion

There is much to unpack about these results. As with Study 1, I will unpack some of the findings here and save some of it for a more synthesized discussion later in the volume. In this section, you will find discussion on the measure and the relationship between political communication apprehension and willingness to communicate about politics.

First, these results revealed a measure of political communication apprehension that correlated well with other measures, offering evidence of its convergent validity, in addition to the previously attained face validity and content validity. However, these correlations are small enough to avoid a concern of multicollinearity, meaning the measures are distinct enough to merit use in different situations. The model fit of the final scale is not ideal, but it is within acceptable ranges and all criteria were met. The model's messiness might be explained by a couple of things. The first is basic measurement error with overlooked issues or items that could have diversified the measure and offered better fit. The second reason might be a missing factor. It is always possible that something else captures PCA that is not in this measure, and that incorporating it with new items with better improve model fit. Both of these options are viable future directions for improving the scale of PCA.

The second finding to discuss is the relationship between apprehension and willingness to communicate. This subject has been previously covered considerably by McCroskey and colleagues, but I have a few new contributions to this side of the literature as well. First, this relationship in political conversations is similar to other communicative practices, but the magnitude of this correlation also encourages thought on other possible dynamics. As I reflected on this relationship, I pondered the possibility of other cases that fit outside this correlation. A case outside of a correlation is an outlier that does not conform to the general relationship. When we assess correlations, we look at how a change in unit *x* correlates to a change in unit *y.* A correlation coefficient references the overlap of change between these two variables, and a lower coefficient indicates less overlap. Accordingly, less overlap indicates cases that do not correlate. The value of the correlation between PCA and WTCAP was significant but it was not absolute. At a value like .3, there are cases that fit outside the mold of the relationship, though these cases

are less likely to occur than cases that do fit the relationship. As apprehension increases, willingness to communicate is likely to decrease, but it may not always decrease. There may be situations where a person feels both apprehensive but also willing to communicate or feels neither of these attitudes at all. One example of this idea would be political disinterest. PCA implies an arousal at the thought of political talk. Someone who does not care about politics might not experience such arousal but still be unwilling to communicate.

These ideas reflect a desire to unpack the different combinations that might exist between apprehension and willingness to communicate. By theorizing, I can imagine what these things might look like when they fit together and then group these presences together to produce a 2 row and 2 column table that can provide a more simplistic but also thorough understanding of the behavior (de Coster et.al, 2011; Swedberg, 2014). This practice is extremely useful for theorizing because it encourages one to think about what sorts of practices fit outside of the posited relationship, and why they may be less common. When done right, it can also provide a typology, an exhaustive list of mutually exclusive categories that describe the phenomenon of interest.

Table 8 visualizes these behaviors as they occur in higher or lower settings. This table represents a typology of political conversation orientations. The negative correlation between these concepts suggests that most people will end up in one of the two grey shaded cells in the table below, with most people being apprehensive and unwilling or unapprehensive and willing. However, as the example of apathy demonstrates, many people can and will end up in one of the other cells so each one merits unpacking.

Table 8:
Typology of Political Conversation Orientations

		Apprehension	
		(lower)	**(higher)**
Willingness	**(lower)**	Closed	Cagey
	(higher)	Confident	Courageous

First, apprehension implies at least some level of interest in the subject but also discomfort in the communication. Apprehension comes with arousal and arousal can only come from interest. The absence of apprehension reflects someone who does not worry about political conversations, meaning the presence of apathy. This absence can exist for multiple reasons. For this reason, someone who is low in both apprehension and willingness is best described as apathetic or closed. This attitude describes those who are uninterested in talking politics and are mostly disengaged from politics, a practice we know to be relatively common with the public (Krupnikov & Barry, 2022). Some people just do not care about politics, and apathy is a term that suits them well.

Second, someone who is high in apprehension and low in willingness is avoidant or cagey. This attitude describes those who might be interested in politics but do not want to engage. One example might be the person who does not want to ruin family dinner by bringing up politics. Accordingly, one major cause of this category is conflict avoidance (Carlson & Settle, 2022). Setting might be another explanation for this issue. Eliasoph (1996; 2013) offers a great example of this attitude in her observations: many people want to discuss politics but are afraid of doing so in open spaces.

Third, someone who is low in apprehension and high in willingness is assertive or confident. This attitude connotes an image of the active citizen in the public sphere (Eliasoph, 1996). One potential explanation for this is setting. The typical hope is that a more public setting would encourage more public conversation but the opposite is often true (Eliasoph, 2013).

Fourth, someone who is high in both apprehension and willingness is cautious and sees the communication as arduous. People with this attitude see these conversations as worth having, though they may be anxious about how they will go. Uncertainty about the situation is one potential explanation here. When we are unaware of the political preferences of another person, we may fear how they will react but still proceed with the conversation (e.g. Van Duyn, 2018; 2021).

One way to consider all four of these attitudes is how they might affect a person's behavior when interacting with others. Consider the example of talking with a family member who has said something politically offensive. The closed person will likely not care about the remark but is still unlikely to communicate. The cagey person will care but feel too anxious to communicate. The confident person will care and actively communicate but not worry about the choice. The cautious person will care and feel anxious but still communicate.

This typology offers several contributions to our understanding of political conversations. The first contribution is intrinsic to the typology itself. Knowing different orientations for communication produces new knowledge for understanding how we approach conversations. The second and more valuable contribution is instrumental. By applying this understanding, we can explore how these different orientations affect subsequent communication behaviors. An interaction effect between apprehension and willingness is plausible but should be measured in

future research to confirm this idea. Study 3 of this dissertation is one such study. Operationalizing this effect requires several considerations of measurement.

There are a few things to note about this typology. First, when reading Table 6, you may notice that I use the terms higher and lower, which are flexible instead of low and high, which are static. Most typologies use categories that are mutually exclusive, and this one is no exception. However, the boundaries of those categories are also fluid. Traditionally, this practice of creating distinct groups was performed using median splits to create groups that indicate a high or low presence of each phenomenon or scores on the measures of said phenomenon. While I'm all for a simpler understanding, I am not going to split these things in a traditional way. By cutting each practice into two halves, we have several problems.

The first and most serious problem is theoretical. I have posited this idea is continuous and should not be split into a yes/no dichotomy. I proposed this scale to include seven choices because I wanted to give space for people who are in-between. To split this behavior into a yes/no choice would go against that goal and defeat the purpose of this exercise. This reason matters most but it is also the most straightforward. The second problem is mathematical and proposes two major issues. First, this split reduces the values of correlations and shows us a diluted statistical answer (Peters and Van Voorhis, 1940). Doing so can still give us an answer, but that answer may not be as clear, like looking at one's reflection in murky water. The second issue is the increased risk of getting a wrong answer. When we split this way, the tests become simpler but need more participants to get an accurate reading of an acute relationship. Without that concision, the statistical tests can become inflated and increase our risks of getting a false positive result (Maxwell & Delaney, 1993). There are trade-offs to this choice, and it is one that needs to be made because it affects the tests I perform in Study 3. Ultimately, I rejected this

dichotomized choice to make use of higher and lower notions, which can offer the same heuristic value we enjoy out of a 2x2 dichotomy but without actually splitting it into a dichotomized choice like yes/no or high/low. The labels that stem from higher/lower capture similar linguistic meanings to high/low but avoid their fixed nature and bypass the theoretical conundrum. This means the boundaries of the typology are still exclusive, but those boundaries also flow to include or exclude certain cases based on the moment they are measured. They may also vary from study to study based on what scores we would expect to occur in a given situation.

Where those boundaries should be likely depends on the context of the communication being measured, our understanding of that context and how that context informs the theory. For example, consider two cases of intimidation, one where a conversation partner is very imposing and another where the partner is very approachable. What we might consider to be high apprehension is fixed on the scale if we use a median split, but understanding these two situations may tell us that certain scores are unusually high or low for the given circumstance. Accordingly, rather than use a median split, I opt for keeping higher/lower values and encourage other scholars to use their own judgments for when and how to split these behaviors into more fixed categories.

Lastly, it is worth noting that this typology is exhaustive, but it may still be incomplete. Good theorists acknowledge the possibility that they could be wrong (Charmaz, 2014). Accordingly, I admit that this typology covers as much ground as I could think of, but it may not cover anything, and I invite another to contribute to it if they see something missing.

All of the work on this scale provides the foundation for hypothesis testing and investigating the part PCA plays in our personal and political lives. The next chapter covers this investigation, its findings, and subsequent discussion.

Chapter 5: Study 3: PCA, Political Behavior, and Well-Being

Study 3 will use variables from the hypothesized model to test the scale's predictive validity. Now that we have a scale that we know to be somewhat reliable and valid, we can test to see if it is useful for predicting other behaviors. This chapter will cover this testing, along with some discussion of the results. Before we get into the testing, here is a recap and rationale for the nine hypotheses and six research questions being tested.

Political discussion literature suggests that people think about political conversations in identity dimensions such as gender, race, and age. We know that discussion practices tend to change based on our perceived identity similarity with other people (Carlson et al., 2020), but we do not know as well if apprehension varies across these identities themselves. This observation inspires a research question in four parts:

3-RQ1: Does PCA vary by identity?

Much of political discussion is sex segregated and carries implicit assumptions that women are less knowledgeable about politics than men (Lizotte & Sidman, 2009; Mondak & Anderson, 2004; Morehouse Mendez & Osborn, 2010). Gender stereotypes like these are internalized under social roles. While many women defy this belief are more knowledgeable than men, the stereotype itself can still encourage apprehension. While it is likely that women are more likely to feel the knowledgeability concern than men, other concerns are less clear here. This observation inspires the first portion of the research question.

3-RQ1a: Does PCA vary by gender?

Ethnorace strongly affects the way people think about politics since it is a foundational influence for much of political history (Coles & Lane, 2023; Carlson et al., 2020). While we

know that discussion practices vary across racial groups, it is less clear what we would expect about anxiety toward political discussions. This inspires an additional question.

3-RQ1b: Does PCA vary by ethnicity?

Age presents a strange paradox of expectations for apprehension. On one hand, it is true that people have been historically taught not to discuss politics (Stromer-Galley, 2002). On the other hand, many citizens become more civically conscious as they get older as reflected by substantially higher voting turnout with older generations compared to younger ones . This inspires an additional question.

3-RQ1c: Does PCA vary by age?

Political identity has become an important element of our lives (Mason, 2018) and the political left and right process politics very differently (Young, 2019; 2023) and engage in politics very differently (Freelon et al., 2020).

3-RQ1d: Does PCA vary by political party identification?

Apprehension is rooted in discomfort and a concern of insecurity. A feeling of safety should combat this discomfort. Apprehension is more commonly seen as a state of mind based on various factors such as who a person is communicating with. If that partner offers a sense of safety, then apprehension will likely be lower. Because apprehension and willingness to communicate correlate negatively, I suspect that a negative relationship for PCA would also reflect a positive relationship WTCAP. Accordingly, I posit the following hypothesis.

3-H1: Emotional trust (a) negatively predicts PCA and (b) positively predicts WTCAP.

Where emotional trust creates confidence in the conversation partner, efficacy represents a sense of confidence in the self.

3-H2: Political self-efficacy (a) negatively predicts PCA and (b) positively predicts WTCAP.

Given the polarized landscape of American politics, disagreement produces a great deal of concern. While disagreement does not have to mark a sense of group bonds, it certainly can with polarized issues such as abortion or election fraud. We also know that most folks prefer to talk politics with people who hold similar views as them. This prompts the next hypothesis.

3-H3: Political view similarity (a) negatively predicts PCA and (b) positively predicts WTCAP.

Apprehension gives us pause and fear is a common reason given for avoidance. Accordingly, a discomfort of communicating about politics would likely discourage participation in civic life. This leads us to the next hypothesis

3-H4: PCA negatively predicts civic engagement.

If PCA negatively predicts civic engagement, then its negative correlate might positively predict such practices. Its opposite may also have an effect. While WTCAP is typically measured by gauging attitudes towards one person, that willingness might reflect a general interest in politics that marks a gap between those who are involved and those who are not (Krupnikov and Ryan, 2022). This prompts our next hypothesis.

3-H5: WTCAP positively predicts civic engagement.

Discomfort towards political conversations reflects a political interest combined with uncertainty about how to proceed. This is part of what makes political conversations stressful and it prompts the next hypothesis.

3-H6: (a) PCA positively predicts stress.

Because of the negative correlation between PCA and WTCAP, there is possible relationship between willingness and stress as well, but this relationship is harder to predict. On one hand, a higher willingness might reflect less concern and therefore less stress. On the other hand, a greater willingness may also reflect a greater willingness to embrace that stress. This means willingness to communicate might be inspired by ones sense of civic duty and actually increase stress. This prompts the following research question.

3-RQ2: What relationship exists between WTCAP and stress?

Previous research found a connection between communication apprehension and self-esteem (McCroskey et al., 1977). Given the emotional nature of politics and past work that connects political similarity to self-esteem (Morrissey & Woodall, 2022), it is sensible for PCA to affect self-esteem as well. This rationale prompts the following hypothesis.

3-H7: PCA negatively predicts self-esteem.

McCroskey and colleagues (1977) also note a negative relationship between willingness to communicate and self-esteem, though this relationship does not translate as well to the specificity of political talk. This observation prompts the following research question:

3-RQ3: What relationship exists between WTCAP and self-esteem?

Thus far, we have only posited singular relationships that are uninfluenced by each other. At the end of the previous chapter, I proposed a greater meaning behind the correlation between PCA and WTCAP. This potential interaction can have subsequent effects on a variety of outcomes, and inspire the following hypotheses.

3-H8: PCA interacts with WTCAP such that, when paired with high WTCAP, PCA has a reduced negative relationship with esteem. But when WTCAP is low, PCA has a higher negative relationship with esteem.

3-H9: PCA interacts with WTCAP such that, when paired with high WTCAP, PCA has a smaller negative relationship on political participation. But when WTCAP is low, PCA has a higher negative relationship political participation

3-H10: PCA interacts with WTCAP such that, when paired with high WTCAP, PCA has a positive relationship stress. But when WTCAP is low, PCA has a negative relationship with stress.

Sample

Participants (N = 400) were recruited from Prolific through a politically representative survey based on US Census data. The median completion time was 11 minutes and 6 seconds. Each participant was paid $3.50 for their time, leading to an average hourly wage of $18.92. This sample was diverse based on gender with 196 participants identifying as men, 195 identifying as women, 8 participants identifying as non-binary or third gender, and one participant preferring not to say. Political ideology was also diverse with 134 participants identifying as Democrats, 153 identifying as Independent, and 114 identifying as Republican. Age range was fairly spread out (M = 45.57, SD = 16.23). Race was not diverse, with the sample being predominantly White (n = 317). The results of this sample are shown in Table 7.

Procedure

Like with Study 2, Institutional Review Board approval was granted for the revisions to launch Study Three collecting data for this study. Once IRB approval was given, the study was posted to Prolific, participants were recruited to participate in a survey administered through Qualtrics. The survey procedure began with informed consent. Once consent was given, participants answered a series of questions from measures for each of the variables described above. Each measure had statements presented in a random order along with several attention

verification questions. After completing the questions, participants were redirected to Prolific with a completion code.

Table 9:
Summary of Study Three Participant Demographics

	N	%
Gender		
Man	196	49.0
Woman	195	48.8
Non-Binary / Third Gender	8	2.0
Prefer not to answer	1	0.3
Race		
White	226	75.1
Black or African American	45	15.0
Asian	37	12.3
American Indian or Alaska Native	1	0.3
Native Hawaiian or Pacific Islander	2	.7
Other	10	3.3
Age		
18-24	40	10.0
25-34	88	22.0
35-44	67	16.8
45-64	150	37.5
65 or older	55	13.8
Political Party Membership		

Democratic	133	33.3
Independent	153	38.3
Republican	114	28.5

Measures

To test my hypotheses, I pulled a series of measures based on the concepts I proposed testing in my hypothesized relationships. In this section, I give several pieces of information for each measure used: the original citation for the measure, number of items, mean and standard deviation, anchor phrases, reason for inclusion, example item, and reliability coefficient from Study 3 analysis (all reliability coefficients for this study are Cronbach's α). The full list of these measures and their items can be found in Appendix One.

Measures used in Study 2

The two core variables of PCA and WTCAP were measured in accordance with the results of Study 2. Apprehension was measured using the final scale from the previous chapter. Reliability was re-assessed for both the overall scale ($\alpha_{Overall}$ = .93 and each factor ($\alpha_{Isolation}$ = .93, $\alpha_{Sensitivity}$ = .88, α_{Face} = .94). WTCAP was measured using the same measure from the previous chapter as designed by Kleinman and Kleinman (2014). Reliability was good (α = .92).

Political Self-Efficacy

Political efficacy (M = 4.68; SD = 1.26) was measured using Craig, Niemi, and Silver's (1990) 7-item approach on a 7-point scale ranging from 1 (*strongly disagree*) to 4 (*neither agree or disagree*) to 7 (*strongly agree*). This measure captures various aspects of people's self confidence in performing political roles and was reliable (α = .88). One example item from this measure reads as "I consider myself well-qualified to participate in politics".

Interpersonal Emotional Trust

Trust was measured using the 6-item subscale of emotional trust (M = 5.29; SD = 1.14; α = .85) from Johnson-George and Swap (1982) on 7-point scale ranging from 1 (*strongly disagree*) to 4 (*neither agree or disagree*) to 7 (*strongly agree*). This measure relies on the respondent answering questions about a particular person. For this study, I asked respondents to consider the same person for their answers regarding WTCAP and emotional trust. This measure was chosen due to it being continually used in modern research despite its age. Other measures of trust could not properly capture either the emotional or interpersonal elements that I was looking for. One example item from this measure is "I would be able to confide in _____ and know they would want to listen".

Political View Similarity

Political view similarity was measured using an adapted four-item measure (M = 4.65; SD = 1.50; α = .92) designed by Johnson et al. (2019). This measure was chosen both for concision and because it was designed for research in political discussion contexts. The four items are offered on a 7-point scale ranging from 1 (*strongly disagree*) to 4 (*neither agree or disagree*) to 7 (*strongly agree*). These items were adapted to match the subject of the WTCAP measure and updated to reflect the 2024 presidential election. Accordingly, one example of these items is "[person's name] will vote for the same candidate as me in the 2024 presidential election".

Stress

Stress was measured using a 14-item perceived stress scale from Cohen and colleagues (1983). This measure captures frequency of feelings commonly associated with stress and coping skills. Participants were asked how often in the past month they had felt what each of the

statements described. The items were offered on a five-point scale of frequency ranging from 1 (*never*) to 3 (*sometimes*) to 5 (*very often*) and the overall measure was reliable (M = 2.61; SD = .75; α = .92). This measure was chosen because it captures self-perception, which is both in line with the other affective sides of this study and better suits my needs. An example item from this measure is "In the last month, how often have you felt that you were unable to control the important things in your life?"

Self-Esteem

Self-esteem was measured using the ten-item Rosenberg Self-Esteem scale (Rosenberg, 1965). This measure (M = 3.06; SD = .65; α = . 93) asked people to agree or disagree with a series of statements about themselves such as "I take a positive attitude toward myself" and "I feel I do not have much to be proud of." On a four point scale ranging from 1 (*strongly disagree)* to 4 (*strongly agree)*. This measure was chosen as one of the more popular measures of self-esteem and one of its items reads as I feel that I am a person of worth, at least on an equal plane with others.

Civic Engagement

As I mentioned in Chapter 2, the third dependent variable of civic engagement requires some explanation. Measuring political participation is a subject of great debate (for more see Saraimbay, 2020) and so any choice requires some explanation. In this case, I am concerned with a variety of actions, but some of them may not matter. One example non-sequitur to this argument is voting. While it is undeniably important in our political process, there is substantial evidence in the public sphere that people will vote regardless of their willingness to openly communicate about politics. Though discussion can predict one's intentions to vote (Klofstad, 2010), it is not likely that discomfort with political conversations would predict voting.

Apprehension implies concern with the present conversational partners, not just concern with the political system. With voting ruled out, I opted to look at other public forms of expression.

Ultimately, political participation was measured through nineteen items adapted from the Pew Research Center's survey on civic engagement (For the complete Pew report, see Smith, 2013). This measure was chosen both because of the Pew's background in research excellence as well as their intentional collaboration with three prolific scholars on the subject (Verba, Schlozman, and Brady, 1995). Where the Pew asked these items as past actions, my hypothesis is on future actions, not past ones. Therefore, I used the subjects from Pew's items and converted them to ask about respondents' perceived likelihood to perform each action if they were given the chance. These asked items were asked on a 5-point scale from 1 (*extremely unlikely*) to 3 (*neither likely or unlikely*) to 5 (*extremely likely*). Items were condensed into three factors based on their corresponding groups in the Pew's reports: civic engagement in groups (M = 2.33; SD = 1.02; α = . 89) by asking about attending events such as rallies or political meetings, civic engagement towards government (M = 2.51; SD = .97; α = .87) by asking about things such as contacting government officials or signing petitions, and civic engagement online (M = 2.81; SD = 1.17; α = .87) by asking about things social media behaviors such as posting political content online or encouraging other people to vote. Overall reliability of this measure was also good (α = .94).

Data Analysis and Results

Data were checked prior to hypothesis testing. All items related to variables of interest were checked for missing cases. Missing data was found for some items but constituted a very small portion of the sample (maximum n = 2). A visual assessment of these cases determined that they were missing at random. Normality was mostly good, with three items containing a

skewness value over 1 or under -1. Multiple variables showed signs of platykurtic distributions with values less than -1, which indicates a smaller than expected number of outlier cases. After examining this trend, the decision was made to continue with the analysis on the grounds that such trends should not drastically alter the results (Osborne, 2009) on the basis that normal data is not a normal occurrence in social science work (Micceri, 1989). Given this issue would produce less outliers than normal, I chose to skip an assessment of outliers. This choice is based on a historic gap between those who are uninvolved with politics and those who are greatly involved (Krupnikov & Ryan, 2022; Verba et al., 1995). Participation tends to be a polarized behavior, meaning most citizens are either very involved or not involved at all. Any outlier cases would likely reflect stronger civic engagement than expected.

To assess variables, I compiled items for each variable by adding their scores together and then dividing the sum of scores by the number of items in the measure to produce an average value for each variable.

To check previous assumptions, Pearson's *r* was calculated for the correlation between PCA and WTCAP. The results repeated previous results with a significant, negative, moderate correlation ($r = -.24$, $p < .01$) between the two variables.

To test hypotheses, each dependent variable had its relevant predictors regressed in a hierarchical linear regression. The first block of predictors included demographics of age, gender, party ideology, and a dummy coded variable of race (0 = non-White, 1 = White). The results of these regression models are summarized in a corresponding table for accessibility purposes.

Research Question 1 asked if PCA would vary by identity and was explored on the identity demographics of age, ethnicity, gender, and political ideology. Regression results

showed that age negatively predicted PCA (β = -.25, p < .01). In investigating this relationship in the subfactors of PCA, results showed that age predicted all three factors negatively as well ($\beta_{Isolation}$ = -.13, p < .01; $\beta_{Sensitivity}$ = -.12, p < .05; β_{Face} = -.37, p < .01). On ethnicity, regression results showed that identifying as White positively predicted PCA (β = .15, p < .01). In investigating this relationship in the subfactors of PCA, results showed identifying as White positively predicted two factors ($\beta_{Isolation}$ = .13 p < .01; $\beta_{Sensitivity}$ = .14, p < .05; β_{Face} = .08). On gender, regression results showed that identifying as a woman positively predicted PCA (β = .10, p < .05). This result was significant in the first model but not significant in the second model, suggesting the possibility of an acute relationship between gender and PCA Support for this possibility can be found in the relationship between gender and the subscales, where identifying as a woman significantly predicted the face concern (β = .20, p < .01). but did not significantly predict the isolation component (β = -.02) or sensitivity component(β = .07). On political ideology, regression results showed no significant difference in PCA between liberal and conservatives ($\beta_{Overall}$ = -.04; $\beta_{Isolation}$ = -.00; $\beta_{Sensitivity}$ = -.06; β_{Face} = -.05). In investigating this relationship in the subfactors of PCA, results showed that age predicted all three factors negatively as well ($\beta_{Isolation}$ = -.20; $\beta_{Sensitivity}$ = -.14; β_{Face} = -.10). Based on these results, the answer to Research Question is a “yes” to age, a no to ideology, and a maybe for ethnicity and gender. The reasoning for these conclusions is explained in the Discussion section below.

Hypothesis 1 proposed that emotional trust would (a) negatively predict PCA and (b) positively predict WTCAP. Regression results showed that emotional trust negatively predicted PCA (β = -.18, p < .01) and but did not predict WTCAP (β = -.18). In investigating this relationship in the subfactors of PCA, results showed that emotional trust predicted all three

factors negatively as well ($\beta_{Isolation}$ = -.20, $p < .01$; $\beta_{Sensitivity}$ = -.14, $p < .05$; β_{Face} = -.10, $p < .01$). Based on these results, Hypothesis Four was partially supported.

Table 10:
Hierarchical Regression results for PCA (overall) and WTCAP

	PCA (Overall)		WTCAP	
	1	2	1	2
Age	-.25**	-.11*	.17**	.05
Gender (Woman)	.10*	.02	.00	.05
Ideology	-.04	-.05	-.05	.00
Ethnicity (White)	.15**	.14**	-.02	-.01
Trust		-.18**		.08
Efficacy		-.39**		.25**
View Similarity		-.10*		.35**
R^2	.08	.30	.02	.25
F (df)	8.55 (4)**	23.20 (7)**	3.17 (4)*	19.84 (7)**

Note: *$p < .05$; **$p < .01$.
Values in each cell refer to standardized beta coefficients.

Hypothesis 2 predicted that political self-efficacy would (a) negatively predict PCA and (b) positively predict WTCAP. Regression results showed that efficacy negatively predicted PCA (β=- -.39, $p < .01$) and positively predicted WTCAP (β=-.25, $p < .01$). In investigating this relationship in the subfactors of PCA, results showed that emotional trust predicted all three factors negatively as well (β_{Spiral} = -.13, $p < .05$; $\beta_{Evaporation}$ = -.16, $p < .01$; β_{Face} = -.65, $p < .01$). Based on these results, Hypothesis Five was supported.

Table 11:
Hierarchical Regression results for PCA subfactors

	Isolation	Sensitivity	Face

	1	2	1	2	1	2
Age	-.13 **	-..06	-.12*	-.04	-.37**	-.17**
Gender (Woman)	-.02	-.04	.07	.04	.20**	.06
Ideology	-.00	-.02	-.06	-.08	-.05	-.01
Race (White)	.13**	.14**	.14**	.14**	.08	.07*
Trust		-.20**		-.14*		-.10 **
Efficacy		-.13*		-.16**		-.65**
View Similarity		-.09		-.11		-.04
R^2	.02	.12	.03	.11	.17	.58
F (df)	2.79 (4)*	7.36 (7)**	3.32 (4)*	6.84 (7)**	20.24 (4)**	76.78 (7)**

Note: *p < .05; **p < .01.
Values in each cell refer to standardized Beta coefficients.

Hypothesis 3 predicted that political view similarity (a) negatively predicted PCA and (b) positively predicted WTCAP. Regression results showed that view similarity negatively predicted PCA (β =- -.39, *p* <.01) and positively predicted WTCAP (β =-.25, *p* < .01). In investigating this relationship in the subfactors of PCA, results curiously showed that emotional trust did not predict all three factor (β^{Spiral} = -.13, *p* <.05; $\beta^{Evaporation}$ = -.16, *p* < .01; β^{Face} = -.65, *p* < .01). Based on these results, Hypothesis Six was partially supported.

Hypothesis 4 predicted that PCA negatively predicts civic engagement. Surprisingly, regression results showed that PCA overall positively predicts civic engagement towards government and media (β =- .13, *p* <.01). but did not predict civic engagement in groups (β =- .09)., or engagement online (β =- .05). In investigating this relationship in the subfactors of PCA, results showed that the isolation factor positively predicted civic engagement online (β =- .14, *p*

<.05) but all other relationships were nonsignificant. These results are summarized in Table 12 below. Based on these results, Hypothesis Seven was not supported.

Hypothesis 5 predicted that WTCAP positively predicted civic engagement. Regression results showed that WTCAP overall did positively predict civic engagement in groups (β =- .31, p < .01), towards government and media (β =- .38, p <.01) and engagement online (β =- .39, p <.01). These results are summarized in Table 12 below. Based on these results, Hypothesis Eight was supported.

Table 12:
Hierarchical Regression results for political communication and civic engagement

	Group		Government/ Media		Online	
	1	2	1	2	1	2
Age	.15**	.10*	.14**	.10*	.08	.00
Gender (Woman)	.07	.06	.07	.06	.04	.05
Ideology (Conservative)	-.11*	-.09*	-.08	-.06	-.13**	-.12**
Race (White)	-.11*	-.12*	-.07	-.08	-.08	-.08
WTCAP		.31**		.38**		.39**
PCA		.09		.13**		.05
Isolation		.04		.09		.14*
Sensitivity		.09		.05		-.03
Face		-.04		-.00		-.08
R^2	..05	.15	.03	.18	.03	.20
F (df)	5.09 (4)**	8.40 (8)**	3.65 (4)**	10.57 (8)**	3.33 (4)*	12.09 (8)**

Note: *p < .05 **p< .01.
Values in each cell refer to standardized Beta coefficients.

Hypothesis 6 predicted that PCA positively predicts stress. Regression results showed that PCA overall did positively predict stress (β = .37,p < .01). In investigating this relationship

in the subfactors of PCA, results showed that stress was predicted by isolation (β =- .17, $p < .01$) and face (β = .23, $p < .01$) but not sensitivity (β = .06). These results are summarized in Table 13 below. Based on these results, Hypothesis Nine was partially supported.

Research Question 2 asked whether WTCAP predicted stress. Regression results showed that WTCAP overall did positively predict stress (β = .16, $p < .01$). These results are summarized in Table 13 below. Based on these results, the answer to RQ2 is a tentative positive relationship between WTCAP and stress. This relationship is unpacked more in the Discussion section below.

Hypothesis 7 predicted that PCA negatively predicts self-esteem. Regression results showed that PCA overall negatively predicts self-esteem (β = -.34, $p < .01$). In investigating this relationship in the subfactors of PCA, results showed that self-esteem was predicted by isolation (β = -.16, $p < .05$) and face (β = -.37, $p < .01$) but not sensitivity (β = .06). These results are summarized in Table 13 below. Based on these results, Hypothesis Nine was partially supported.

Research Question 3 asked whether WTCAP predicted self-esteem. Regression results showed that WTCAP overall did not predict self-esteem (β = .02). These results are summarized in Table X below. Based on these results, the answer to RQ3 is a tentative non-relationship between WTCAP and self esteem.

Table 13:
Hierarchical Regression results for political communication and well-being

	Stress		Self-Esteem	
	1	2	1	2
Age	-.31**	-.22**	.35**	.20**
Gender (Woman)	.11*	.06	.01	.07
Ideology	.00	.02	.06	.03
Race (White)	.05	.00	-.11*	-.07
WTCAP		.16**		.02

PCA	[redacted]	.37 **	[redacted]	-.34**
Isolation		.17**		-.16*
Sensitivity		.06		.05
Face		.23**		-.37**
R^2	.10	.24	.12	.28
F (df)	11.45 (4)**	15.30 (8)**	13.12 (4)**	18.74 (8)**

Note: *p < .05 **p< .01.
Values for each variable are standardized Beta coefficients.

Hypothesis 8 predicted that PCA interacts with WTCAP such that, when paired with high WTCAP, PCA has a reduced negative effect on esteem. But when WTCAP is low, PCA has a higher negative effect on esteem. Regression results showed that the interaction between PCA and WTCAP did not predict self-esteem (β =- .13). Based on these results, Hypothesis Eleven was not supported.

Hypothesis 9 predicted that PCA interacts with WTCAP such that, when paired with high WTCAP, PCA has a reduced negative effect on political participation. But when WTCAP is low, PCA has a higher negative effect on political participation. Regression results showed that this interaction overall did not predict civic engagement towards government (β =- .02), in groups (β = .13), or online (β = .00). Based on these results, Hypothesis Twelve was not supported.

Hypothesis 10 predicted that PCA interacts with WTCAP such that, when paired with high WTCAP, PCA has a positive effect on stress. But when WTCAP is low, PCA has a negative effect on stress. Regression results showed that Interaction overall did not predict civic engagement towards government (β= .02). Based on these results, Hypothesis Thirteen was not supported.

Discussion

There are a few things to unpack from this study. The first thing is to finish the discussion on the measurement on PCA itself. Much of this discussion was mentioned in previous chapters, so I will limit discussion on this subject here. At this point, the measure of PCA has achieved predictive validity as well, offering a reliable and valid measure for future research in political communication. This work continues to be important for our understanding of political communication and offers a useful tool for investigating such calls in our work (for an example call, see Van Duyn, 2023).

The results of the hypotheses offer some surprises and some results as expected. Those results merit discussion themselves. The rest of this chapter is dedicated to unpacking those results and their limitations.

Demographic influences- The cases of age, race, and gender

Age and race had the highest coefficient of any demographic. As a parts of the first research question, they require some unpacking.

First, apprehension decreases as people get older, which challenges the conventional notion that previous generations were socialized not to talk about politics. That practice may be true, but it is also true that previous generations were raised in a different form of social context (Putnam, 1995) and were raised on the importance of community. It is also a common cultural case for people to become more politically concerned as they get older, which is why voting turnout and civic volunteering is much higher for older citizens compared to young citizens (Blais, 2000; Schneider & Marshall, 2023). This would explain an increased willingness to communicate but not the decreased apprehension. Such a decrease requires investigating each

factor. A decrease in spiral of silence apprehension might be the result of more crystallized social circles in older citizens or it might reflect a generation that is more tolerant of disagreement. My data cannot provide a distinction in this case. This might also be the case for the sensitivity factor, which is also lower. The face concern is lower as well, which might reflect a stronger sense of self-confidence. Most people become more confident in themselves as they get older and tend to become stable in their sense of self (Botwinick, 1970). This stability would likely reduce the discomfort.

Next, identifying as White predicted apprehension in the overall sense and in each of the subfactors. This is somewhat surprising and there are competing explanations for why. The first and more likely reason is statistical noise. As Carlson and colleagues (2019; 2020) note, ethnorace is a pivotal part of processing political conversations and African-Americans, Hispanics, and Asian-Americans each have their own political discussion preferences that largely differ from Whites. These preferences are affected by larger political practices such as the racial knowledge gap (Abrajano, 2015) and passively racist behaviors (e.g. Dupree & Fiske, 2019). By aggregating them together, we miss what makes each group unique and assume they are all identical. When we do not aggregate them, the data becomes too strongly skewed to be of any use for racial comparisons. The second potential explanation is cultural. If we set the error aside, there may still be something worth learning here. Whites tend to report more interest in politics than people of color (Carlson et al., 2020), though my data offer support for the idea that people of color are more civically engaged as well. This matters because apprehension presupposes an interest in politics. While there are cultural postulations about things like White people not wanting to be called racist (Sobieraj et al., 2013), such ideas were not primed in these studies. It is possible these ideas came to mind but we cannot be certain. This finding implies there may be

a larger racial difference in the discomfort towards talking politics. There are competing explanations for why, and each reason varies. One might be quick to say that White citizens are more concerned about politics but remember that Whiteness also negatively predicted civic engagement but race did not predict willingness. This means that people of color are more likely to take part in the political process but are equally willing to discuss politics. Combining this argument with these findings would lead to a paradoxical conclusion: that White people are less politically active but more afraid of conversation, yet they're more politically interested. In lieu of this problem, I suspect the answer lies in a sense of self. When we revisit our typology, it is possible that people of color may be disproportionately placed into the closed or confident category while White folks may be more commonly placed into the cagey or cautious categories. This means people of color are more likely to not worry about the outcome of these interactions, not that they are less engaged. This also makes sense considering much political discussion is sorted by race, with many people preferring to talk about politics with similar partners (Leighley & Matsubayashi, 2009).

Next, gender has a smaller effect on apprehension, particularly with the face concern. There might be several reasons for this. On one hand, it may be that women are more apprehensive than men. Carlson and colleagues (2020) note that women are historically stereotyped as less politically knowledgeable. It is possible that this stereotype is internalized and causes some women to doubt their own knowledge. On the other hand, many men are also socialized to be self-expressive. It is important to note this does not show an actual gap of knowledge between men and women. The data cannot show that since actual knowledge was not measured. The data does show that women were significantly more likely to be concerned with looking unintelligent in a political conversation. My own suspicion is this finding reflects gender

socialization and self-confidence. A quick check showed that identifying as woman negatively predicted political self-efficacy ($\beta = -.20$, $p < .01$). Society pervasively teaches women to question themselves in a way that is fundamentally different from men (for examples, see Wolak, 2020). Accordingly, men tend to feel more capable in politics, though there is not data to suggest a significant difference between actual effectiveness or engagement. This self-titled Audacity Hypothesis merits further testing.

Lastly, it is always possible that these three identities intersect together to change the effects as well. Intersectionality (Crenshaw, 2013) is a useful idea for future consideration in this process since identities compound political problems (for more, see, Bedolla, 2007). In some cases, two identities that raise apprehension might compound the feeling and make it worse. For example, if identifying as White and as a woman each increase apprehension, then a comparison should be made between White men, White women, non-White men, and non-White women. In other cases, these identities may mitigate each other's influence. For example, if apprehension increases by gender but decreases by age, then a comparison should see how these two changes might fit together.

Safety and Self Confidence

Trust and a sense of efficacy both negatively predict apprehension. This finding reflects the intersection of the political and relational. Emotionally trusting one's conversational partner reduces apprehension because it reduces the risk associated with self-expression. What is interesting about this is that efficacy predicts less apprehension and increases willingness, but people seem willing to communicate regardless of trust. Other factors are likely at work in these situations. View similarity offers one potential explanation given its small reduction in apprehension and moderate increase in willingness to communicate. There might be an

interaction effect between trust and view similarity underlying this relationship, though such an effect was not part of my hypotheses and therefore outside the scope of this dissertation. Group bonds facilitate trust and tend to help us feel more confident in our sense of self. Theories of intergroup behavior like self-categorization theory (Tajfel & Turner, 1979) may offer some explanation for this circumstance, but such possibilities are another book entirely. These three factors offer insight into the intrapersonal, interpersonal, and intergroup elements of politics. All three elements offer their own insights with arguments being previously made for each (for more, see Bandura, 2004 for intrapersonal, Carlson & Settle 2022b for interpersonal, and Mason, 2018 for intergroup). While we typically separate each of these threads for theorizing and sensemaking, all three are deeply intertwined.

Politics are Personal

PCA had very little predictive power over civic engagement but did predict wellness. There is an important connection between these relationships. The civic engagement result is somewhat surprising considering the spiral of silence factor positively predicted civic engagement towards government, but all other relationships of engagement were null. First, spiral of silence theory typically deals with social isolation, while communication towards government may have prompt less social considerations. This might be based on the belief that civic engagement towards government is more disseminative than dialogic (for more see Peters, 1999; Singhal, 2005). When communication is seen as one-way, relational pressure is less than it would be if the communication is seen as two-way. Because PCA is based on relational concerns, the two way pressure is likely more active. There is some sense to this issue considering that folks may feel more apprehension based on who they are talking to (Morey et al., 2012). Such an idea was posited in the typology of conversation orientations from the

previous chapter. While these results do not offer support for an interaction, the typology still offers some useful explanation here. Some people will not speak because of their apprehension, but some speak in spite of it. The relationships between stress, willingness and apprehension border on paradoxical if we say stress is something to avoid. Politics are stressful, willingness and apprehension both positively predict stress, but willingness and apprehension are negatively correlated. How can two seemingly opposite concepts have the same effect? Culture provides the most plausible explanation. This leads us to the next major talking point.

Speaking Despite the Stressors

To explain this paradox, we need to revisit willingness. WTCAP held one of the largest effects of civic engagement. This finding makes sense given that those who are deeply involved with politics tend to be more engaged and will perform a variety of political roles, while the disengaged tend to avoid most political forums because they do not care to get involved (Krupnikov & Ryan, 2022; Prior, 2005; Verba et al., 1995). This finding was expected, but what makes it interesting is how WTCAP also positively predicted stress. It is possible this is just noise, but there is another explanation for it as well. Krupnikov and Ryan (2022) refer to political socialization and participation as "the most sacred duty" (there is an entire chapter in their book devoted to this subject). This vivid language may be their own choice of words, but it reflects a larger social perspective that political participation is a good thing and an imperative for people to perform. Not everyone participates in politics, but even the disengaged generally see it as a good thing to be politically informed. This sense of duty reflects a larger willingness to communicate despite the acknowledgement that politics are stressful. The deeply involved take part in politics because they know it is important and believe it is worth the stress and pressure it creates. This explains another finding of importance.

Apprehension and Esteem

McCroskey and colleagues previously noted that communication apprehension influences self-esteem. This finding was expected, but it is arguably one of the most important findings of this volume because of its specification towards political context. Given what we have discussed thus far, apprehension would make sense to affect one's sense of self esteem. Political socialization produces opportunities for connection and allow us to build connection with others (Wyant, Hurst, and Reedy, 2020). Feeling discomfort in these moments can foster insecurity and make us feel unwelcome. Of all the factors of PCA, the face concern had the most direct effect on self-esteem because it most strongly reflects an insecurity of the self. Spiral of silence theory posits that people feel like they have the wrong social opinions, but not that people feel like they are wrong themselves. Knowledgeability face concern reflects a sense of self-doubt and that might have a stronger effect on our sense of self than the concern that others do not agree with us.

Thus far, I have discussed a variety of concerns surrounding the scientific study of PCA but there are implications for this work beyond its measurement and hypothesis testing. This type of research carries a wide variety of social implications and merit discussion as well. The next chapter covers these implications.

Chapter 6: Discussion in The Big Picture

"The warnings should really come before the spells".

-Dr. Stephen Strange, (2016)

On February 16th, 2024, a suspicious package was reported on the University of Oklahoma campus (Dodd, 2024). The university alert system told everyone to stay clear while authorities investigated. News coverage of the situation showed a sign that read like follows

"IGNORE THIS LIKE YOU DO

GENOCIDE

28,000 AND COUNTING.

SILENCE IS COMPLICIT."

Alongside the sign was a pile of debris that prompted the report. Thankfully, it turned out to be performance art and no one was hurt, but it raised fears and sparked public discussion about the nature of silence. This message, presumably based on ongoing Israeli military actions in the Gaza Strip reflects a larger philosophy in political consciousness about the role of silence. Some see silence as a survival skill, others see it as danger that perpetuates larger violence. There is a matter of choice in these moments, and time matters.

The Greek language emphasizes two different words to reference time. The first word is chronos, referring to quantitative elements of time like seconds or minutes. The amount of time spent reading this work, or the number of years spent preparing for it would be notions of this conception of time. The second word is kairos, referring to the qualitative elements of appropriateness such as the criticality of a moment. We think of kairos a great deal in strategic

thinking such as in chess, determining the right time to act. Part of the reason I chose this topic for my dissertation is because it is critical to this moment in our political culture. Apprehension can be examined in the context of chronos (e.g., how it is has changed over time) or in kairos (e.g., the right moment to address it). A moment of popularized challenge to traditional notions of power and hegemonic norms of identity mean people now have a much greater chance to use their voice than they did previously, which coincides with the rise of social media (Klinger et al., 2023). The incident on OU's campus borders on terrorism and should be discouraged, but it is also important to ponder. The opportunity presents a chance for serious social change, but that change will be shaped by our communication practices and our political beliefs.

Apprehension is a major piece of processing this puzzle, and measuring is only the first step in the process. An exploration of this matter requires a more critical awareness of the contexts in which apprehension exists, exploring the realities of our political spaces, and understanding the consequences of our political actions. Terrorism is intended to induce fear. The mysterious package on OU's campus may promote more discussion on Israel's war in Gaza or it may suppress it. Only time will tell, but past literature offers us clues.

Paulo Freire (1970) and by extension, translator Maya Bergman Ramos (2018) argue that liberation of oppressed populations is different from flipping the power dynamic between oppressor and oppressed. Instead, such a situation only reinforces a system of dehumanization because the oppressor exists within the oppressed as well. In other words, modern practices like cancel culture do not lead to liberation in Freire's opinion. They simply flip the script of power and continue oppression in a different way.

> If the goal of the oppressed is to become fully human, they will not achieve their goal by merely reversing the terms of the contradiction, by simply changing poles…the restraints

> imposed by the former oppressed on their oppressors, so that the latter cannot reassume their former position, do not constitute oppression. An act is oppressive only when it prevents people from being more fully human. (Freire, 2018, pp. 56-57)

Freire's argument served as a warning then and that warning is equally relevant now: political communication apprehension can serve as a tool for dehumanization of both the oppressor and the oppressed. Violence (both physical and mental) is not the answer to political problems, it only creates new ones. There is easy joy to be found in making White supremacists apprehensive about expressing their opinions in public, but this result does not contribute to a liberation of race or a dissolution of White supremacy, it only drives White supremacists to express their opinions in more safe spaces (e.g., Woods & Hahner, 2019) and act in more covert ways rather than overt (see the opposite scenario but transferable example of Van Duyn, 2019). In these cases, balance is essential. For better social change, it might be best to have White supremacists apprehensive enough to be wary of confidently expressing blatant discrimination, but still willing to communicate because communication is the key to changing their minds. We know that exposure to studies and evidence does not always change minds (Lord et al., 1979; Lodge & Taber, 2013) but the personal exchange of stories can (Papacharissi, 2016; Polletta & Redman, 2020; van Zoonen, 2012). To demonstrate this point, I offer two examples: Ann Atwater and the Parents Circle Families Forum.

First, consider the influential case of Ann Atwater, a Black activist who lived in Durham, North Carolina. Atwater is highly regarded for producing great social change in the Durham community but also for changing the personal opinions of C.P. Ellis, one of the leading members of the Durham chapter of the Ku Klux Klan. Atwater and Ellis were tasked with working together on the racial integration of Durham public schools. They managed to progress over

time, even though neither of them wanted to work together. Through talking together, these two individuals came to know each other's fears, concerns, and worries and in doing so, they develop an important empathic bond that transcends the racial divisions stoked by White supremacy. Ellis left the Ku Klux Klan after working with Atwater and their friendship lasted through the rest of their lives (Davidson, 2018). These common bonds contribute to social capital (Putnam, 1995) and help us think outside of group identities that otherwise guide our political behaviors with "the other side" (Levendusky & Stecula, 2021). This type of bond is important in producing radical social change because it creates the foundations for shared empathy that makes people care about social struggles besides their own. This type of connection is essential to reducing political polarization (Levendusky, 2023) and the dangerous types of behaviors that come from being polarized (For examples, see Iyengar et al., 2019; Kalmoe & Mason, 2022;2024).

Atwater is a unique case in a larger American system that still has concerns with racism today (Coles & Lane, 2023). Her initial disinterest in working with Ellis and ultimate action provides an important exemplar of the courageous conversation orientation. These actions are inspiring and offer a great example for how we can act, but I am not advocating that we all become Ann Atwater. I am advocating that her example provides one reason to consider the importance of communication and the potential benefits to speaking and listening. We can consider a second example as well.

For decades, the nation of Israel has maintained a practice of conflict with Palestinian militant organizations in the Gaza Strip. This conflict drastically affects the local Palestinian population and continues a cycle of violence, genocide, and necropolitic (Mbembe, 2008). Necropolitics are a political practice of governments to restrict speech and movement. Mbembe (2008) argues these practices are often racially driven. A core assumption of necropolitics is that

movement is essential to survival and communication is essential to movement. To suppress speech and movement is to condemn a person to a living death, where they wait to die in what Mbembe calls deathworlds, spaces of stasis where one is unable to decide their own fate.

Mbembe (2019) observes Gaza in particular as an example of this practice, where Palestinians are forced to live and many are unable to leave, keeping them in a state of stasis where they cannot advance their lives, they can only wait to die or fight for a way out. Mbembe argues that places with strict government control are ripe for deathworlds, places such as refugee camps, detention centers, and strongly monitored borders, all of which exist in Gaza. While some on both sides oppose the fighting, many support it because of past incidents, most recently including the 2023 Hamas-led attack that killed over one thousand Israelis as well as the Israeli response that has destroyed much of the Gaza Strip and displaced almost all of its 2.3 million refugees (Al Jazeera Labs, Last updated February 16th, 2024). Such practices lead to an increasing disdain between the two groups and are the hallmark of affective polarization (for a review, see Iyengar et al., 2019). If public opinion supports conflict, it is likely to continue, and public support is likely to remain high unless citizens express their concerns.

Accordingly, a popular assumption in public opinion is that silence is acceptance. Not everyone thinks this way, but many do and there are fair rationales for thinking so. Responsive theories of public opinion (e.g. Conover et al., 2007; Entman, 2004) propose that stopping atrocities like the ones in Gaza require communication and changing public opinion towards ending the conflict. Dissemination through mass communication channels creates awareness and prompts public attention (Zaller, 2003) but true recognition of sovereignty can only come from dialogue (Freire, 2018). This is true for both the governmental action and the public's endorsement of it. Not all political topics lead to genocide and not all apprehension is based on

acceptance of opinion. However, if we accept the argument that silence is complicity, then we can say apprehension contributes to necropolitics. There are examples of this belief in the Gaza conflict as well.

While the region roars with conflict, there are efforts to prevent the necropolitic from becoming complete. Among other organizations, a small group of families began a movement known as the Parents' Circle and Families Forum (PCFF). This organization brings together Israeli and Palestinian families that have each lost loved ones to the violence that plagues the region. The organization brings these people together for conversations where they can hear each other's stories, reconcile differences, and recognize they share the same pain. Doing so gives them the chance to make an empathic bond that gives each member a new sense of shared identity and a new interpretation of the larger conflict (Furman, 2013). These bonds lead many in the organization to become opposed to fighting despite sharing the same pain that inspires others to support it. The members of the PCFF recognize that dialogue is essential to stopping the conflict and have worked hard to spread this message using the slogan "it won't stop until we talk". The organization has gone to speak at schools for both sides to share their experiences and encourage less hatred. The result has encouraged new members, but it has also produced mainstream outrage that contributes to social backlash for its members (Katriel, 2021). The organization's 2022 Impact Report argues their mission has been disrupted by misinformation that seeks to encourage continued violence. The resulting public spheres include voices that advocate for peace and voices that advocate for conflict. It is likely apprehension has been a concern in these spaces, and it is not always apprehension of the democratic sort, but we do not have sufficient data to know for sure. This is a recommended future direction for the study of apprehension.

While Atwater's story seems inspirational, the PCFF seems bleak. Both examples provide a grounded reminder that talking is a prerequisite for peace, not the means. Both examples are vital for understanding the role of apprehension. The discomfort toward speaking serves a purpose and there are times where it is an important survival skill. In other cases, it is an obstacle to overcome for achieving change. Dialogue will not solve our problems, but it is a necessary condition for solutions to be made. Communication will not magically solve racism or end wars, but it is essential to creating spaces and structures that can achieve these goals. By building empathic bonds, we can challenge the meanings behind identities that encourage such horrible practices (Jardina & Piston, 2021). Communication in good will comes before the work can even begin, and the work itself takes time and great energy (Sanford, 2024). This can make progress feel discouraging, but it is still worth doing. If enabling dialogue is the key to change, then I use the summation of this work to argue that apprehension is critical to enabling dialogue.

I mention these examples because political communication apprehension is a dangerous tool for both the oppressor and the oppressed. It can be used to remove structures of oppression, but it can also reinforce or continue them in new ways. Studying its application contains great risk but is also one of the best ways to create positive social change. A better form of democracy means identifying the reasons for apprehension so we can mitigate them for all groups, encourage listening, and stop violence. The identification of this practice may also lead to further weaponization of it, but that vulnerability is the price of understanding a great tool for resolving our problems. The suppression of speech is already a common practice, but studying apprehension provides more concision to the practice and can help identify appropriate circumstances for speaking up or staying silent. I encourage any researcher who considers

studying this subject to carefully consider all the risks and benefits of it. Responsible research of this subject should be in service of a better and more equal world for all, not just some.

Measuring this phenomenon is just the first step in the process, subsequent work will need to be considered and the advice that comes from it will need to change as our understanding changes.

Translational Advice

This work has offered several contributions to the scientific community, and I would like to also offer benefits for the non-academic. Theories are only helpful to the extent they can help us make sense of things. To assist in this pursuit, I have several pieces of advice for any person, academic or not.

First, discomfort is common and valid, but actions are arbitrary. A feeling is always valid, and an action or reaction is always open to judgement. You are allowed to feel apprehensive but so is another person. All other advice in this section stems from this claim.

Second, apprehension's role changes based on the person's perception and a larger "big picture." Sometimes discomfort is a survival skill, telling us to stay quiet for our own good or for the good of the people we care about. These moments should be weighed carefully, because there are occasions where it is more appropriate to stay silent. However, there are also undeniably situations where one stays silent when they should have spoken. There is not always a line between complicity and self-preservation. In some situations, the two go hand in hand. sometimes it's a survival skill and sometimes it's an obstacle. Reconsider this dilemma using the case of Ann Atwater. Had Atwater stayed silent and refused to cooperate with Ellis, it is possible the Durham school district would have seen a very different outcome. On the other hand, if

Atwater had not felt capable of making a difference or had certainly been harmed for speaking, would we blame her for staying silent? It is hard to say since history did not play out this way, but the dilemma between action and inaction centers around this sense of agency. Each person has an obligation to others and to themselves. In any situation, we weigh these commitments and decide which one to exercise in a given moment. Some speak in spite of the harm caused by speaking, while others stay silent when no threat is present. Both of these concerns matter because a duty implies agency and so context tells us what kind of civic obligation we have regarding our apprehension.

There are different kinds of duties in the world. A common distinction between them is perfect and imperfect duties (Kant, 1785). Perfect duties are actions that we ought to always do. A classic example of this is the duty to respect others. We are socialized to believe we ought not hurt other people physically or mentally. Imperfect duties are obligations that we ought to do at our discretion. We do not blame the powerless for not speaking out, we blame those who can speak for them. Power ebbs and flows within people and situations. A person with great agency in one situation may be powerless in another. Based on this observation, I argue each person has an imperfect duty to speak. We all should speak up on issues that bother us, but how we do so is ultimately up to us.

Within this duty contains a piece of advice. Apprehension is important to acknowledge because it can be handled carelessly, and such a practice can have consequences for any number of people. To each reader, I encourage you to carefully consider the position of you, your conversational partner, and the subject matter to dictate what you do. The notion of a careful consideration changes from person to person, but there are basic diligences we can perform, such as ensuring safety and respect for us and those around us.

This reflection also poses a question of what we owe to people who are apprehensive. It is generally a good practice but to encourage people to share thoughts, but such an obligation can inadvertently harm the marginalized groups we hope to help. Again, this advice depends upon context and individual judgement. Letting folks stay silent can increase a risk of error if they have a different perspective from the rest of the group (Bohman, 2007). In this case, weighing the obligation is best considered through the lens of assisting an apprehensive White supremacist or an apprehensive civil rights advocate. These two cases may have the same types of apprehension, but the meaning behind their apprehension carries different weight and different burdens. A good ethical obligation should be able to apply to both cases while recognizing that they are different. The closest answer comes from the philosopher John Rawls (1971). Rawls' contributions to the study of justice focused heavily on the difference principle: treat each situation in a way that the most disadvantaged person benefits. Evidence would likely say in each situation that we should do something that favors a marginalized group. In some cases, this might mean letting the apprehensive supremacist stay silent to avoid causing harm. In other cases, it might mean encouraging them to speak so they can hear the perspectives of people they are so prejudiced against. This is based on the assumption that communication could resolve the difference between these two people, and that assumption is not always true. However, if one has the chance to deradicalize a White supremacist through dialogue, they have a chance towards the true freedom that Freire dreamed of. As I mentioned before, those actions can only come through the formation of good will.

Future Directions

With this warning unpacked, we can return to a softer and more comfortable side of this subject. PCA likely changes across a wide range of contexts. This section considers seven of them.

First, PCA should be studied in a more generalizable sample by ethnorace. Racial identity plays a crucial part in how people navigate politics (Carlson et al., 2020; Fraser, 1990). As Carlson and colleagues (2020) note, an overwhelming amount of our knowledge surrounding political discussion is based on White samples, with very little generalizability with people of color. This is an important consideration and a major limitation of this dissertation. Future work should consider comparing PCA in similarly sized samples based on race to produce properly generalizable results for people of multiple racial backgrounds (Carlson et al., 2020). There are other contextual factors that can also change this possibility.

Politics are a social activity that makes humans interdependent (Cramer, 2004). In political spaces, social identities become personal and personal identities gain political meaning (Oloka-Onyongo & Tamale, 1995; Papacharissi, 2015). PCA produces a natural barrier to this flow, where meanings are both obstructed and reinforced when they might otherwise be changed. This power is not uniform nor is it absolute. Rather, these practices change across a variety of contexts. Each context I mention here has gone unexplored in this dissertation and should be considered as a future direction for research.

The first and most obvious context is issue oriented. PCA overall can be gauged but it might also vary depending on the subject being discussed. Issue publics divert their attention toward specific topics and I suspect the corresponding awareness changes the apprehension. For an example, consider a group of women gathered to discuss reproductive rights. If the group is

gathered with the purpose of discussing the issue, then their apprehension might lower because the group's expectation has been set to discuss the present topic. Suppose this same group happens to begin discussing Israel's war in Gaza. This issue public did not originally intend to discuss this issue, and so a group dynamic is questioned on appropriateness. This is the kind of problem Eliasoph (1998) observes in her work with volunteers. It may also change based on whether or not the person sees the issue as political (Coles, 2024). Two people can look at the same issue and reach different conclusions about whether the topic is political. Subsequent communication between these two people can challenge this interpretation. Apprehension might be lower if the political issue is expected. On the other hand, anticipation of the topic might produce more anxiety. Future research could investigate this distinction to see if "surprise political conversations" have any sort of change in apprehension and what that change means for relationships and our political culture.

The second context to consider is intergroup contact. Because people tend to pursue political conversations with people like them, communicating with unalike others can also produce apprehension. One example of this is gender. As Carlson and colleagues (2020) note, much political discussion is sex segregated. While this work consider gender itself as a predictor of apprehension, it does not consider inter-gender communication as a possible cause. This could be a possible predictor of apprehension, given the political stereotypes afforded to men and women and the political differences between them. This might change based on identity salience in the interaction. Each person carries with them a multitude of identities beyond the standard demographics we consider. Whenever we talk with others, only a few of these identities are brought forth, while others are left dormant. Accordingly identity similarity might be something relieves apprehension while identity difference creates apprehension. This may be especially true

for ethnorace, consider most citizens discuss politics of similar racial backgrounds (Carlson et al., 2020). An intergroup contact can amplify apprehension and this apprehension may also increase when race is the topic of conversation. Such an increase might occur because of intergroup anxiety or intergroup tension.

A natural connection here exists between PCA and intergroup interactions. Intergroup and intragroup interactions produce different concerns for PCA, particularly when the salient group identities are themselves political. One way of thinking about this might be Republicans and Democrats, another might be marginalized identities that both fight for equality and have been seemingly pitted against each other in the hierarchy of social struggle (Brown & Harlow, 2019). One example of this clash is African-Americans and members of the LGBTQ+ community (Chong & Mohr, 2020).

The next context is technological. Most of our political communication is mediated (Billard, 2023) whether it be informational dissemination of the news or text messaging friends and family about political events. There are important distinctions between online and offline political participation and each practice influences the other (Vaccari et al., 2015; Vaccari & Valeriani, 2018). Examining PCA in online contexts is particularly useful for understanding how these behaviors inform each other across different information flows and communication logics (for an example, see Billard, 2023).

Third, PCA likely changes based on culture. I have argued previously in this volume that the measured conceptualization is largely rooted in democratic ideals. There are certainly other components of political culture that can change the manifestation of apprehension. Some things naturally transfer like the spiral of silence theory. Others require re-interpretation in more authoritarian contexts. The greatest risk in many democratic cultures is social death or

dehumanization. This risk is arguably greater in more authoritarian contexts. While these contexts might exist more in authoritarian countries like Iran or China, they are also possible in democratic countries such as Mexico and the United States. Studying the difference between these contexts and others can offer insights into understanding political expression around the world and PCA as a more empirical concept.

It is important to acknowledge this similarity because ignoring it can perpetuate negative stereotypes about other nations (for an example see Anderson, 2018 on "shithole countries") and it can encourage ignoring the political realities of marginalized groups in other nations. While the latter two countries are notably more democratic than the former, they still have authoritarian spaces where violence is weaponized to encourage silence. One example of this problem in Mexico is the prominence of cartels and other organized crime syndicates, which are believed to have much more influence than the government in some portions of the country. The same is true of Jim Crow states and voter suppression laws in the United States. On paper both countries are considered democratic, but neither has always been a true procedural democracy because both have a history of strongly stifling dissent in at least some parts of the country. In both cases, the suppression is the result of both state and non-state actors and the perception of democracy changes based on whether a person sees their culture as democratic or authoritarian. Consider the previously mentioned case of Israelis and Palestinians. It is not likely that they would call themselves apprehensive if only the three factors were mentioned. The fear of political dissent in Gaza reflects a more serious form of danger where fear of social death is accompanied by imprisonment or physical death for both the self and potentially others (Mbembe, 2019). Such violence can be caused because of terrorist actions such as the Hamas-led attack on October 7th

or state sanctioned in the form of targeted killings where civilian deaths are weighed. This changes the concern of sensitivity from one of emotional distress to physical safety as well.

These distinctions produce another natural way forward for research. We can reconsider the scale tested in this dissertation as political communication apprehension in democratic senses (PCA-D), while future research should consider political communication apprehension in authoritarian senses (PCA-A). Exploring the factorability and theoretical distinctions between these two practices would be a worthwhile endeavor and it can be explored interconnectedly with other contexts discussed in this chapter. One such example intersection might be technological. As technology has changed, the Internet has been lauded for its great civic potential (Papacharissi, 2002; Stromer-Galley, 2017), but it has also been employed by authoritarian states to reinforce their rule (Tufecki, 2017). This practice creates what MacKinnon (2012) calls networked authoritarianism, where states utilize Internet and social networking sites to more closely monitor their citizens. Apprehension might play an important role in how political discussion works in these nations. Dal and Nisbet (2022) explored this possibility in Turkish Internet users and found that risk perceptions did not change online political expression but that anticipatory emotions did. Anticipatory emotions refer to the feelings people experience while they make a decision. As choices are considered, we weigh potential outcomes as -one of several- reasons for which option to choose. Let us unpack that a little more. Dal and Nisbet's finding of anticipatory emotions suggests that our feelings towards these actions will better predict online political expression more than an actual risk assessment would. Our gut feelings about these actions inform our choices more than the actual perceived risks. Apprehension and willingness are two of these emotions and are worth exploring in these contexts.

Another cultural element to PCA might be intercultural political encounters (e.g., Wyant et al., 2021). People from different political cultures may have different expectations of the interaction and therefore become apprehensive in new ways that contribute to either acculturation (Kim, 1977, 1988, 2001, 2012) or cultural fusion (Croucher & Kramer, 2021, Kramer, 2000). These theories are active and openly clashing interpretations about how immigrants become accustomed to new cultures. To very briefly summarize this clash, acculturation proposes that immigrants tend to abandon previous identities in favor of new ones that allow them to adapt to the culture of their new host country. Fusion theory proposes that the previous and the new become blended to create a hybridized culture (Croucher & Kramer, 2021). Both theories might inform and be informed by an investigation of PCA in intercultural encounters. For example, the fusion process requires taking time to adjust and understand the new culture one finds themselves in. This moment can be stressful and produce uncertainty, causing apprehension.

Fourth, PCA likely changes based on power dynamics and relational cues. As I have mentioned earlier in this work, relationships shape our interactions like our interactions shape the relationship. One example of this in politics is political socialization. Krupnikov and Ryan (2022) refer to socializing children as the "the most sacred duty" (it's in the title of one of their chapters), and parents do play a vital role in helping children learn how to navigate politics. This role can be changed based on how the parents socialize their children to communicate. These communication patterns in turn change how children perceive their role with their parents and whether they have the chance to influence them in turn (McDevitt & Chaffee, 2002a, 2002b). This process also changes across gendered lines, with mothers often being seen as more open to upward influence from children while fathers are seen as more influential downwards,

influencing children without being influenced themselves (Shulman & DeAndrea, 2014). This practice is rooted in larger social perceptions of women as being more open-minded than men (Krupnikov et al., 2020). Accordingly, PCA might change based on which parent a child is talking to.

Power dynamics of authority can also change the choice to communicate. For an example, we can look at self-disclosure in competitive debate and forensics (Copeland & Woodall, 2021). In competitive forensics, students perform speeches and literature about topics of their choosing. Many students consider a topic of personal importance but each student chooses whether or not they want to share that connection explicitly. This choice is a practice of communication privacy management (Petronio et al., 2021) that is driven in part by the power dynamic between the student competitor and the judge that evaluates them. In their interview work with forensics students, Copeland and Woodall (2021) found that many students considered employing self-disclosure in their performances but some did not out of fear of competitive punishment. In other words, students wanted to disclose but did not because they feared judges would rank them lower for disclosing. In a competitive culture where winning matters and builds connection (Jensen, 2017), this practice is a spiral of silence phenomenon. Competitive scenarios are one potential place to assess this practice. It is likely others exist as well such as the relationship between a student and instructor. One example of how to study this behavior is in the disclosure practices of students in classroom settings. One might explore how PCA arises in these contexts on the basis of popularity or on the basis of saying something wrong. Such practice is especially true for students who believe intelligence is a core and fixed aspect of their identity (Yeager & Dweck, 2012).

Next, PCA should be considered across time. Carlson & Settle's (2022) 4D framework offers a prime example for how to examine PCA over time in a micro setting of conversations. PCA might change across different moments of the conversation, raising or falling as the conversation progresses through the four stages. This was something I wanted to examine in my own work, but did not have the resources or knowledge necessary to do so. Moreover, PCA may also change over longer quantities of time. The data from my studies suggest that the macro setting of a human lifespan reduce PCA. Other work from Croucher and colleagues (2024) suggests that apprehension is a state, not a trait. This means that people may not be apprehensive by default, but they can still exhibit apprehension in multiple settings over time.

Lastly, PCA should be examined with a multitude of methods. We know from previous research that network ties reveal crucial information about citizen preferences towards political communication (Eveland & Hutchens, 2009; Morey & Yamamoto, 2020). Accordingly, network research is an important context for the future study of PCA. Another important context is longitudinal research. Croucher and colleagues (2024) note that other measures of communication apprehension struggled to stay stable over a 15-year period of data collection. While I take a different approach to conceptualizing apprehension than the measures classically employed (e.g. McCroskey, 1985), my measure is still vulnerable to this concern because it is brand new. Further testing to replicate results with other populations as well longitudinal work is needed to ensure this concept stands the test of time (Littlejohn et al., 2021).

With this study concluded, the measure has been constructed and validated. Most of the social scientific portion of this work has concluded. However, there are still several things that need to be unpacked and discussed. The next chapter covers these subjects in a more critical sense.

Chapter 7: Conclusion

Our time together is ending, so I want to offer a few items for thought. This work has offered multiple contributions, and it is important to consider them all at the very end. I've covered a lot of ground and I think just this once, you can get the TL;DR.

Review of Information

First, let's recap everything we learned in this work. I believe there are four core lessons in this work:

1) Political communication is a vital connection between the personal and the public. It is through communicating that we make better worlds for ourselves and the people around us. Apprehension exists as a barrier to that communication and can keep both a person and society from flourishing.
2) Apprehension is a concern both personally and politically.Apprehension undermines our sense of self-worth and can worsen stress. Both our vital to a flourishing body and body politic.
3) Apprehension manifests in a variety of ways. We are each uncomfortable with politics for different reasons and those reasons change based on a variety of factors. Our orientation towards a given conversation will likely change our attitudes, goals, and practices, though I do not yet have the data to back this claim.
4) Apprehension affects our mental well-being, but not necessarily civic engagement. Some civic practices are not reduced by apprehension because they are already low. Other practices, such as civic talk themselves are less likely to occur in the presence of apprehension.

Review of Contribution

Second, let's review the value of this work, what is has to offer the scientific community, and what it has to offer the public.

I offer five theoretical contributions in this work.

1) A synthesized approach to PCA, a topic that has not been discussed in the literature but that has deeply pervaded our political culture.
2) A novel measure of PCA that can be used in a variety of contexts, as a whole or as subscales. This measure will hopefully be refined and used in future research.
3) A connection between apprehension and mental health. This finding shows us another way politics are personal.
4) A connection between apprehension and larger political concerns such as necropolitics.
5) Future directions for multiple research agendas across issues, identity, culture, technology, and power.

I also offer four translational suggestions in this work.

1) Discomfort is common and valid.
2) Sometimes it's a survival skill and sometimes its an obstacle.
3) Apprehension is important to acknowledge but can be carelessly mishandled.
4) The imperfect duty to speak.

Final Thoughts

This work has come to a close, but with it comes a great deal of research direction. I only focused on five theories in my literature review but passively mentioned many more. Political

communication apprehension is affected by many theories of human communication, which gives it ground for a wide research agenda, wide knowledge, and wide abuse. Much of this abuse is already given shape by giving people ample reason to feel powerless.

There are a great number of concerns to consider with talking about politics. It is something we should do, but not constantly or at every opportunity. PCA represents an important and common part of our lives, and what we do with it matters. To close this work, I offer some words that shaped my own thinking throughout the process of writing this work.

> The single quality that is common across every living creature on this planet, is fear; it's funny then that as common as fear is, we so easily underestimate its power. Fear of growing close to someone, the subsequent fear of loss, fear of failure; and as more people depend on you, those fears can take on greater power. Fear itself isn't worthy of concern, it is who we become while in its clutches. Will you be proud of that person? Will you forgive them? Will you understand why they felt the need to do the things they did? Will you even recognize them? Or will the person staring back at you be the very thing you should have feared from the start? I suppose we all find out sooner or later. (Shawcross, 2020)

Endnotes

1. It is worth noting that PCA is an acronym for a related statistical test known as principal components analysis. Synonymous terms for political communication apprehension exist and run into the same problem such as political talk apprehension (PTA), political discussion apprehension (PDA), as do other takes on PCA such as PolCA (polytomous variable latent class analysis). A heuristic benefit of using PCA is that the concept could be applied to political conversations as well as other forms of political communication such presidential address.

References

Abrajano, M. (2015). Reexamining the “racial gap” in political knowledge. *The Journal of Politics*, *77*(1), 44-54. https://doi.org/10.1086/678767

Abramowitz, A. I., & Saunders, K. L. (2008). Is polarization a myth? *The Journal of Politics*, *70*(2), 542-555. https://doi.org/10.1017/s0022381608080493

Acar, Y. G., & Uluğ, Ö. M. (2022). When and why does political trust predict well-being in authoritarian contexts? Examining the role of political efficacy and collective action among opposition voters. *British Journal of Social Psychology*, *61*(3), 861-881. https://doi.org/10.1111/bjso.12505

Achen, C. H., & Bartels, L. M. (2017). *Democracy for realists*. Princeton University Press.

Al Jazeera Labs (October 7th, 2023). Israel-Gaza war in maps and charts: Live tracker. Last updated and accessed February 16th, 2024.

Altman, I., & Taylor, D. (1973). *Social penetration: The development of interpersonal relationships*. Holt.

Anderson, L. (2018). "Shithole countries": The wretched of the Earth, Frantz Fanon. *Social Research: An International Quarterly*, *85*(3), 487-502. https://doi.org/10.1353/sor.2018.0026

Anson, I. G. (2018). Partisanship, political knowledge, and the Dunning-Kruger effect. *Political Psychology*, *39*(5), 1173-1192. https://doi.org/10.1111/pops.12490

Arendt, H. (1958). *The human condition*. The University of Chicago Press.

Arendt, H. (1973). *The origins of totalitarianism* [1951]. *New York*.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of*

Psychology, *52*(1), 1–26. https://psycnet.apa.org/doi/10.1146/annurev.psych.52.1.1

Bandura, A. (2005). The evolution of social cognitive theory. *Great Minds in Management*, 9–35. https://doi.org/10.1093/oso/9780199276813.003.0002

Barraclough, R. A., Christophel, D. M., & McCroskey, J. C. (1988). Willingness to communicate: A cross-cultural investigation. Communication Research Reports, 5(2), 187-192. https://psycnet.apa.org/doi/10.1080/08824098809359822

Bartlett, M. S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of the Royal Statistical Society*, *16*, 296-298. https://doi.org/10.1111/j.2517-6161.1954.tb00174.x

Baumeister, R.F., Campbell, J.D., Krueger, J.I, Vohs, K.D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Sciences in the Public Interest*, *4*(1), 1-44. https://doi.org/10.1111/1529-1006.01431

Beavers, A. S., Lounsbury, J. W., Richards, J. K., Huck, S. W., Skolits, G., & Esquivel, S. L. (2013). Practical considerations for using exploratory factor analysis in educational research. *Practical Assessment, Research and Evaluation*, *18*, 1-13. https://doi.org/10.7275/qv2q-rk76

Bedolla, L. G. (2007). Intersections of inequality: Understanding marginalization and privilege in the post-civil rights era. *Politics & Gender*, *3*(2), 232-248. https://doi.org/10.1017/S1743923X07000050

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, *107*(2), 238-246. https://doi.org/10.1037/0033-2909.107.2.238

Bentler, P. M. (1995). *EQS structural equations program manual*. Encino, CA: Multivariate Software

Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research, 1*(2), 99-112. https://psycnet.apa.org/doi/10.1111/j.1468-2958.1975.tb00258.x

Billard, T. J. (2023). *Voices for transgender equality: Making change in the networked public sphere*. Oxford University Press.

Bishop, B. (2009). *The big sort: Why the clustering of like-minded America is tearing us apart*. Houghton Mifflin Harcourt.

Blais A. (2000). *To vote or not to vote? The merits and limits of rational choice*. University of Pittsburgh Press

Bodie, G. D. (2010). A racing heart, rattling knees, and ruminative thoughts: Defining, explaining, and treating public speaking anxiety. *Communication Education, 59*(1), 70-105. https://doi.org/10.1080/03634520903443849

Bohman, J. (2007). Political communication and the epistemic value of diversity: Deliberation and legitimation in media societies. *Communication Theory*, *17*(4), 348-355. https://doi.org/10.1111/j.1468-2885.2007.00301.x

Borgatti, S. P., Everett, M. G., Johnson, J. C., & Agneessens, F. (2018). *Analyzing social networks*. SAGE Publications Limited.

Botwinick, J. (1970). Age differences in self-ratings of confidence. *Psychological Reports, 27*(3), 865-866. https://doi.org/10.2466/pr0.1970.27.3.865

Bowman, J. (2021, April 23). The atom(ization) bomb: Hannah Arendt's warning, critical race ideology and the coming totalitarian nightmare. *The Hannah Arendt Center for Politics*

and Humanities. https://hac.bard.edu/amor-mundi/the-atomization-bomb-hannah-arendts-warning-critical-race-ideology-and-the-coming-totalitarian-nightmare-2021

Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? *Journal of Social Issues, 55*(3), 429–444. https://psycnet.apa.org/doi/10.1111/0022-4537.00126

Brown, T. A. (2005). *Confirmatory factor analysis for applied research* (1 ed.). Guildford Press.

Brown, D., & Harlow, S. (2019). Protests, media coverage, and a hierarchy of social struggle. *The International Journal of Press/Politics*, *24*(4), 508-530. https://doi.org/10.1177/1940161219853517

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. *Sociological Methods Research, 154*(2), 132-162. https://doi.org/10.1177/0049124192021002005

Burgoon, J. K. (1976). The unwillingness-to-communicate scale: Development and validation. *Communications Monographs*, *43*(1), 60-69. https://psycnet.apa.org/doi/10.1080/03637757609375916

Burroughs, N. F., Marie, V., & McCroskey, J. C. (2003). Relationships of self-perceived communication competence and communication apprehension with willingness to communicate: A comparison with first and second languages in Micronesia. *Communication Research Reports*, *20*(3), 230-239. https://doi.org/10.1080/08824090309388821

Burstein, P. (2003). Is Congress really for sale? *Contexts, 2*(3), 19-25. https://doi.org/10.1525/ctx.2003.2.3.19

Campbell, A., Gurin, G. and Miller W. M.. 1954. *The voter decides*. Peterson.

Campbell, K. K. (2005). Agency: Promiscuous and protean. *Communication and Critical/Cultural Studies, 2*(1), 1-19. https://doi.org/10.1080/1479142042000332134

Carlson, T. N., Abrajano, M., & García Bedolla, L. (2020). Political discussion networks and political engagement among voters of color. *Political Research Quarterly*, *73*(1), 79-95. https://doi.org/10.1177/1065912919873729

Carlson, T. N., Abrajano, M., & Garcia Bedolla, L. (2020). *Talking politics: Political discussion networks and the new American electorate*. Cambridge University Press.

Carlson, T. N., & Settle, J. E. (2019). Freedom of expression in interpersonal interactions. *PS: Political science & politics*, *56*(2), 245-249. https://doi.org/10.1017/S1049096522001342

Carlson, T. N., & Settle, J. E. (2022). *What goes without saying: Navigating political discussion in America*. Cambridge University Press.

Carpenter, A., & Greene, K. (2016). Social penetration theory. In C.R. Berger & M.E. Roloff (Eds.) *International encyclopedia of interpersonal communication* (1st ed.). John Wiley & Sons.

Carpenter, S. (2017). Ten steps in scale development and reporting: A guide for researchers. *Communication Methods and Measures*, *12*(1), 25-44. https://doi.org/10.1080/19312458.2017.1396583

Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, *1*(2), 245-276. https://doi.org/10.1207/s15327906mbr0102_10

Chadwick, A. (2017). *The hybrid media system: Politics and power* (2nd ed.). Oxford University Press.

Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). Sage.

Chin, B. A. (2021). *Politics, partisanship, and our relationships: Where do we draw the line?* [Master's Thesis submitted to Harvard University]. Digital Access to Scholarship at Harvard.

Chong, E. S. K., & Mohr, J. J. (2020). How far can stigma-based empathy reach? Effects of societal (in)equity of LGB people on their allyship with transgender and Black people. *American Journal of Orthopsychiatry*, *90*(6), 760-771. https://doi.org/10.1037/ort0000510

Citrin, J., & Stoker, L. (2018). Political trust in a cynical age. *Annual Review of Political Science, 21*(1), 49-70. https://doi.org/10.1146/annurev-polisci-050316-092550

Clifford, W.K. (1876). The ethics of belief. *Contemporary Review*, *29*, 289-309.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*(4), 385. https://psycnet.apa.org/doi/10.2307/2136404

Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*(1), 155-159. https://doi.org/10.1037//0033-2909.112.1.155

Coles, S. M. (in-press, expected 2024) Conceptualizing evaluations of the political relevance of media texts: The politically relevant media model. *Communication Theory*.

Coles, S. M. (2020). "*It's all political": The role of political identity in the identification and selection of politically relevant entertainment media*. [Doctoral dissertation submitted to the University of Michigan]. DeepBlue.

Coles, S. M., & Lane, D. (2023). Race and ethnicity as foundational forces in political communication: Special issue introduction. *Political Communication*, *40*(4), 367-376. https://doi.org/10.1080/10584609.2023.2229780

Conover, P. J., Crewe, I., Searing, D. D., & Solt, F. (2007). Public discussion in the deliberative system: Does it make better citizens? *British Journal of Political Science, 37*(4), 587-618. https://doi.org/10.1017/S0007123407000336

Conover, P. J., Crewe, I. M., & Searing, D. D. (2002). The deliberative potential of political discussion. *British Journal of Political Science, 32*(1), 21-62. https://doi.org/10.1017/S0007123402000029

Conover, P. J., & Searing, D. D. (2005). Studying 'everyday political talk' in the deliberative system. *Acta Politica, 40*(3), 269-283. https://doi.org/10.1057/palgrave.ap.5500113

Copeland, K., & Woodall, A. (2021). "This is who I am and this is what I'm carrying": examining self-disclosure in forensics. *Argumentation and Advocacy*, 1-16. https://doi.org/10.1080/10511431.2021.1897296

Craig, S. C., Niemi, R. G., & Silver, G. E. (1990). Political efficacy and trust: A report on NES pilot study items. *Political Behavior, 12*(3), 289-314. https://psycnet.apa.org/doi/10.1007/BF00992337

Cramer, K. (2004). *Talking about politics: Informal groups and social identity in American life*. University of Chicago Press

Cramer, K. J. (2016). *The politics of resentment: Rural consciousness in Wisconsin and the rise of Scott Walker*. University of Chicago Press.

Cramer, K. J., & Toff, B. (2017). The fact of experience: Rethinking political knowledge and civic competence. *Perspectives on Politics, 15*(3), 754-770. https://doi.org/10.1017/S1537592717000949

Crenshaw, K. W. (2013). Mapping the margins: Intersectionality, identity politics, and violence against women of color. In *The public nature of private violence* (pp. 93-118). Routledge.

Cronbach, L.J. (1951) Coefficient alpha and the internal structure of tests. *Psychometrika, 16*, 297-334. https://psycnet.apa.org/doi/10.1007/BF02310555

Croucher, S. M., Kelly, S., Nguyen, T., Rocker, K., Yotes, T., & Cullinane, J. (2024). A longitudinal analysis of communication traits: communication apprehension, willingness to communicate, and self-perceived communication competence. *Communication Quarterly, 72*(1), 99-119. https://doi.org/10.1080/01463373.2023.2292216

Croucher, S. M., & Kramer, E. (2017). Cultural fusion theory: An alternative to acculturation. *Journal of International & Intercultural Communication, 10*(2), 97–114. https://doi.org/10.1080/17513057.2016.1229498

Dal, A., & Nisbet, E.C. (2022). To share or not to share?: How emotional judgments drive online political expression in high risk contexts. *Communication Research, 49*(3), 353-375. https://doi.org/10.1177/0093650220950570

Davidson, O. G. (2018). *The Best of Enemies: Race and Redemption in the New South*. University of North Carolina Press.

de Coster, J., Gallucci, M., & Iselin, A. R. (2011). Best practices for using median splits, artificial categorization, and their continuous alternatives. *Journal of Experimental Psychopathology*, *2*(2), 197-209. https://doi.org/10.5127/jep.008310

Delli Carpini, M. X., & Keeter, S. (1996). *What Americans know about politics and why it matters*. Yale University Press.

DeVellis, R. F., & Thorpe, C. T. (2021). *Scale development: Theory and applications*. Sage publications.

Deichert, M. A. (2019). *Partisan cultural stereotypes: The effect of everyday partisan associations on social life in the United States* [Doctoral Dissertation submitted to Vanderbilt University]. Vanderbilt University Institutional Repository.

Dodd, P. (February 16th, 2024). All clear given after Gaylord Hall evacuated due to suspicious package alert: Timeline of events. *OU Daily*.

Dewey, J. (1927). *The public and its problems* (Vol. 1954). Swallow Press.

Druckman, J. N., Levendusky, M. S., & McLain, A. (2018). No need to watch: How the effects of partisan media can spread via interpersonal discussions. *American Journal of Political Science, 62*(1), 99-112. https://doi.org/10.1111/ajps.12325

Dubin, R. (1978). *Theory building*. Free Press.

Dupree, C. H., & Fiske, S. T. (2019). Self-presentation in interracial settings: The competence downshift by White liberals. *Journal of Personality and Social Psychology, 117*(3), 579–604. https://psycnet.apa.org/doi/10.1037/pspi0000166

Edelman, M. (1971). *Politics as symbolic action.* Academic Press.

Edy, J. A., & Meirick, P. C. (2018). The fragmenting public agenda: Capacity, diversity, and volatility in responses to the "Most Important Problem" question. *Public Opinion Quarterly, 82*(4), 661-685. https://doi.org/10.1093/poq/nfy043

Eliasoph, N. (1998). *Avoiding politics: How Americans produce apathy in everyday life*. Cambridge University Press.

Eliasoph, N. (2010 Fall). The evaporation of politics in the public sphere. *Kettering Review*, 37-48.

Entman, R. M. (2004). *Projections of power: Framing news, public opinion, and U.S. foreign policy*. University of Chicago Press.

Eveland, W.P. (2004). The effect of political discussion in producing informed citizens: The roles of information, motivation, and elaboration. *Political Communication, 21*(2), 177-193. https://doi.org/10.1080/10584600490443877

Eveland, W.P., & Hutchens, M. (2009). Political discussion frequency, network size, and "heterogeneity" of discussion as predictors of political knowledge and participation. *Journal of Communication, 59,* 205-224. https://doi.org/10.1111/j.1460-2466.2009.01412.x

Eveland, W. P., & Kleinman, S. B. (2013). Comparing general and political discussion networks within voluntary organizations using social network analysis. *Political Behavior, 35,* 65-87. https://doi.org/10.1007/s11109-011-9187-4

Eveland, W. P., Morey, A. C., & Hutchens, M. J. (2011). Beyond deliberation: New directions for the study of informal political conversation from a communication perspective. *Journal of Communication, 61*(6), 1082-1103. https://doi.org/10.1111/j.1460-2466.2011.01598.x

Feldman, L., & Price, V. (2008). Confusion or enlightenment?: How exposure to disagreement moderates the effects of political discussion and media use on candidate knowledge. *Communication Research, 35*(1), 61-87. https://doi.org/10.1177/0093650207309362

Fink, E. L. (2022). A condensed discussion of definition and measurement: "It don't make no nevermind" (Wainer, 1976). *Asian Communication Research, 19*(1), 5-9. http://dx.doi.org/10.20879/acr.2022.19.1.5

Finkel, S. E. (1985). Reciprocal effects of participation and political efficacy: A panel analysis. *American Journal of Political Science, 29*(4), 891–913. https://doi.org/10.2307/2111186

Fisher, R.A. (1925). *Statistical methods for research workers* (1st ed.). Oliver and Boyd.

Fishkin, J. S., & Laslett, P. (2003) *Debating deliberative democracy*. Blackwell.

Floyd, K. (2022). *Communication matters* (4th ed.). McGraw-Hill.

Fowler, F. J. (1995). *Improving survey questions: Design and evaluation*. Sage

Fraser, N. (1990). 'Rethinking the public sphere: a contribution to the critique of actually existing democracy'. In C. Calhoun (Ed.), *Habermas and the Public Sphere* (Vol. 8, pp. 56-80).

Freelon, D., Marwick, A., & Kreiss, D. (2020). False equivalencies: Online activism from left to right. *Science, 369*(6508), 1197-1201. https://doi.org/10.1126/science.abb2428

Freire, P. (2018). *Pedagogía del oprimido* [Pedagogy of the oppressed]. (Originally published 1970). Free Press.

Fukuyama, F. (1995). *Trust : the social virtues and the creation of prosperity*. Free Press.

Furman, F. K. (2013). Bereavement, storytelling, and reconciliation: Peacebuilding between Israelis and Palestinians. *Peace and Conflict Studies, 20*(2). http://dx.doi.org/10.46743/1082-7307/2013.1148

Gallois, C., Ogay, T., & Giles, H. (2005). Communication accommodation theory: A look back and a look ahead. In W. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 121-148). Sage.

Gamson, W. A. (1992). *Talking politics*. Cambridge University Press.

Gardner, M. (2005). *The qualities of a citizen: Women, immigration, and citizenship, 1870-1965*. Princeton University Press.

Gibson, J.L., & Sutherland, J.L. (2020). Keeping your mouth shut: Spiraling self-censorship in the United States. Working paper.

Gignac, G.E., & Szodoari, E.T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences, 102*, 74-78. https://psycnet.apa.org/doi/10.1016/j.paid.2016.06.069

Gil de Zúñiga, H., & Valenzuela, S. (2011). The mediating path to a stronger citizenship: Online and offline networks, weak ties, and civic engagement. *Communication Research*, *38*(3), 397-421.

Giles, H., Mulac, A., Bradac, J. J., & Johnson, P. (1987). Speech accommodation theory: The first decade and beyond. *Annals of the International Communication Association*, *10*(1), 13-48. https://doi.org/10.1080/23808985.1987.11678638

Giles, H. (2008). Communication accommodation theory. In L.A. Baxter and D.O. Braithwaite (Eds.) *Engaging theories in interpersonal communication: Multiple perspectives*. Sage

Giles, H., Willemyns, M., Gallois, C., & Anderson, M.C. (2007). Accommodating a new frontier: The context of law enforcement. In K. Fiedler (Ed.), *Social communication* (pp. 129-162). Psychology Press.

Gimpel, J. G., Morris, I. L., & Armstrong, D. R. (2004). Turnout and the local age distribution: examining political participation across space and time. *Political Geography*, *23*(1), 71-95. https://doi.org/10.1016/j.polgeo.2003.09.002

Goodstein, E. S. (2017). Money, relativism, and the post-truth political imaginary. *Philosophy & Rhetoric 50* (4):483–508. https://doi.org/10.5325/philrhet.50.4.0483

Glynn, C.J., Herbst, S., Lindeman, M., O'Keefe, G.J., & Shapiro, R.V. (2019). *Public opinion* (3rd ed.) Routledge.

Goertz, G., & Mahoney, J. (2012). *A tale of two cultures: Qualitative and quantitative research in the social sciences*. Princeton University Press.

Goertz, G. (2006). *Social science concepts: A user's guide*. Princeton University Press.

Goffman, E. (1967). On face-work. In *Interaction ritual: Essays on face-to-face behavior* (pp. 5-46). Pantheon.

Goffman, E. (1955). On face-work: An analysis of ritual elements in social interaction. *Psychiatry, 18*(3), 213-231. https://doi.org/10.1080/00332747.1955.11023008

Grasswick, H. E. (2004). Individuals-in-communities: The search for a feminist model of epistemic subjects. *Hypatia, 19*(3), 85-120. https://doi.org/10.1111/j.1527-2001.2004.tb01303.x

Groenendyk, E., & Krupnikov, Y. (2021). What motivates reasoning? A theory of goal-dependent political evaluation. *American Journal of Political Science, 65*. https://doi.org/10.1111/ajps.12562

Guttman, L. (1954). Some necessary conditions for common factor analysis. *Psychometrika, 19*, 149-161. https://doi.org/10.1007/BF02289162

Gutmann, A., & Thompson, D. (2010). The mindsets of political compromise. *Perspectives on Politics, 8*(4), 1125-1143. https://doi.org/10.1017/S1537592710003270

Habermas, J. (1991). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. MIT press.

Hancock, G., & Mueller, R. O. (2001). Rethinking construct reliability within latent variable systems. In R. Cudek, S. du Toit, & D. Sörbom (Eds.), *Structural Equation Modeling: Present and Future* (pp. 195-216). Scientific Software International.

Hansen, C. (2021). *Examining Political Communication Apprehension* [Master Thesis submitted to Purdue University Graduate School]. Retrieved from HAMMER Research Repository.

Hart, R. P., & Lavally, R. (2017). Not a fourth estate but a second legislature. In K. H. Jamieson & K. Kenski (Eds.), *The Oxford handbook of political communication*. Oxford University Press.

Hay, C. (2007). *Why we hate politics*. Polity Press.

Hayes, A. F., Glynn, C. J., & Shanahan, J. (2005). Willingness to self-censor: A construct and measurement tool for public opinion research. *International Journal of Public Opinion Research*, *17*(3), 298-323. https://psycnet.apa.org/doi/10.1093/ijpor/edh073

Hayes, A. F., & Matthes, J. (2017). Self-censorship, the spiral of silence, and contemporary political communication. In K. H. Jamieson & K. Kenski (Eds.), *The Oxford handbook of political communication*. Oxford University Press.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). Beyond WEIRD: Towards a broad-based behavioral science. *Behavioral and Brain Sciences*, *33*(2-3), 111. https://psycnet.apa.org/doi/10.1017/S0140525X10000725

Hetherington, M. J., & Weiler, J. D. (2018). *Prius or pickup? How the answers to four simple questions explain America's great divide*. Houghton Mifflin Harcourt.

Hewitt, J.P. (2009). The social construction of self-esteem. In S.J. Lopez, C.R. Snyder (Eds.) *Oxford Handbook of Positive Psychology*. Oxford University Press.

Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, *30*(2), 179-185. https://doi.org/10.1007/bf02289447

Hu, L. t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1-55. https://psycnet.apa.org/doi/10.1080/10705519909540118

Huckfeldt, R., & Sprague, J. (1995). Citizens, politics, and social communication: Information and influence in an election campaign. Cambridge University Press.

Huckfelt, R. (2017). Taking interdependence seriously: Platforms for understanding political communication. In K. H. Jamieson & K. Kenski (Eds.), *The Oxford handbook of political communication*. Oxford University Press.

Humphreys, L. G., & Montanelli Jr., R. G. (1975). An investigation of the parallel analysis criterion for determining the number of common factors. *Multivariate Behavioral Research*, *10*(2), 193-205. https://psycnet.apa.org/doi/10.1207/s15327906mbr1002_5

Hurst, E. (2021). *Navigating political identity in the big red dot: Political conversations among rural Oklahoman college students* [Dissertation submitted to the University of Oklahoma]. ShareOK.

Husserl, E. (1970). The crisis of European sciences and transcendental phenomenology. Northwestern University Press.

Hutchens, M. J. (2010). *I think I can: The interaction between self-efficacy and anxiety predicting who we talk to*. [Doctoral dissertation submitted to The Ohio State University]. OhioLINK.

Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. *Journal of Communication*, *59*(1), 19-39. https://psycnet.apa.org/doi/10.1111/j.1460-2466.2008.01402.x

Iyengar, S., Lelkes, Y., Levendusky, M., Malhotra, N., & Westwood, S. J. (2019). The origins and consequences of affective polarization in the United States. *Annual Review of Political Science*, *22*(1), 129-146. https://doi.org/10.1146/annurev-polisci-051117-073034

Iyengar, S., & Westwood, S. J. (2015). Fear and loathing across party lines: New evidence on group polarization. *American Journal of Political Science, 59*(3), 690-707. https://doi.org/10.1111/ajps.12152

Jaggar, A. M. (1989). Love and knowledge: Emotion in feminist epistemology. *Inquiry, 32*(2), 151-176. https://doi.org/10.1080/00201748908602185

Jamieson, K. H., & Cappella, J. N. (2008). *Echo chamber: Rush Limbaugh and the conservative media establishment*. Oxford University Press.

Jamieson, K. H., Volinsky, A., Weitz, I., & Kenski, K. (2017). The political uses and abuses of civility and incivility. In K. H. Jamieson & K. Kenski (Eds.), *The Oxford handbook of political communication*. Oxford University Press.

Jardina, A., & Piston, S. (2021). Hiding in plain sight: Dehumanization as a foundation of white racial prejudice. *Sociology Compass*, *15*(9), e12913. https://doi.org/10.1111/soc4.12913

Jennings, F. J. (2019). An uninformed electorate: identity-motivated elaboration, partisan cues, and learning. *Journal of Applied Communication Research*, *47*(5), 527-547. https://doi.org/10.1080/00909882.2019.1679385

Jensen, S. (2017). Be it resolved that debate is resolute: Deep structures as explanation for predictable cycles in the evolution of intercollegiate debate. *Forensic*, *102*, 17-29.

Johnson, A. J., Bostwick, E. N., & Cionea, I. A. (2019). Talking turkey: Effects of family discussions about the 2016 election over the Thanksgiving holiday. *Journal of Family Communication*, *19*(1), 63-76. https://doi.org/10.1080/15267431.2018.1543688

Johnson-George, C., & Swap, W. C. (1982). Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other. *Journal of*

Personality and Social Psychology, *43*(6), 1306-1317. https://psycnet.apa.org/doi/10.1037/0022-3514.43.6.1306

Johnson, A. J., Kelley, K. M., Liu, S.-J., Averbeck, J. M., King, S. D., & Bostwick, E. N. (2014). Family serial arguments: Beliefs about the argument and perceived stress from the argument. *Communication Reports*, *27*(2), 116-128. https://doi.org/10.1177/02654075211040798

Jones-Carmack, J. (2019). Political communication apprehension: Toward productive political discourse online and face-to-face. *Journal of Leadership Studies*, *13*(3), 73-78. https://doi.org/10.1002/jls.21656

Jöreskog, K.G. (1993). Testing structural equation models. In K.A. Bollen & J.S. Long (Eds.), *Testing structural equation models* (pp 294-316). Sage.

Kahan, D. M. (2015). The politically motivated reasoning paradigm. *Emerging Trends in Social & Behavioral Sciences*.

Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika*, *35*(4), 401–415. https://doi.org/10.1007/BF02291817

Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, *20*, 141-151. https://doi.org/10.1177/001316446002000116

Kalmoe, N. P., & Mason, L. (2022). *Radical American partisanship: Mapping violent hostility, its causes, and the consequences for democracy*. University of Chicago Press.

Kalmoe, N. P., & Mason, L. (2024). Threats as political communication. *Political Communication*, *41*(1), 162-171. https://doi.org/10.1080/10584609.2023.2270539

Kant, I. (1785). *Foundations of the metaphysics of morals*.

Katriel, T. (2021). *Defiant discourse: Speech and action in grassroots activism*. Routledge.

Kawachi, I., Daniels, N., & Robinson, D.E. (2005). Health disparities by race and class: Why both matter. *Health Affairs, 24*(2), 343–352. https://doi.org/10.1377/hlthaff.24.2.343

Keeter, S., Hatley, N., Lau, A., & Kennedy, C. (2021). What 2020's election poll errors tell us about accuracy of issue polling. *Pew Research Center. https://www.pewresearch.org/methods/2021/03/02/what-2020s-election-poll-errors-tell-us-about-the-accuracy-of-issue-polling/*

Kleinman, S. B., & Kleinman, E. (2015). Willingness to communicate about politics (WTCAP): A novel measure of interpersonal political discussion. *Studies in Communication Sciences, 15*, 173-181. https://doi.org/10.1016/j.scoms.2016.01.001

Klinger, U., Kreiss, D., & Motsvairo, B. (2023). *Politics, platforms, and power: An introduction to political communication in the digital age*. Polity.

Klofstad, C. A. (2015). Exposure to political discussion in college is associated with higher rates of political participation over time. *Political Communication*, *32*(2), 292-309. https://doi.org/10.1080/10584609.2014.944322

Klofstad, C. A. (2010a). *Civic talk: Peers, politics, and the future of democracy*. Temple University Press.

Klofstad, C. A. (2007). Talk leads to recruitment: How discussions about politics and current events increase civic participation. *Political Research Quarterly*, *60*(2), 180-191. https://doi.org/10.1177/1065912907301708

Klofstad, C. A. (2010b). The lasting effect of civic talk on civic participation: Evidence from a panel study. *Social Forces*, *88*(5), 2353-2375. https://doi.org/10.1353/sof.2010.0047

Kim, Y.Y. (1977). Communication patterns of foreign immigrants in the process of acculturation. *Human Communication Research, 4,* 66–77. https://doi.org/10.1111/j.1468-2958.1977.tb00598.x

Kim, Y.Y. (1988). *Communication and cross-cultural adaptation: An integrative theory*. Philadelphia, PA: Multilingual Matters Limited.

Kim, Y.Y. (2001). *Becoming intercultural: An integrative theory of communication and cross-cultural adaptation*. Thousand Oaks, CA: Sage.

Kim, Y.Y. (2012). Beyond cultural categories: Communication, adaptation, and transformation. In J. Jackson (Ed.), *The Routledge handbook of language and intercultural communication* (pp. 229– 243). New York, NY: Routledge.

Knobloch, K. R., Gastil, J., Reedy, J., & Cramer, K. (2013). Did they deliberate? Applying an evaluative model of democratic deliberation to the Oregon Citizens' Initiative Review. *Journal of Applied Communication Research*, *41*(2), 105-125. https://doi.org/10.1080/00909882.2012.760746

Kramer, E.M. (2000). Cultural fusion and the defense of difference. In M. Asante & J. Min (Eds.), *Socio-cultural conflict between African and Korean Americans* (pp. 183–230). New York, NY: University Press of America.

Kraus, M. W., Côté, S., & Keltner, D. (2010). Social class, contextualism, and empathic accuracy. *Psychological Science*, *21*(11), 1716–1723. https://doi.org/10.1177/0956797610387613

Kreiss, D., Lawrence, R. G., & McGregor, S. C. (2020). Political identity ownership: Symbolic contests to represent members of the public. *Social Media+ Society*, *6*(2). 1-5. https://doi.org/10.1177/2056305120926495

Krumpal, Ivar (2011). Determinants of social desirability bias in sensitive surveys: A literature review. *Quality and quantity*, 47(4), pp. 2025-2047. Springer

Krupnikov, Y., & Ryan, J. B. (2022). *The Other Divide: Polarization and Disengagement in American Politics*. Cambridge University Press.

Krupnikov, Y., Milita, K., Ryan, J. B., & Connors, E. C. (2020). How gender affects the efficacy of discussion as an information shortcut. *Political Science Research and Methods, 8*(2), 268-284. https://doi.org/10.1017/psrm.2019.26

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin, 108*(3), 480-498.

Lance, C. E., Butts, M. M., & Michels, L. C. (2006). The sources of four commonly reported cutoff criteria: What did they really say? *Organizational Research Methods, 9*(2), 202-220. https://doi.org/10.1177/1094428105284919

Lawley, D.N., & Maxwell, A.E. (1963). *Factor analysis as a statistical method*. Butterworth.

Lee, H., Kim, H., & Yeon, J. (2023). Partisan YouTube use and evaluation of knowledge in Korea and the United States: a fresh perspective via the Dunning–Kruger effect. *Human Communication Research*. https://doi.org/10.1093/hcr/hqad054

Lee, N.-J., Shah, D. V., & McLeod, J. M. (2012). Processes of political socialization: A communication mediation approach to youth civic engagement *Communication Research, 40*(5), 669-697. https://psycnet.apa.org/doi/10.1177/0093650212436712

Leighley, J. E., & Matsubayashi, T. (2009). The implications of class, race, and ethnicity for political networks. *American Politics Research, 37*(5), 824-855. https://doi.org/10.1177/1532673X09337889

Levendusky, M. (2023). *Our common bonds*. University of Chicago Press.

Levendusky, M. S., & Stecula, D. A. (2021). *We need to talk: How cross-party dialogue reduces affective polarization*. Cambridge University Press.

Lippmann, W. (1929). *Public opinion*. Macmillan Company.

Littlejohn, S. W., Foss, K. A., & Oetzel, J. G. (2021). *Theories of human communication* (12 ed.). Waveland Press.

Lizotte, M.-K., & Sidman, A. H. (2009). Explaining the gender gap in political knowledge. *Politics & Gender*, *5*(2), 127-151. https://doi.org/10.1017/S1743923X09000130

Lodge, M., & Taber, C. S. (2013). *The rationalizing voter*. Cambridge University Press.

Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, *37*(11), 2098-2109. https://psycnet.apa.org/doi/10.1037/0022-3514.37.11.2098

Lukes, S. (2005). *Power: A radical view* (2nd ed.). Palgrave Macmillan.

Lupia, A. (2006). How elitism undermines the study of voter competence. *Critical Review*, *18*(1-3), 217-232. https://doi.org/10.1080/08913810608443658

Lupia, A. (2015). *Uninformed*: *Why Americans know so little about politics and what we can do about it*. Oxford University Press.

MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological methods*, *1*(2), 130. https://psycnet.apa.org/doi/10.1037/1082-989X.1.2.130

MacCallum, R. C., Roznowski, M., & Necowitz, L. B. (1992). Model modifications in covariance structure analysis: the problem of capitalization on chance. *Psychological Bulletin*, *111*(3), 490. https://psycnet.apa.org/doi/10.1037/0033-2909.111.3.490

MacKinnon, R. (2011). Liberation technology: China's "networked authoritarianism". *Journal of Democracy*, *22*(2), 32-46.

MacKuen, M. (1990). Speaking of politics: Individual conversational choice, public opinion, and the prospects for deliberative democracy. In J. A Ferejohn & J. H. Kuklinski (Eds.), *Information and democratic processes*. University of Illinois Press.

Mahoney, J., & Goertz, G. (2006). A tale of two cultures: Contrasting quantitative and qualitative research. *Political analysis*, *14*(3), 227-249. https://doi.org/10.1093/pan/mpj017

Mansbridge, J. (1980). *Beyond adversary democracy*. Basic Books.

Marchlewska, M., Castellanos, K. A., Lewczuk, K., Kofta, M., & Cichocka, A. (2019). My way or the highway: High narcissism and low self-esteem predict decreased support for democracy. *British Journal of Social Psychology*, *58*(3), 591-608.

Maslow, A.H. (1988). On management. John Wiley and Sons.

Mason, L. (2018). *Uncivil agreement: How politics became our identity*. University of Chicago Press.

Maxwell, S. E., & Delaney, H. D. (1993). Bivariate median splits and spurious statistical significance. *Psychological Bulletin, 113*, 181–190. https://psycnet.apa.org/doi/10.1037/0033-2909.113.1.181

Mbembe, A. (2019). *Necropolitics.* Durham and London.

Mbembe, A. (2008). Necropolitics. In *Foucault in an Age of Terror: Essays on Biopolitics and the Defence of Society* (pp. 152-182). Springer.

McCombs, M., & Zhu, J.-H. (1995). Capacity, diversity, and volatility of the Public Agenda. *Public Opinion Quarterly, 59,* 495-525. https://doi.org/10.1086/269491

McCroskey, J.C. (1977). Classroom consequences of communication apprehension. *Communication Education, 26,* 27-33. https://doi.org/10.1080/03634527709378196

McCroskey, J.C. (2008). Communication apprehension: What have we learned in the last four decades. *Human Communication*, *12*(2), 179-187.

McCroskey, J. C. (1983). The communication apprehension perspective. *Communication, 12(1),* 1-25.

McCroskey, J. C. (1972). The implementation of a large-scale program of systematic desensitization for communication apprehension. *The Speech Teacher, 21*, 255-264.

McCroskey, J.C. Daly, J.A., Richmond, V.P., & Falcione, R.L. (1977). Studies of the relationship between communication apprehension and self-esteem. *Human Communication Research*, *3*(3), 269-299. https://psycnet.apa.org/doi/10.1111/j.1468-2958.1977.tb00525.x

McCroskey, J. C., & Richmond, V. P. (1987). Willingness to communicate. In J. C. McCroskey, & J. A. Daly (Eds.), Personality and interpersonal communication (pp. 129-156). SAGE Publications.

McCroskey, J. C., & Richmond, V. P. (1990). Willingness to communicate: A cognitive view. *Journal of Social Behavior and Personality, 5,* 19-37.

McDevitt, M., & Chafee, S. (2002a). From top-down to trickle-up influence: Revisiting assumptions about the family in political socialization, *Political Communication*, *19*(3), 281–301. http://dx.doi.org/10.1080/01957470290055501

McDevitt, M., & Chaffee, S. H. (2002b). The family in a sequence of political activation: Why civic interventions can succeed. *Journalism & Communication Monographs*, *4*,6–42. https://doi.org/10.1177/152263790200400102

Meadowcroft J. M. (1986). Family communication patterns and political development: The child's role. *Communication Research*, *13*(4), 603–624. https://doi.org/10.1177/009365086013004005

Meirick, P. C., & Bessarabova, E. (2016). Epistemic factors in selective exposure and political misperceptions on the right and left. *Analyses of Social Issues and Public Policy*, *16*(1), 36-68. https://psycnet.apa.org/doi/10.1111/asap.12101

Metts, S., & Cupach, W. (2008). Face theory. In Leslie A. Baxter and Dawn O. Braithwaite (Eds.) *Engaging theories in interpersonal communication: Multiple Perspectives.* Sage.

Micceri, T. (1989). The unicorn, the normal curve, and other improbable creatures. *Psychological Bulletin*, *105*(1), 156-166. https://psycnet.apa.org/doi/10.1037/0033-2909.105.1.156

Mondak, J. J., & Anderson, M. R. (2004). The knowledge gap: A reexamination of gender-based differences in political knowledge. *The Journal of Politics*, *66*(2), 492-512. https://doi.org/10.1111/j.1468-2508.2004.00161.x

Montgomery, M. (2020). *"I never shared my opinion again": Political communication apprehension and conservative college students* [Master Thesis submitted to Northern Illinois University]. Retrieved from Huskie Commons.

Morehouse Mendez, J., & Osborn, T. (2010). Gender and the perception of knowledge in political discussion. *Political Research Quarterly*, *63*(2), 269-279. http://dx.doi.org/10.1177/1065912908328860

Morey, A. C., Eveland, W. P., & Hutchens, M. J. (2012). The "who" matters: Types of interpersonal relationships and avoidance of political disagreement. *Political Communication*, *29*(1), 86-103. http://dx.doi.org/10.1080/10584609.2011.641070

Morey, A. C., & Yamamoto, M. (2020). Exploring political discussion motivations: Relationships with different forms of political talk. *Communication Studies, 71*(1), 78-97. https://doi.org/10.1080/10510974.2019.1692885

Morell, M. E. (2003). Survey and experimental evidence for a reliable and valid measure of internal political efficacy. *Public Opinion Quarterly*, *67*(4), 589–602. https://doi.org/10.1086/378965

Morrissey, B. S., & Woodall, A. (2022) Examining family communication patterns and political similarity's influences on relational closeness and self-esteem. [Presented at the National Communication Association Annual Convention, New Orleans, LA].

Mutz, D. C. (2006). *Hearing the other side: Deliberative versus participatory democracy*. Cambridge University Press.

Neville-Shepard, R. (2019). Post-presumption argumentation and the post-truth world: on the conspiracy rhetoric of Donald Trump. *Argumentation and Advocacy*, *55*(3), 175-193. https://doi.org/10.1080/10511431.2019.1603027

Newton, K., & Zmerli, S. (2011). Three forms of trust and their association. *European Political Science Review*, *3*(2), 169-200. https://doi.org/10.1017/S1755773910000330

Noelle-Neuman, E. (1974). *The spiral of silence: A theory of public opinion.*

Norris, P. (2023). Cancel culture: Myth or reality? *Political Studies*, *71*(1), 145-174. https://doi.org/10.1177/00323217211037023

Nunnally, J.C. and Bernstein, I.H. (1994) The assessment of reliability. *Psychometric Theory*, *3*, 248-292.

O'Connor, B. P. (2000). SPSS and SAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behavior Research Methods, Instruments, & Computers*, *32*(3), 396-402. https://doi.org/10.3758/BF03200807

Oetzel, J. G., & Ting-Toomey, S. (2003). Face concerns in interpersonal conflict: A cross-cultural empirical test of the face negotiation theory. *Communication Research*, *30*(6), 599-624. https://psycnet.apa.org/doi/10.1177/0093650203257841

Oloka-Onyango, J., & Tamale, S. (1995). " The personal is political," or why women's rights are indeed human rights: An African perspective on international feminism. *Human. Rights Quarterly*, *17*, 692-730. https://doi.org/10.1353/hrq.1995.0037

Orth, U., & Robins, R.W. (2022). Is high self-esteem beneficial? Revisiting a classic question. *American Psychologist*. *77*(1), 5-17. https://doi.org/10.1037/amp000092

Osborne, J. W. (2010). Data cleaning basics: Best practices in dealing with extreme scores. *Newborn and Infant Nursing Reviews*. *10*(1), 37-43. https://doi.org/10.1053/j.nainr.2009.12.009

Papacharissi, Z. (2002). The virtual sphere: The internet as a public sphere. *New Media & Society*, *4*(1), 9-27. https://doi.org/10.1177/14614440222226244

Papacharissi, Z. (2015). *Affective publics: Sentiment, technology, and politics.* Oxford University Press.

Papacharissi, Z. (2016). Affective publics and structures of storytelling: sentiment, events and mediality. *Information, Communication & Society*, *19*(3), 307-324. https://doi.org/10.1080/1369118X.2015.1109697

Pateman, C. (1970) *Participation and democratic theory*, Cambridge University Press.

Patterson, J. M. (1989). A family stress model: The family adjustment and adaptation response. In C. N. Ramsey Jr. (Ed.), *Family systems in medicine* (pp. 95–118). New York, NY: Guilford Press.

Peters, C. C., & Van Voorhis, W. R. (1940). *Statistical procedures and their mathematical bases*. New York: McGraw-Hill.

Peters, J. D. (1999). *Speaking into the air: A history of the idea of communication*. University of Chicago Press.

Petronio, S. 2002. *Boundaries of privacy*. State University of New York Press.

Petronio, S., Child, J. T., & Hall, R. D. (2021). Communication privacy management theory: Significance for interpersonal communication. In *Engaging theories in interpersonal communication* (pp. 314-327). Routledge.

Polletta, F., & Redman, N. (2020). When do stories change our minds? Narrative persuasion about social problems. *Sociology Compass*, *14*(4). https://doi.org/10.1111/soc4.12778

Popal, A. (2022). Using communication accommodation in political communications. [Dissertation submitted to University of Massachusetts Global]. ProQuest.

Prior, M. (2005). News vs. entertainment: How increasing media choice widens gaps in political knowledge and turnout. *American Journal of Political Science*, *49*(3), 577-592. https://doi.org/10.1111/j.1540-5907.2005.00143.x

Punches, B., & Ramos Salazar, L. (2022). It's interpersonal: An introduction to relational communication. New York: W.W. Norton.

Putnam, Robert D. (2000) *Bowling alone. The collapse and revival of American community,* Simon & Schuster.

Putnam, R. D. (1995). Tuning in, tuning out: The strange disappearance of social capital in America. *PS: Political science & politics*, *28*(4), 664-683. https://doi.org/10.2307/420517

Rawls, J. (1971). *A theory of justice*. Belknap Press.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.

Rousseau, J.J. (1754). *The social contract and discourses*. E.P. Dutton & Co.

Sairambay, Y. (2020) The contemporary challenges of measuring political participation. *Slovak Journal of Political Sciences*, 20(2), pp. 206-226. Available at: https://sjps.fsvucm.sk/index.php/sjps/article/view/164

Scheufele, D. A. (2000). Talk or conversation? Dimensions of interpersonal discussion and their implications for participatory democracy. *Journalism & Mass Communication Quarterly*, *77*(4), 727-743. https://doi.org/10.1177/107769900007700402

Scheufele, D. A., & Moy, P. (2000). Twenty-five years of the spiral of silence: A conceptual review and empirical outlook. *International Journal of Public Opinion Research*, *12*(1), 3-28. https://doi.org/10.1093/ijpor/12.1.3

Scheufele, D. A., Nisbet, M. C., Brossard, D., & Nisbet, E. C. (2004). Social structure and citizenship: Examining the impacts of social setting, network heterogeneity, and informational variables on political participation. *Political Communication*, *21*(3), 315-338. https://doi.org/10.1080/10584600490481389

Schneider, M. C., & Bos, A. L. (2019). The application of social role theory to the study of

gender in politics. Political Psychology, 40(1), 173-213. https://doi.org/10.1111/pops.12573

Schneider, E., & Marshall, T.J. (2023). At height of pandemic, more than half of people age 16 and over helped neighbors, 23% formally volunteered. *U.S. Census Bureau.* Retrieved from: https://www.census.gov/library/stories/2023/01/volunteering-and-civic-life-in-america.html

Schudson, M. (1998). *The good citizen: A history of American civic life*. Harvard University Press.

Schudson, M. (1997). Why conversation is not the soul of democracy. *Critical Studies in Mass Communication*, *14*(4), 297-309. https://doi.org/10.1080/15295039709367020

Settle, J. E., & Carlson, T. N. (2019). Opting out of political discussions. *Political Communication*, *36*(3), 476-496. https://doi.org/10.1080/10584609.2018.1561563

Shah, D. V. (2016). Conversation is the soul of democracy: Expression effects, communication mediation, and digital media. *Communication and the Public*, *1*(1), 12-18. https://doi.org/10.1177/2057047316628310

Shawcross, K (Writer & Director). (2020, February 1). The enemy of trust (Volume 7, Episode 13) [Web series episode]. In M. Hullum, B. Burns, & K. Shawcross (Executive Producers), *RWBY*. Rooster Teeth Studios.

Shulman, H.C., & DeAndrea, D.C. (2014). Predicting success: Revisiting assumptions about family political socialization. Communication Monographs, 81(3), 386–406. https://psycnet.apa.org/doi/10.1080/03637751.2014.936478

Sinclair, B. (2012). *The social citizen: Peer networks and political behavior*. University of Chicago Press.

Singhal, A. (2005). Dissemination versus dialogue: A false dichotomy. *Mazi*. Retrieved from: https://drsinghal.victorportillo.com/wp-content/uploads/2021/06/singhal_dissemination_dialogue.pdf

Smith, A. (2013). *Civic engagement in the digital age*. https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2013/04/PIP_CivicEngagementintheDigitalAge.pdf\

Sobieraj, S., Berry, J.M., & Connors, A. (2013). Outrageous political opinion and political anxiety in the US. *Poetics, 41*(5), 407-432. https://doi.org/10.1016/j.poetic.2013.06.001

Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin, 139*(1), 213–240. https://doi.org/10.1037/a0028931

Steiger, J. H. (2016). Notes on the Steiger–Lind (1980) handout. *Structural Equation Modeling: A Multidisciplinary Journal*, *23*(6), 777-781. https://psycnet.apa.org/doi/10.1080/10705511.2016.1217487

Steiger, J. H., & Lind, J. C. (1980). Statistically based tests for the number of common factors. The annual meeting of the Psychometric Society, Iowa City, IA. .

Strömbäck, J. (2005). In Search of a Standard: four models of democracy and their normative implications for journalism. *Journalism Studies*, *6*(3), 331-345. https://doi.org/10.1080/14616700500131950

Stromer-Galley, J. (2002). New voices in the public sphere: A comparative analysis of interpersonal and online political talk. *Javnost - The Public*, *9*(2), 23-41. https://doi.org/10.1080/13183222.2002.11008798

Stromer-Galley, J. (2017). Political discussion and deliberation online. In K. H. Jamieson & K. Kenski (Eds.), *The Oxford handbook of political communication*. Oxford University Press.

Stryker, R., Conway, B. A., & Danielson, J. T. (2016). What is political incivility? *Communication Monographs*, *83*(4), 535-556. https://psycnet.apa.org/doi/10.1080/03637751.2016.1201207

Swedberg, R. (2014). *The art of social theory*. Princeton University Press.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Pearson.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks/Cole.

Thakerar, J., Giles, H., & Chesire, J. (1982). Psychological and linguistic parameters of speech accommodation theory. In C. Fraser & K.R. Scherer (Eds.), *Advances in the social psychology of language* (pp. 205-255). Cambridge University Press.

Ting-Toomey, S. (1988). Intercultural conflict styles: A face-negotiation theory. In Y.Y. Kim and W. Gudykunst (Eds.), *Theories in intercultural communication*. Newbury Park, CA: Sage.

Ting-Toomey, S. (2005). The matrix of face: An updated face-negotiation theory. In W.B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 71-92). Sage.

Tourangeau, R., Rips, L.J., Rasinski, K. (2000). *The psychology of survey response.* Cambridge University Press.

Tufecki, Z. (2017). *Twitter and tear gas*: *The power and fragility of networked protest*. Yale University Press.

Ulbig, S. G., & Funk, C. (1999). Conflict avoidance and political participation. *Political Behavior*, *21*(3), 265-282. https://psycnet.apa.org/doi/10.1023/A:1022087617514

Vaccari, C., & Valeriani, A. (2018). Digital political talk and political participation: Comparing established and third wave democracies. *SAGE Open*, *8*(2). https://doi.org/10.1177/2158244018784986

Vaccari, C., Valeriani, A., Barberá, P., Bonneau, R., Jost, J. T., Nagler, J., & Tucker, J. A. (2015). Political expression and action on social media: Exploring the relationship between lower- and higher-threshold political activities among Twitter users in Italy. *Journal of Computer-Mediated Communication*, *20*(2), 221-239. https://doi.org/10.1111/jcc4.12108

Valenzuela, S., Kim, Y., & Gil de Zúñiga, H. (2011). Social networks that matter: Exploring the role of political discussion for online political participation. *International Journal of Public Opinion Research*, *24*(2), 163-184. https://doi.org/10.1093/ijpor/edr037

van der Meer, T. W. G. (2017). Political trust and the "crisis of democracy". In *Oxford Research Encyclopedia of Politics*.

Van Duyn, E. (2021). *Democracy lives in darkness: How and why people keep their politics a secret*. Oxford University Press.

Van Duyn, E. (2018). Hidden democracy: Political dissent in rural America. *Journal of Communication*, *68*(5), 965-987. https://doi.org/10.1093/joc/jqy042

Van Duyn, E. (2023). Negotiating news: How cross-cutting romantic partners select, consume, and discuss news together. *Political Communication*, 1-20. https://doi.org/10.1080/10584609.2023.2270445

Van Green, T. (2021, November 23). Republicans and Democrats alike say it's stressful to talk politics with people who disagree. *Pew Research Center*.

Van Zoonen, L. (2012). I-Pistemology: Changing truth claims in popular and political culture. *European Journal of Communication, 27*(1), 56-67. https://doi.org/10.1177/0267323112438808

Verba, S., Schlozman, K.L., & Brady, H.E. (1995). *Voice and equality: Civic voluntarism in American politics*. Harvard University Press.

Weick, K. E. (1995). *Sensemaking in organizations*. Sage.

Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization science*, *16*(4), 409-421. http://dx.doi.org/10.1287/orsc.1050.0133

Wojcieszak, M. (2011). Deliberation and attitude polarization. *Journal of Communication*, *61*(4), 596-617. https://doi.org/10.1111/j.1460-2466.2011.01568.x

Wolak, J. (2020). Self-confidence and gender gaps in political interest, attention, and efficacy. *The Journal of Politics*, *82*(4), 1490-1501. https://doi.org/10.1086/708644

Woodall, A. (in-progress). What is political communication?: A grounded theory approach to defining the field and what it studies.

Woods, H. S., & Hahner, L. A. (2019). *Make America meme again: The rhetoric of the Alt-Right*. Peter Lang New York.

Wyant, M. H., Hurst, E. H., & Reedy, J. (2020). Political socialization of international students: Public-issue discourse and discussion on the college campus. *Journal of Intercultural*

Communication Research, *49*(4), 372-393. https://doi.org/10.1080/17475759.2020.1785529

Wyatt, R. O., Katz, E., & Kim, J. (2006). Bridging the spheres: Political and personal conversation in public and private spaces. *Journal of Communication*, *50*(1), 71-92. https://doi.org/10.1111/j.1460-2466.2000.tb02834.x

Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist*, *47*(4), 302–314. https://doi.org/10.1080/00461520.2012.722805

Young, D. (2023). Political communication apprehension in an era of activism: A survey of Thai undergraduates. *LEARN Journal*, *16*(1), 408-428.

Young, D.G. (2019). *Irony and outrage*: *The polarized landscape of rage, fear, and laughter in the United States*. Oxford University Press.

Young, D. G. (2023). *Wrong: How media, identity and politics drive our appetite for misinformation.* John Hopkins Press.

Zakahi, W.R., & McCroskey, J.C. (1989). Willingness to communicate: A potential confounding variable in communication research. *Communication Reports*, *2*(2), 96-104. https://doi.org/10.1080/08934218909367489

Zaller, J. (2003). A new standard of news quality: Burglar alarms for the monitorial citizen. *Political Communication*, *20*(2), 109-130. https://doi.org/10.1080/10584600390211136

Zwick, W. R., & Velicer, W. R. (1986). Factors influencing four rules for determining the number of principal components to retain. *Psychological Bulletin, 99*, 432-442. https://psycnet.apa.org/doi/10.1037/0033-2909.99.3.432

Appendices

Appendix One: Measures

This appendix contains the measures for every variable explored in this dissertation.

Measure One: Scale of Relational Political Communication Apprehension

***indicates a reverse coded item.**

Dimension One: Isolation (Being seen as part of the group).

S1*: I am unafraid of expressing political opinions that others will disagree with.

S2*: I do not worry about how others will react to my political opinions.

S3: I would rather keep my opinion to myself than start a political disagreement.

S4*: I am not afraid to express my political beliefs around others who might disagree.

S5: I worry about how my friends would react if I expressed my political opinions.

S6*: I rarely stress about how others might react to my political opinions.

S7: I worry that people will stop talking to me if I express my political beliefs.

S8: I worry that expressing my political opinions could cost me a few friendships.

S9*: I never worry about losing friends when I talk politics.

S10: I worry my friends might exclude me if they knew about my political beliefs.

S11: I worry that my political beliefs would not be tolerated by others.

S12: I have wondered if my political beliefs would be considered taboo by others.

Dimension Two: Sensitivity (being sensitive to the feelings of others)

E1: It is hard to talk about politics without someone getting uncomfortable.

E2: I avoid talking about politics because it will upset the person I'm talking to.

E3: My friends react emotionally when we talk about politics.

E4: I'm afraid that bringing up politics will cause distress for the person I'm talking to.

E5: I worry the person I'm talking with will get really worked up over politics.

E6: My friends get tense when we talk about politics.

E7: In my experience, talking about politics always seems to end up with someone getting upset.

E8: I dislike watching people get worked up over politics.

E9: My friends take political discussion personally.

E10: I have seen people get upset just from thinking about politics.

E11*: I rarely worry about hurting someone's feelings when I talk about politics.

E12*: My friends talk politics in a very calm way.

Dimension Three: Knowledgeability Face (being seen as knowledgeable)

F1: I am worried about looking stupid when I talk about politics.

F2*: I feel confident in myself during political conversations.

F3: I feel dumb when people around me talk about politics.

F4: I am concerned about appearing unintelligent in a political conversation.

F5: I want other people to see me as knowledgeable in political conversations.

F6: I feel lost in a bad way when people around me start talking politics.

F7: I worry someone would call me out for not knowing enough about a political issue.

F8: I am self-conscious of my intelligence in political conversations.

F9: I feel very embarrassed if I get political facts wrong in front of others.

F10: I rarely feel uninformed in political conversations.

F11: I want to look credible when I discuss politics.

F12: I beat myself up when I get facts wrong in political conversations.

Measure Two: Willingness to Communicate about Politics (Taken from Kleinman and Kleinman, 2015)

This measure relies on willingness with a specific person and consists of two parts. The first part is used to identify a person for answer questions in the second part. To use it, give the respondent one of the following letters at random: A, J, S, M L ,T, E or , R and ask them to think of someone they know whose name starts with that letter. Next, ask them if they would be able to recognize this person if they saw them out in the world. If they answer yes, proceed to Part Two. If they answer no, repeat Part One with a different letter or ask them to recall the last person they spoke with that they recognized.

Part Two consists of the following questions, asked on a five-point scale from Very Unlikely to Very Likely.

1. Suppose you ran into -INSERT NAME HERE-. at a party. How likely would you be to engage in a conversation with this person about the topic of politics broadly speaking?
2. Suppose you ran into -INSERT NAME HERE-. at a party. How likely would you be to initiate a conversation about politics broadly speaking?
3. Suppose you ran into -INSERT NAME HERE- at a party. Assume that in the natural flow of conversation a political topic generally speaking arose. How likely would you be to continue discussing the topic?

4. Suppose were eating a meal with -INSERT NAME HERE-. How likely would you be to engage in a conversation with this person about the topic of politics broadly speaking?
5. Suppose were eating a meal with -INSERT NAME HERE-. How likely would you be to initiate a conversation about politics broadly speaking?
6. Suppose you were eating a meal with ${q://QID16/ChoiceTextEntryValue}. Assume that in the natural flow of conversation a political generally speaking arose. How likely would you be to continue discussing the topic?

Measure Three: Alternate measure of PCA taken from Young (2023)

1. I would feel comfortable participating in a political discussion with a group of people who share my political views.
2. Taking part in a political discussion with a group of classmates would be enjoyable.
3. My thoughts become confused and jumbled when having a political discussion with someone with different political views than my own.
4. I would feel comfortable participating in a political discussion with a group of classmates who held various political views.
5. When I am participating in a political discussion, I get so nervous that I forget pieces of evidence that support my view.
6. I would feel comfortable participating in a political discussion with a group of people even if I did not know which political opinions they held.
7. I would not feel comfortable participating in a political discussion with a classmate that that shares my political views.
8. Because conflict can occur in political discussions, they make me nervous.
9. Contributing to political discussions is difficult for me.

10. would feel comfortable participating in a political discussion with a group of classmates who have diverse political beliefs.
11. Whether I share my political opinions during a discussion depends on the topic we are discussing.
12. I dislike getting involved in political discussions with classmates because it could ruin our relationships with one another.
13. I would feel comfortable participating in a political discussion with a classmate even if I didn't know their political opinions.
14. Having discussions about politics with people with different political opinions than my own does not intimidate me.
15. Certain parts of my body feel tense when people start talking about politics and expect me to contribute.
16. Discussing politics makes me uncomfortable, regardless of who it is with.
17. It is easier to have political discussions with family than friends.
18. It is easier to have political discussions with my friends than my family.
19. Having political discussions outside of class is easier than having political discussions with classmates.
20. Participating in political discussions with classmates is nerve-wracking.
21. would feel uncomfortable participating in a political discussion with a classmate who has different political beliefs from my own.
22. I would feel comfortable participating in a political discussion with a classmate who has the same political beliefs as me

23. I would feel uncomfortable participating in a political discussion with a group of classmates who have different political beliefs from mine.

24. . Participating in political discussions with classmates is nerve-wracking.

Measure Four: Emotional Trust- Taken from Johnson and Swap (1982)

1. If _____ unexpectedly laughed at something I did or said, I would wonder if they were being critical and unkind.
2. I could talk freely to _____ and know that _____would want to listen.
3. _____ would never intentionally misrepresent my point of view to others.
4. If _____ knew what kinds of things hurt my feelings, I would never worry that they would use them against me, even if our relationship changed.
5. I would be able to confide in _____ and know that they would want to listen.
6. If I told _____ what things I worry about, they would not think my concerns were silly.

Measure Five: View Similarity- (Adapted from Johnson et al., 2019)

We would like to ask you about this person's political choices in comparison to your own.

1. _____ and I tend to have similar political views.
2. I don't usually agree with _____ concerning politics.
3. _____ will vote for the same presidential candidate as me in the 2024 election.
4. _____ will probably vote for a different presidential candidate than I will.

Measure Six: Political Self-efficacy-(Taken from Craig and colleagues, 1990)

1. I consider myself well-qualified to participate in politics. (SELFQUAL; agree)

2. I feel that I have a pretty good understanding of the important political issues facing our country. (UNDRSTND; agree)

3. *Other people seem to have an easier time understanding complicated issues than I do. (OTHERS; disagree)

4. I feel that I could do as good a job in public office as most other people. (PUBOFF; agree)

5.* I often don't feel sure of myself when talking with other people about politics and government. (NOTSURE; disagree)

6. I think that I am as well-informed about politics and government as most people. (INFORMED; agree)

7.* Sometimes politics and government seem so complicated that a person like me can't really understand what's going on. (COMPLEX; disagree)

Measure Seven: Political Participation and Civic Engagement- Adapted from The Pew Research Center (2013)

Below is a list of activities some people might do. If the opportunity arose, how likely do you think you would be to…

Factor One: Civic Group Participation

1. Attend a political rally or speech
2. Attend an organized protest of any kind.
3. Attend a political meeting on local, town, or school affairs.
4. Work or volunteer for a political party or candidate.
5. Be an active member of any group that tries to influence public policy or government, not including a political party.
6. Work with fellow citizens to solve a problem in your community.

Factor Two: Government and Media Participation

1. Contact a national, state, or local government official in person, by phone call, or by letter about an issue that is important to you.
2. Contact a national, state, or local government official online, by email or by text message about an issue that is important to you.
3. Sign a digital or paper petition.
4. Send a letter to the editor by mail to a newspaper or magazine.
5. Call into a live radio or tv show to express an opinion.
6. Comment on an online news story or blog post to express an opinion about a political or social issue.
7. Share or post content online related to a political or social issue.
8. Send text or voice messages to others about a political or social issue.

Factor Three: Online Civic Engagement

1. Post links to political stories or articles for others to read.
2. Post your own thoughts or comments on political or social issues.
3. Encourage other people to vote.
4. "Like" or promote material related to political or social issues that others have posted.
5. Encourage other people to take action on a political or social issue that is important to you.

Measure Eight: Stress (taken from Cohen et al., 1983)

0. never 1. Almost never 2. Sometimes 3. Fairly often 4. Very often

1. In the last month, how often have you been upset because of something that happened unexpectedly?

2. In the last month, how often have you felt that you were unable to control the important things in your life?

3. In the last month, how often have you felt nervous and “stressed”?

4*a In the last month, how often have you dealt successfully with irritating life hassles?

5.a In the last month, how often have you felt that you were effectively coping with important changes were occurring in your life?

6.* In the last month, how often have you felt confident about your ability to handle your personal problems?

7.* In the last month, how often have you felt that things were going your way?

8. In the last month, how often have you found that you could not cope with all the things that you had to do?

9.* In the last month, how often have you been able to control irritations in your life?

10.* In the last month, how often have you felt that you were on top of things?

11. In the last month, how often have you been angered because of things that happened that were outside of your control?

12. In the last month, how often have you found yourself thinking about things that you have to accomplish?

13.* In the last month, how often have you been able to control the way you spend your time?

14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Measure Nine: Relational Self-Esteem (From Rosenberg, 1965)

1. I feel that I am a person of worth, at least on an equal plane with others.
2. I feel that I have a number of good qualities
3. All in all, I am inclined to feel that I am a failure.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself.
9. I certainly feel useless at times.
10. At times I think I am no good at all.

Measure Ten: Miscellaneous Questions

Gender: Please select the gender identity you most closely identify with.

Man

Woman

Non-binary / third gender

Prefer not to say

Ethnicity: Please select the ethnic identities you most closely identify with. You are allowed to select multiple options on this screen.

White

Black or African-American

American Indian or Alaska Native

Asian

Native Hawaiian or Pacific Islander

Other

Age: Please enter the age you turned at your last birthday.

Party: Please select the political party you most closely identify with.

Democratic Party

Independent

Republican Party

Comments: Do you have any comments about this study that you think the researchers should be aware of?

Appendix Two: Introductions to Methods of Analysis

This section is meant to break down the theory, purpose, and procedure behind the different statistical tests used in this dissertation. This section is primarily meant for non-academic audiences but may also serve as a refresher for non-quantitative scholars. For clarity purposes, the length of these primers is kept intentionally brief. If you have more questions, I encourage looking into some of the books I cite here or you can just look them up online.

Primer: Significance

Many statistical relationships can be subject to chance. When a hypothesis is tested, it is tested against a null hypothesis that essentially says "nuh-uh" to any proposed relationship. A null hypothesis proposes something different from the expected relationship. In this case, that opposite is not positive-negative. It is positive-not positive or negative-not negative. Many statistical tests compare results against randomness to ensure any result they find is intentional and in doing so, reject the null hypothesis. To interpret significance tests, we use a value represented by *p*. *P* values are products that range from 0 to 1, with higher values indicating a higher probability of a random result and lower *p* values indicate more reason to reject the null hypothesis. Any result with a low enough *p* value is considered statistically significant and has sufficient reason to reject the null hypothesis.

There is a threshold for *p* values that is commonly agreed upon in statistical methods. The threshold of .05 is the most common limit for a label of statistical significance. This threshold was set nearly 100 years ago by Fisher (1925), who proposed it as a sufficient level that represented a 1 in 20 chance that the result was wrong. Why Fisher chose this threshold is unclear, but his argument was so influential that it continues today. Some researchers prefer higher thresholds such as .01, which reflects in a 1 in 100 chance of being wrong or a .001,

which reflects a 1 in 1000 chance. This standard has largely been gatekept because it is considered an appropriate boundary between a defensible or indefensible answer. Past attempts have been made to lower the standard but the .05 level is still considered the predominant maximum value for a significant finding.

Primer: Measurement

Backup Readings:

Singleton, R.A. and Straits, B.C. (2018). *Approaches to social research* (6th ed.) Oxford University Press.

Treadwell, D. (2017). *Introducing communication research: Paths of inquiry* (3rd ed.). SAGE.

Measurement is a process of assigning numeric value to units of analysis that represent a concept of interest. We measure things to help us make sense of the world and we use units of analysis that make sense to us. These units are not always objective or perfect, but they are still useful. Measurement begins with conceptualizing the subject of interest. Some things are sensibly measured universally such as time by using seconds, minutes, etc. Social subjects are harder to universally measure and require other notions of measurement. When a subject is conceptualized, we can then also operationalize it, meaning that we can capture elements of it through measurement, replication or observation. This process runs on the assumption that the thing can be collected and examined. Operationalization is necessary for measurement.

There are different levels of measurement, each with their own benefits.

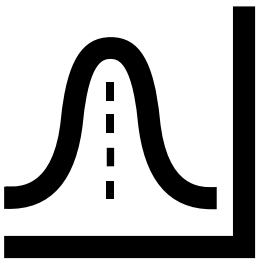
Nominal measurement deals with categories or labels that are distinct but not in pattern. These labels serve as tags for a concept but do not distinguish them beyond the name itself. An example of this might be political party identification. Democrats and Republicans are not

empirically distinct and are equivalent in their labels as members in a political party. When we change these labels into numbers, the number only indicates the group. Ordinal measurement indicates a distinction between units of analysis based on rank or progression. In other words, this form of measurement presumes one group has more of something than another. Ranking your top three TV shows would be an example of this. Interval measurement includes the previous notions but also presumes that each category is equidistant. There is an even gap between 1 and 2, 3 and 4. One example of this might be measuring time in seconds, or temperature in degrees. Ratio measurement includes the previous notions of the other three with the addition of an absolute zero point. An example of this approach might be money. There is an even gap between each dollar, but a person can also have absolutely no money.

When we measure something, the measure should have both reliability and validity. Reliability refers to consistency, and validity deals with accuracy. The measure should be able to capture both of these things.

Primer: Data Normality

Normality refers to the extent to which all the scores on a variable fall within an expected distribution, typically visualized by a bell curve like this one (which I pulled from the Icons in Microsoft Word).



Normality is also associated with basic descriptive statistics you might recognize from high school: the mean, median, and mode Imagine asking 100 people to rate how their day is going on a scale from 1 to 10. A normal distribution in this case would expect a number in the middle to be the most common (mode). Additionally, we would expect the average score to end up somewhere in the middle (mean) and same with a midpoint between the highest and lowest scores (median).

If we put all of the scores on a line with the lowest scores on the left side and furthest scores on the right side, the data are more normal if you have a large number of scores in the middle of your possible answers. Most of these answers are expected to fall within one standard deviation of your mean score (around 68%). Normality is typically gauged through two characteristics: skewness and kurtosis. Skewness refers to symmetry in the distribution, an equal number of high and low scores. When the data is skewed, the bulk of scores rest on one end of the bell curve. Kurtosis refers to peakedness or how high the curve goes. The higher the curve, the more cases with the same answer and the more kurtotic the distribution. The lower the curve, the more diverse the cases and the less kurtotic the distribution.

Normality matters because it can distort an expected result. For instance, if everyone rated their day as a five out of ten, we would not be able to explore why different scores exist because there are no different scores in the dataset. We would also not be able to explain why someone else would have a different score because we would have no alternative scores to compare. Normality is an expectation when you sample participants randomly, because true randomness should prevent problems with normality from occurring.

Primer: Correlations

A correlation refers to a statistical relationship between two variables. Mathematically, correlations represent an overlap in the covariance between the two variables. The more the two items change together, the more they correlate. Correlation relationships can be positive or negative. A positive correlation captures a relationship in which both variables increase or decrease together. A negative correlation captures a relationship in which an increase in one variable predicts a decrease in another variable. Most correlations are calculated using Pearson's correlation coefficient, with values ranging from -1 to 0 to 1. Values from 0 to 1 are positive correlations with values closer to 1 representing larger positive correlations. Values from -1 to 0 are negative correlations with values closer to -1 representing larger negative correlations.

There is some debate surrounding what constitutes a small, medium, or large correlation effect. One of the most influential standards comes from Cohen (1992) who proposed rules of 0.10, 0.30, and 0.50 for small, medium, and large correlations, respectively. However, other researchers have challenged this notion. One example comes from Gignac and Szodorai (2016), who argue Cohen's standards are not based on substantial evidence. Instead, they rely on data to propose small, medium, and large groupings based on cumulative percentages, with a small correlation being something that fits within the bottom 25th percentile of all correlation values, medium being within the 50th percentile, and large being in the 75th percentile. Using this standard, Gignac and Szodorai propose small, medium, and large effects of 0.10, 0.20, and 0.30. I do not strictly endorse either of these standards, but the results in this work will lead some correlations to change labels based on which standard is adopted.

Study One: Exploratory Factor Analysis

An exploratory factor analysis or EFA is a statistical test used to examine correlations between data to discover factors that reveal patterns in the data. Think of this kind of like creating groups based on measurement. We look at a set of data to identify subsets within the data. These subsets are at least somewhat independent of each other.

We use these tests to assess that the data is suitable for factor analysis and that there are factors to separate from the data. For example, Bartlett's test of sphericity examines the data and tests it against a null hypothesis that every variable is completely distinct from the other. This would mean each item correlates with itself but not at all with other items. This is also referred to as an identity matrix. We also have to use all three tests because each of them individually have problems for which the others can account. Bartlett's test of sphericity is sensitive to sample size, and it has been suggested that it is not helpful with samples where there are at least five people per item asked (Tabachnick & Fidell, 2007). This produces a problem because at least five people per variable is also considered a minimum necessary sample size for factor analysis (Carpenter, 2017; DeVellis & Thorpe, 2021).

When the data are examined, the software calculates a number of factors to explain all of the variance in the data. These values are examined through the calculation of eigenvalues. Explaining an eigenvalue itself is a bit too complex for an accessibility section, so the major thing to know right now is that eigenvalues are coefficients of eigenvectors, non-zero numbers that reflect a pattern of data points. These coefficients correspond to the amount of variance explained by a factor, and the factor is based on how many variables correlate together. The goal with interpreting eigenvalues is identifying which ones contain the most covariance in the dataset. The criteria for evaluating eigenvalues is explained in Chapter 4.

To assess an EFA, the following criteria should (probably) be followed. All of these criteria are discussed in a best practices article cited earlier in this dissertation (Carpenter, 2017).

- Bartlett's test of sphericity should be significant (meaning less than .05).
- The Kaiser-Meyer-Olkin measure of sampling adequacy should be at least .6.
- Items should load onto a single factor with a value of .32 or greater.
- Factors should have at least three items to be relevant.
- Factors should be examined empirically to identify underlying relationships between the items. The underlying relationship reflects the nature of the factor. This requires the researcher to look at the items within the factor, how they are worded, what they are intended to capture, and what overlap multiple items might have.

Study Two: Confirmatory Factor Analysis

Where an EFA looks to explore data, a confirmatory factor analysis or CFA looks to compare observed data against a hypothesized measurement model. In other words, we can use a CFA to see if things (i.e., the items in a scale) fit together the way we think they do. To test this, researchers use software to produce matrices of correlations or covariances between measured items in a scale. In this process, there are several things to consider. I will deconstruct these things briefly. This is not a comprehensive guide.

The major goal of a CFA is to see whether the hypothesized measurement model (that is how we think factors relate to their indicators, which are the items in a scale) can be supported with the observed model resulting from the data collected. Model fit indicates plausibility, not correctness. Accordingly, CFA's are typically tested as hypothesized models. These hypotheses are based on theories and educated guessing. A more thoughtful hypothesized model will

improve plausibility, but even a plausible model can be incorrect. To interpret model fit, goodness-of-fit is one of the most important criteria in a CFA. Goodness of fit is evaluated using two types of standards: absolute fit indices and relative fit indices.

Absolute fit indices refer to how well the observed model reproduces the hypothesized model. The most common standard for goodness of fit in these indices is the chi-squared test, which takes observed matrices from the observed model in data and compares them with expected matrices from the hypothesized model. The overlap between these matrices is used to calculate a chi-square value and a probability value. The probability value reflects the chance that the hypothesized model and observed model are significantly different from each other. In this case, a higher *p* value (meaning a non-significant chi-square difference) is preferred because it represents a non random difference between the hypothesized model and the observed data. Since the chi-square value is sensitive to sample size, other absolute fit indices are used alongside the chi-square. One example of this is the Root Mean Square Error of Approximation (RMSEA) or Standardized Root Mean Residual (SRMR), which are discussed in more detail in Chapter 4 of this work.

Relative fit indices take absolute fit indices a step further by taking their results and comparing them to a null model where nothing correlates. Overlap between these models indicates poor fit. This approach usually relies on comparative fit indices (Bentler, 1990) to draw conclusions.

When performing a CFA, the following assumptions should be checked. These assumptions are not necessarily deal breakers, but they are reasons to reconsider using a CFA if they are not met.

- Data are normal, devoid of outlier cases and not missing.
- Item measures are continuous.
- The relationships between items and hypothesized factors are mutually exclusive. Items should not correlate with other factors.

Study Three: Hierarchical Regression Analysis

Regression analysis is a statistical test that involves predicting what the value of one variable will be based on the value of another variable. While correlation is examined using two variables, regression operates on the presumption of an independent variable and a dependent variable. Regressions are conducted to determine how much a change in an independent variable leads to a change in a dependent variable. When we run this process with multiple independent variables and one dependent variables, we perform a multiple regression. This process can also be complexified further by accounting for cluster variables, or variables that would naturally affect the dependent variable together. These clusters can then be applied to the dependent variable individually to produce multiple regression models, creating a hierarchical regression model. The goal of these models is to see how much variance in the dependent variable can be explained by the proposed independent variable(s).

Regression results are interpreted through several statistics. The first statistic is a determination coefficient that represents the variance explained. This statistic refers to how much change in the independent variable can predict changes in the dependent variable. This value is reported as R or R^2, with values between 0 and 1, and with higher values usually being preferred because they indicate more variance being explained. There is a concern with using this coefficient based on inflation. R values will increase just by adding predictors to the model. Regardless of whether those predictors are meaningful or not. In some cases, we may substitute

R or R^2 with an adjusted R^2 based on how complex the model is. The second statistic is a regression coefficient, calculated as B or the standardized version beta (β). B can manifest as any number, with higher positive values or lower negative values indicating stronger overlap. The standardized version β coefficient contains values between 0 and 1, with higher positive values and lower negative values indicating a stronger relationship. The third statistic is an F test that is designed to see if the R or R^2 value differs significantly from zero. The fourth statistic is a series of p significance tests for R, R^2, B, β, and F.

When performing a regression, the following assumptions should be checked:

- A linear relationship exists between the variables, meaning a change in Variable X leads to a change in Variable Y.
- Data are normally distributed.
- Case residuals are independent of each other. No case affects the results substantially more than the others.
- Errors in a relationship remain constant across all levels of an independent variable.

Appendix Three: Supplementary Tables and Figures

Note: Additional tables and figures are only given for Study One. Additional information for Study Two

Table 12:
Study One: Initial Factor Analysis Eigenvalues

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	11.66	32.40	32.40	11.20	31.12	31.12	8.11
2	4.18	11.62	44.02	3.86	10.73	41.84	8.33
3	2.63	7.31	51.32	2.01	5.59	47.43	6.46
4	2.40	6.67	58.00	2.00	5.57	53.00	5.93
5	1.59	4.40	62.40	1.28	3.55	56.55	7.71
6	1.19	3.31	65.71	.76	2.11	58.66	2.24
7	.93	2.58	68.29				

Figure 4:

Initial Scree Plot for Visual Check of Factor Retention

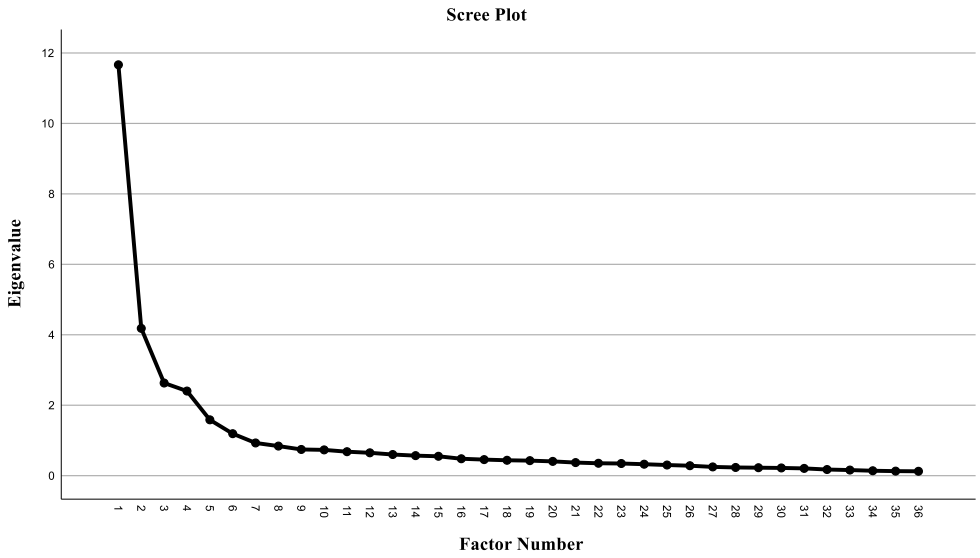


Table 14:
Study One- Final Solution -Eigenvalues

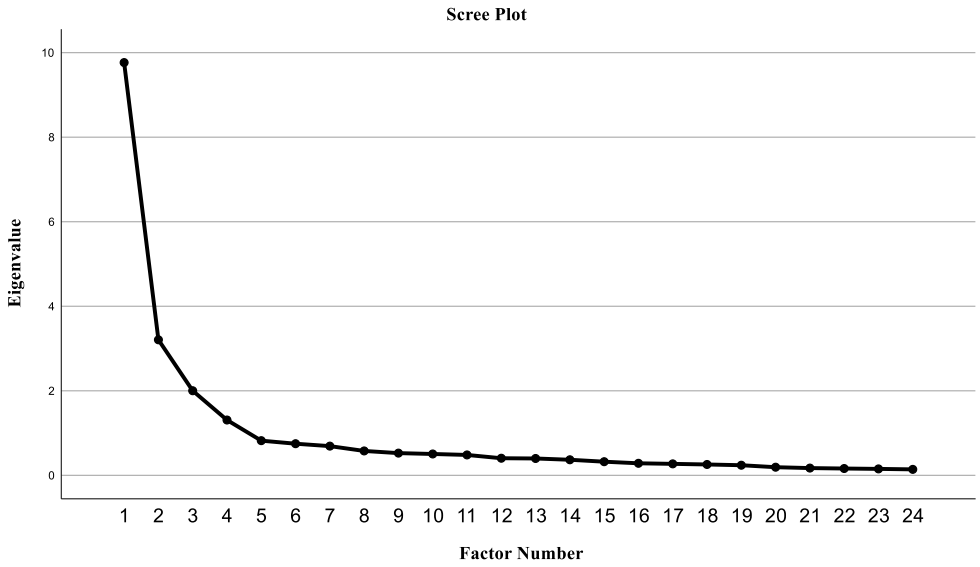
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	9.77	40.69	40.69	9.37	39.03	39.02	7.17
2	3.21	13.36	54.05	2.88	11.98	51.01	7.06
3	2.00	8.34	62.39	1.62	6.77	57.77	6.29
4	1.31	5.45	67.84	.96	4.00	61.77	5.23
5	.82	3.42	71.26				

Extraction Method: Maximum Likelihood.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Figure 5:

Study One Scree Plot for Final Solution



Appendix Four: Supplemental Text

Supplement One: LISREL Syntax for Study Two

```
!StudyTwoCFA
RAW DATA FROM FILE STUDYTWOCFA.LSF
LATENT VARIABLES
 SPIRAL EVAPOR FACE PCA
 S2=1*SPIRAL
 S5-S12=SPIRAL
 E1=1*EVAPOR
 E2-E5=EVAPOR
 F1= 1*FACE
 F2-F8=FACE
 SPIRAL EVAPOR FACE = PCA
 LET THE ERRORS OF S5 AND S10 CORRELATE
 LET THE ERRORS OF S2 AND S6 CORRELATE
 LET THE ERRORS OF F3 AND F6 CORRELATE
 LISREL OPTIONS: SC
 PATH DIAGRAM
 END OF PROBLEM
```

Supplement Two: Means, Standard Deviations, and Correlation Matrix used in Study Two

Note: Means and standard deviations were pulled directly from LISREL Output. Correlation matrix was calculated in SPSS Statistics 27.

Means

S1	S2	S4	S5	S6	S7
1.575	2.638	2.501	3.170	4.769	3.072

Means

S8	S9	S10	S11	S12	E1
4.769	2.497	4.024	3.488	2.319	0.659

Means

E2	E4	E5	E8	F1	F2
1.270	1.234	1.242	0.441	2.580	3.784

Means

F3	F4	F6	F7	F8	F10
3.547	2.125	4.024	2.181	2.221	1.811

Standard Deviations

S1	S2	S4	S5	S6	S7
1.416	1.472	1.636	1.543	2.722	1.543

Standard Deviations

S8	S9	S10	S11	S12	E1
2.722	1.327	2.081	1.853	1.089	0.877

Standard Deviations

E2	E4	E5	E8	F1	F2

1.125	0.778	1.180	1.061	1.439	2.010

Standard Deviations

F3	F4	F6	F7	F8	F10
1.666	1.129	2.081	1.061	1.349	1.078

Correlation Matrix

	S1	S2	S4	S5	S6	S7	S8
S1	1.00	-.36	-.55	-.40	-.39	-.34	-.29
S2	-.36	1.00	.39	.53	.59	.58	.57
S4	-.55	.39	1.00	.35	.45	.35	.30
S5	-.40	.53	.35	1.00	.50	.73	.76
S6	-.39	.59	.45	.50	1.00	.59	.53
S7	-.34	.58	.35	.73	.59	1.00	.75
S8	-.29	.57	.30	.76	.53	.75	1.00
S9	-.35	.58	.34	.62	.54	.60	.63
S10	-.35	.51	.28	.82	.51	.73	.79
S11	-.33	.60	.32	.64	.58	.73	.73
S12	-.25	.53	.23	.61	.45	.59	.59
E1	-.09	.25	.06	.17	.11	.21	.20
E2	-.31	.39	.28	.37	.32	.40	.36
E4	-.30	.39	.28	.45	.33	.46	.44
E5	-.31	.44	.22	.38	.38	.40	.37
E8	-.24	.18	.16	.10	.12	.14	.12
F1	-.23	.30	.24	.32	.30	.33	.33

F2	-.26	.21	.26	.23	.21	.20	.22
F3	-.27	.25	.30	.34	.30	.27	.26
F4	-.18	.21	.21	.32	.24	.29	.30
F6	-.28	.23	.25	.41	.29	.36	.35
F7	-.21	.29	.22	.32	.28	.32	.33
F8	-.21	.23	.17	.27	.26	.29	.25
F10	-.15	.08	.18	.13	.10	.12	.14

	S9	S10	S11	S12	E1	E2	E4
S1	-.35	-.35	-.33	-.25	-.09	-.31	-.30
S2	.58	.51	.60	.53	.25	.39	.39
S4	.34	.28	.32	.23	.06	.28	.28
S5	.62	.82	.64	.61	.17	.37	.45
S6	.54	.51	.58	.45	.11	.32	.33
S7	.60	.73	.73	.59	.21	.40	.46
S8	.63	.79	.73	.59	.20	.36	.44
S9	1.00	.59	.59	.49	.14	.41	.36
S10	.59	1.00	.72	.64	.19	.37	.42
S11	.59	.72	1.00	.68	.21	.44	.40
S12	.49	.64	.68	1.00	.20	.27	.29
E1	.14	.19	.21	.20	1.00	.53	.52
E2	.41	.37	.44	.27	.53	1.00	.69
E4	.36	.42	.40	.29	.52	.69	1.00
E5	.37	.39	.44	.38	.56	.62	.64

E8	.18	.16	.13	.12	.37	.39	.38
F1	.30	.31	.34	.25	.18	.30	.30
F2	.28	.19	.21	.13	.21	.36	.26
F3	.30	.29	.27	.20	.21	.32	.30
F4	.25	.30	.29	.29	.19	.23	.28
F6	.32	.43	.36	.32	.23	.35	.33
F7	.29	.27	.32	.29	.24	.27	.34
F8	.29	.28	.30	.24	.13	.26	.21
F10	.12	.11	.09	.07	.17	.25	.17

	E5	E8	F1	F2	F3	F4	F6
S1	-.31	-.24	-.23	-.26	-.27	-.18	-.28
S2	.44	.18	.30	.21	.25	.21	.23
S4	.22	.16	.24	.26	.30	.21	.25
S5	.38	.10	.32	.23	.34	.32	.41
S6	.38	.12	.30	.21	.30	.24	.29
S7	.40	.14	.33	.20	.27	.29	.36
S8	.37	.12	.33	.22	.26	.30	.35
S9	.37	.18	.30	.28	.30	.25	.32
S10	.39	.16	.31	.19	.29	.30	.43
S11	.44	.13	.34	.21	.27	.29	.36
S12	.38	.12	.25	.13	.20	.29	.32
E1	.56	.37	.18	.21	.21	.19	.23
E2	.62	.39	.30	.36	.32	.23	.35

E4	.64	.38	.30	.26	.30	.28	.33
E5	1.00	.38	.33	.31	.33	.27	.33
E8	.38	1.00	.16	.22	.19	.09	.27
F1	.33	.16	1.00	.60	.72	.76	.67
F2	.31	.22	.60	1.00	.65	.47	.56
F3	.33	.19	.72	.65	1.00	.61	.72
F4	.27	.09	.76	.47	.61	1.00	.58
F6	.33	.27	.67	.56	.72	.58	1.00
F7	.32	.16	.69	.52	.61	.70	.56
F8	.27	.06	.61	.45	.57	.61	.54
F10	.14	.12	.43	.54	.45	.38	.39

	F7	F8	F10
S1	-.21	-.21	-.15
S2	.29	.23	.08
S4	.22	.17	.18
S5	.32	.27	.13
S6	.28	.26	.10
S7	.32	.29	.12
S8	.33	.25	.14
S9	.29	.29	.12
S10	.27	.28	.11
S11	.32	.30	.09
S12	.29	.24	.07

E1	.24	.13	.17
E2	.27	.26	.25
E4	.34	.21	.17
E5	.32	.27	.14
E8	.16	.06	.12
F1	.69	.61	.43
F2	.52	.45	.54
F3	.61	.57	.45
F4	.70	.61	.38
F6	.56	.54	.39
F7	1.00	.53	.34
F8	.53	1.00	.25
F10	.34	.25	1.00