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The Seeds of Change: Attitudinal Stability and the Direction of Attitudinal Change across the Lifespan

Johnathan C. Peterson
University of Nebraska - Lincoln

THE SEEDS OF CHANGE: ATTITUDINAL STABILITY AND THE DIRECTION OF ATTITUDINAL CHANGE ACROSS THE LIFESPAN

by

Johnathan C. Peterson

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Johnathan C. Peterson, Ph.D.

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Advisor: John R. Hibbing

Folk wisdom has long held that people become more conservative as they grow older. The empirics behind this claim, however, are not definitive. Utilizing panel data from the Michigan Youth-Parent Socialization Panel study and a longitudinal sample of Australian twins, my dissertation answers this question and many others as I examine patterns of attitudinal stability and the direction of attitudinal change when it does occur. These data allowed me to longitudinally track attitudinal change at the individual level. I first uncovered latent classes defined by patterns of attitudinal stability across the lifespan. The majority of people in these latent classes were defined by general patterns of stability. Of those who did change their attitudes across the lifespan, most moved in a conservative direction. However, there was still a significant group of people who were defined by a pattern of liberal change. After ascertaining these latent classes, I then began to uncover the reasons underlying these basic patterns of stability. I show attitudinal stability is a somewhat heritable trait which can be explained by psychological predispositions and sociological life events.

For Jessica.
Thank you for always being there for me even when I am being a big old grouch.

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Finally, I want to thank all the haters. Look at me now, Mom![1]

[1] This is just a joke. My mom, dad, and sister have all been wonderful supporters.

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Chapter 1: The Seeds of Change

1.1 Don’t Lose Your Dinosaur

The 2008 hit comedy *Step Brothers* hits its emotional crescendo at the Catalina Wine Mixer. In the preceding moments leading to this climax, Brennan Huff and Dale Doback, played by Will Ferrell and John C. Reilly, respectively, had spent their lives as overgrown 40-year-old man-children whose parents recently married. Their follies culminated in the destruction of the beloved sailboat owned by Robert Doback, Dale’s father who was played by the inimitable Richard Jenkins. The destruction of the boat causes a rift that tears this newly formed family apart and forces Dale and Brennan to act their age and join the real world. Brennan gets a job at his brother’s helicopter leasing company and is put in charge of the Catalina Wine Mixer, the biggest helicopter leasing event in the Western Hemisphere. He brings the family back together, as he hired Dale’s catering company and invited their parents to the event. In the culmination of this classic piece of American cinema, Robert looks at his dispirited son and former step-son and is crushed. He opens up to them:

> “When I was a kid, when I was a little boy, I always wanted to be a dinosaur. I wanted to be a Tyrannosaurus Rex more than anything in the world. I made my arms short and I roamed the backyard, I chased the neighborhood cats, I growled and I roared. Everybody knew me and was afraid of me. And one day my dad said, ‘Bobby, you are 17. It's time to throw childish things aside,’ and I said, ‘Okay, Pop.’ But he didn't really say that, he said, ‘Stop being a fucking dinosaur and get a job.’ So, I thought, I'll be a doctor for a little while, and then go back to that…the point is, don’t lose your dinosaur."

This moment of the film is similar in many regards to the popular understanding of how the aging process works. In our younger years, we are supposed to be filled with gleeful abandon and fanciful notions, but as we grow older, we are expected to throw these

youthful dalliances aside and develop a more conventional lifestyle. In short, we are supposed to become more conservative.

The popular folk wisdom states that if you are not a liberal at 20, you have no heart, but if you are not a conservative at 30, you have no brain. As we saw in 2016, seemingly age-old attitudes that defined separation between the two parties evaporated into thin air. Politically, 2016 was a strange year. The rise, within the ranks of a party noted for its conservative orthodoxy, of an ideologically heterodox businessman and reality television star was shocking in and of itself. His ascendancy to the presidency was nearly Earth-shattering in its unexpectedness. Although the current Republican president of the United States holds many conservative positions, he has also been unafraid to explore abandoning central tenets of conservative trade policy by scrapping long-standing free trade deals. His close relationship with Russia has caused many Republican voters to develop friendlier attitudes toward Vladimir Putin and Russia more broadly.

Some in the media and elsewhere have attributed our president's success in changing the attitudes of the Republican to his ability to stoke the flames of racial and religious animosity among an aging crowd of white voters. Perhaps our septuagenarian president from New York City has tapped into an already natural inclination of voters to become more conservative throughout time. Although many hold to this belief that says people become more conservative as they grow older, the empirical support behind it is scant. Indeed, an examination of the literature surrounding the direction of attitudinal change is mixed, with some arguing that people become more liberal as they grow older and others arguing people become more conservative. I will answer this question in my dissertation,

but before I can answer this question I must also contend with the nature of attitudinal change regardless of its direction.

There are a number of questions surrounding the nature of attitudinal change. Since the early 00's, there has been a mini-renaissance in the study of political attitudes from a psychological perspective. Political science had long held that political attitudes at the individual-level were unstable and unconstrained by one another (see Converse 1964). Yet, scholars working on the border of psychology and political science have begun to reformulate our understanding of what political attitudes are. Jost et al. (2003) laid the foundation for this renaissance when their meta-analytic study demonstrated the wide-ranging psychological correlates of political attitudes. This study suggested attitudes were a fundamental psychological. Subsequent work, such as that of Alford, Funk, and Hibbing (2005), has repeatedly shown individual-level ideological orientation to be influenced by genetically heritable factors (e.g. Hatemi et al. 2008; Settle et al. 2009; Verhulst, Eaves, and Hatemi 2012). Put together, these studies all present a radically different interpretation of political attitudes than the dominant view within political science, as they believe these attitudes to be a fundamental human trait which should be relatively immutable.

The primary question at the heart of this dissertation is: How stable are political attitudes over the lifespan? As this question is answered, however, a number of related questions are answered along the way, as I explain individual-level variation in patterns of attitudinal stability over the lifespan. Specifically, in the chapters of this dissertation, I will focus on four major goals. First, I will describe the general patterns of attitudinal change over the lifespan. In the process of describing these patterns, I will examine the

existence and direction of attitudinal change over the lifespan. That is, do political attitudes tend to change over the lifespan, and when they do change, do they shift in a liberal or conservative direction? Second, I will determine the degree to which those general patterns of attitudinal change are heritable traits. Here I will also explore various psychological traits which may explain differences in the patterns of attitudinal change. Third, I will identify the various factors which work to shift attitudes over the lifespan. These factors will include psychological changes and major life events such as socioeconomic mobility, changing peer influences, and acquiring new roles in life like becoming a parent. Finally, I will examine the degree to which patterns of attitudinal change are context dependent. That is, do different types of political attitudes display different patterns of change over the lifespan?

From here, I will proceed as follows: The theory section will discuss four major theories of political attitude change throughout the lifespan. These models are the lifelong persistence model, the lifelong openness model, the impressionable years model, and the running tally model. The strengths and weaknesses of these models will be discussed in some detail. It will be argued that these theories are lacking as they provide answers—some better than others—for whether or not attitudes do change and when they change, but none of these theories can work to explain the direction of attitude change throughout the lifespan. After this discussion, I explore potential ways in which recent advances in political psychology might be able to provide us better answers about attitudinal stability throughout the lifespan. I will discuss theoretical expectations regarding the existence and pattern of attitudinal change throughout the lifespan. I will then propose four unique

studies which will work to advance the overall level of understanding regarding political attitudes throughout the lifespan.

1.2 Theories about Attitudinal Stability

Four models have dominated the study of political learning—a vast literature dealing with not only attitudinal stability but with how individuals process and deal with new political information and political shocks throughout the lifespan. In no particular order, these models are the lifelong persistence model, the lifelong openness model, the impressionable years model, and the running tally model. As these various models are discussed, special care will be taken to mention how each model might answer the question of the change of political attitudes.

Lifelong Persistence

The lifelong persistence model derives primarily from the work of Campbell et al. (1960). As the name suggests, this model suggests that political attitudes, partisan attitudes to be specific, are the result of socialization early in life and persist throughout the lifespan of the individual. Regardless of new political information and political shocks, attitudes will remain relatively constant. Although this model was primarily devised as an explanation for partisan identification, lifelong persistence does provide testable hypotheses regarding the existence and direction of attitudinal change. Followed to its logical conclusion, the lifelong persistence model would expect little-to-no attitudinal change; there should be no systematic shift from liberal to conservative attitudes across the long term (or vice versa). This model of attitudinal stability is very accurate regarding the attitudes of older people, but has weaknesses when trying to explain younger people.

Lifelong Openness

The inverse of the lifelong persistence model is the lifelong openness model, which suggests that attitudes remain equally susceptible throughout the lifespan. This model is most succinctly laid out by Franklin and Jackson (1983) and Franklin (1984), who used it to explore the dynamics of partisan identification. They found that partisan identification was an identity that was responsive to the ever-changing policy orientations of the Democratic and Republican parties. Throughout the lifespan people should remain open new political information and respond to political shocks. In short, individuals will be susceptible to attitudinal change. This model is largely agnostic on the direction of such change. Presumably, the direction of the change would be dependent on the context of the political environment. For instance, if the prevailing political environment were more supportive of the Democratic Party, we would expect leftward attitudinal change. If the Republican Party were the more supported party, we would expect the direction of attitudinal change to move right.

Impressionable Years

The impressionable years model of political learning incorporates elements of both the persistence and openness models. Essentially, the impressionable years model argues that young adults generally between the ages of 18 and 26 are susceptible to attitudinal change as the openness model suggest. However, as these young adults grow older, their attitudes crystalize and become more immune to new information and political shocks as the persistence model suggests. Building the work Newcomb (1943) and Newcomb et al. (1967) did with a panel of women who attended Bennington College in the 1930s, it was found the attitudes of these women crystallized in early adulthood and remained stable throughout the rest of their life (Alwin, Cohen, and Newcomb 1991;

Alwin and Krosnick 1991). Other work on political socialization and learning has reached similar conclusions with perhaps one minor caveat. Some argue that while the bulk of crystallization may occur in early adulthood, crystallization occurs throughout the rest of life (Sears and Funk 1999). Work in this vein has even been categorized as a separate model called the increasing persistence model.[2] Studies using data from the Michigan Youth-Parent Socialization Panel Study typically report findings consistent with the impressionable years or increasing persistence models (e.g. Jennings and Niemi 1981; Jennings and Markus 1984; Markus 1979; Niemi and Jennings 1991; Stoker and Jennings 2008). In sum, the impressionable years model suggests people are amenable to shifting their political attitudes and are most pliable in early adulthood (Dinas 2013). Again, however, the model provides no theoretical expectation regarding the direction of that change. Dinas (2013) has used this model to demonstrate that the political environment is vital in determining the outcome of change, as he found young people were more likely than older people to adjust their attitudes toward Richard Nixon following the Watergate scandal.

Running Tally

The running tally model is a rational choice approach to political learning primarily developed by Fiorina (1981) and expanded upon by Achen (1992) and Gerber and Green (1998). This approach suggests that instead of having immovable attitudes people routinely update their attitudes based on retrospective (Fiorina 1981; Gerber and Green 1998) or prospective (Achen 1992) evaluations of the political environment.

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[2] For a further explanation of the differences between the impressionable years and increasing persistence models see Alwin and Krosnick 1991.

Similar to the lifelong openness model (and, in a more limited sense, the impressionable years model), the running tally model allows for attitudes to fluctuate throughout the lifespan. Although the lifelong openness model and the running tally model have their similarities, there is one major difference between them. The lifelong openness model holds that attitudes are equally likely to shift through the lifespan. As such, prior attitudes do not constrain the likelihood of shifting attitudes. The running tally model accounts for a larger role of prior attitudes, as a person must accrue enough "tallies" against that prior attitude before changing. Again, however, there is no consistent hypothesis on the direction such change will take; the direction of any attitudinal change is assumed to be almost solely a function of context and the political environment.

1.3 Integrating Individual Differences

Central to the previously discussed models of attitude change is a one-size-fits-all approach to the study of attitude change. That is, general patterns of change should be relatively invariable across individuals. Yet, the study of individual differences within both political science and psychology has begun to explore the possibility that one-size-fits-all models are not ideal for understanding the complexities of human behavior. That is, there may be one group of people which may display one pattern of change over their lifespan while another group of people may display an entirely different pattern of attitude change over their lifespan. Specifically, I posit that individual differences in patterns of attitude change exist, and these differences are best understood from a framework incorporating insights from developmental psychology, behavioral genetics, and political science.

Currently, there are two major streams of thought regarding the nature of attitudinal stability. The first is best exemplified by the work of Converse (1964) and

others who dismiss the existence of ideology altogether because of observed instability and lack of constraint in political attitudes. The second comes from the research following the insights gleaned from Alford, Funk, and Hibbing's (2005) article which was among the first work to establish a heritable component to political ideology. This line of work has established a convincing counterargument to Converse and others. Instead of ideology being an ephemeral trait dependent on the capricious whims of time, place, and mood, this group of scholars maintains that ideology is a biologically predisposed trait which forms a central aspect of individual identity. As such, if this proposition is correct, then ideology should be far more immutable than previous research had suggested. Yet, this ongoing debate may be missing the forest for the trees, as it disregards the reasonable hypothesis that both views may be partly correct. From the standpoint of understanding the nature of individual differences, it is plausible to imagine a reality where there are some who are predisposed towards attitudinal lability and others who are predisposed towards attitudinal stability.

In terms of expectations for such a theory, Hatemi et al. (2009) explored the degree to which additive genetic effects differed over the lifespan. Their findings were suggestive of a general pattern similar to the impressionable years model. In their analyses, they found the genetic effect on political orientation reported by Alford, Funk, and Hibbing (2005) only begins to play a role for people once they reach the ages of 21-25. Prior to that political orientations are largely explained by factors in the environment such as familial socialization. I will go beyond these findings in my dissertation and hopefully demonstrate that the process of attitudinal crystallization described in the impressionable years model is in itself a product of additive genetic effects. As I will

discuss later, the impressionable years model has a substantial literature to support its general tenets. It may be that the impressionable years model is adept at capturing the central tendency of attitudinal change through the lifespan, but a focus on individual differences as they pertain to attitudinal change allows us to have a much clearer understanding of these processes.

To assess the feasibility of such a theory, I will take an exploratory approach as I figure out the nature of attitudinal stability. This exploratory approach will be constrained by theoretical expectations derived from our understanding of psychological development through the lifespan. My theoretical expectations will draw from a burgeoning literature on the nature of personality change over the lifespan. The linkage between personality traits and political attitudes has been well established (see Mondak 2010), and there is some reason to expect changes in political orientation over the lifespan will track changes in personality over the lifespan. The central finding in the personality over the lifespan literature is that personality is a remarkably stable trait over the lifespan (Helson, Jones, and Kwan 2002; McAdams and Olson 2010; Roberts, Walton, and Viechtbauer 2006). Yet, this tendency towards stability is marked by noticeable patterns of change. These patterns are detectable in terms of the timing of personality change and in terms of the direction of personality change. Specifically, personality change tends to occur in early adulthood, and if personality does change as people grow older they tend to become more conscientious, socially dominant, and agreeable (Roberts, Walton, and Viechtbauer 2006) while negativity bias tends to decrease as people grow older (Wood and Kisley 2006).

These patterns of change largely map onto our understanding of the nature of attitude change over the lifespan. In terms of the timing of attitude change, most

empirical evidence supports something like the aforementioned impressionable years model. Just as the impressionable years model maintains that the probability of attitude change is highest in young adulthood, the general consensus on personality change argues the probability of personality change is highest during the same time with the probability of change decreasing significantly after people turn 40 (Roberts, Walton, and Viechtbauer 2006). The empirical evidence on the direction of attitude change over the lifespan tends to be a little murkier, as some argue that people become more conservative as they grow older (Cornelis et al. 2009; Franssen, Dhont, and Van Hiel 2012; Kossowska, Jasko, and Bar-Tal 2012; Tilley and Evans 2014; Van Hiel and Brebels 2011; Wilson 1973) while others argue for a liberalizing effect of age (Dangelis, Hardy, and Cutler 2007; Glenn 1974; Schwadel and Garneau 2014).

It is possible that this disconnect in the literature can be reconciled, as those who believe age makes people more conservative tend to be focused on policy attitudes as the outcome variable while those who argue the opposite tend focus on outgroup tolerance attitudes as the outcome variable. The empirical evidence has presented a consistent pattern in regard to this statement. Yet, contextualizing the direction of attitude change in such a manner has not taken place. Therefore, there are many open questions pertaining to this disconnect. Since we do not know who exactly is changing, we do not know if the people who are becoming more conservative in their policy positions are also the same people who are becoming more tolerant towards outgroups. If they are indeed the same people, this raises interesting questions as to how the concurrence of these two patterns occurs. If they are not the same people, then it raises interesting questions as to why some people become more tolerant and others become more conservative. It is important to

note that most studies up to this point have relied on cross-sectional data to answer these questions. Although there are certain benefits to this kind of approach, cross-sectional data cannot capture the within-person processes that produce these shifts through the lifespan. As I will use panel data in my dissertation, I hope to answer these questions.

If policy attitudes and tolerance attitudes are separate, it should be possible to reconcile these two arguments. Moreover, these separate patterns in attitude change may be explained by known patterns of personality change. There are fairly well-established relationships between conscientiousness and conservative policy attitudes (see Mondak 2010) as well as between social dominance and conservative policy attitudes (see Pratto et al. 1994). Given the increase of conscientiousness and social dominance over the lifespan, it is not surprising then to see a corresponding shift in conservative policy attitudes. In addition to the increases in conscientiousness and social dominance, there is also an increase in agreeableness and a decrease in negativity bias as people grow older. There has been no steady relationship between agreeableness and conservative policy attitudes (Gerber et al. 2010), but there is a demonstrable relationship between agreeableness and attitudes toward outgroups. Negativity bias has also been linked to ideology (Hibbing, Smith, and Alford 2014). Importantly, negativity bias tends to be most closely associated with conservative social policy attitudes (see Oxley et al. 2008; Smith et al. 2011), and there is no consistent link between negativity bias and conservative economic policy attitudes (Hibbing, Smith, and Alford 2014). These predispositional changes could be an explanation for observed patterns of increased tolerance over the lifespan. These personality changes may not be the only force underlying this apparent divide between the stability patterns of tolerance items and the

stability patterns of issue attitudes, but it is one theoretical possibility underlying these differences.

Based on the existing evidence in the study of personality over the lifespan, my theoretical expectations are as follows. The dominant pattern of attitude change over the lifespan will be stability, but when attitudes do change the nature of the change will be gradual, and the direction of that change will be dependent on the specific domain of the attitude. Attitudes on policy will tend to change in a conservative direction while attitudes toward social tolerance will tend to change in a liberal direction. Beyond these gradual and predictable changes, however, there is evidence to suggest traumatic or unexpected life events, as well as role changes through the lifespan, may also shape the degree to which people change over their lifespans.

Evidence from the frontiers of the biological examination of lifespan development points to the ability of traumatic and stressful events to fundamentally alter the structures and functions of the brain (Kolassa and Elbert 2007). Although much of this work centers on the kinds of severe traumatic events which lead to clinically diagnosable disorders such as post-traumatic stress disorder, there is some evidence to suggest major events that are not readily classified as traumatic events may induce attitude change among some people. In an examination of how people processed the Watergate scandal, Dinas (2013) found that the scandal had a lasting effect on the political outlooks of young people who lived through the event. Findings like these make sense when thought of as an analogue to basic physics. Given that the central tendency in personality and political attitude change over is stability marked by gradual changes, it is presumed that simple inertia explains a good deal of attitudes over the lifespan. Inertia describes a process by which an

object will maintain constant velocity unless it is acted upon by an unbalanced force (Newton 1687). If the trajectory of attitudes is the object in this instance, then these kinds of unexpected life events act as the unbalanced force which disrupts the constant velocity of those attitudes.

The Plan of Action

Taken together, my four major expectations are outlined above. To reiterate, the expectations are as follows:

1. The typical pattern of attitudinal stability over the lifespan will be stasis.
2. Some will be predisposed towards attitudinal stability while others will be predisposed towards attitudinal lability.
3. Regardless of predisposed tendencies towards stability or lability, change will occur as the result of psychological predispositions, major life events, and as a byproduct of the aging process.
4. The direction of attitudinal change will be predictable and context-dependent.

In the empirical chapters of this dissertation I will work to test the limits of these expectations. From here, I will outline the structure of this dissertation, taking special care to discuss the research strategies I employ throughout.

1.4 Chapter 2

The second chapter of this dissertation is dedicated to the descriptive understanding of attitudinal changes over the lifespan. Using longitudinal data, I will establish the general patterns of attitudinal change over the lifespan. Here, I will lay the empirical foundation for the dissertation. Specifically, I used a combination of descriptive statistics and growth-mixture modeling, and I addressed the first theoretical expectation

of this dissertation by establishing patterns of attitudinal stability and showing patterns of attitudinal stability can be treated as individual differences.

The findings of this chapter run counter to each of the four existing theories of attitudinal change. Each of those theories argues for a uniform pattern of attitudinal change. By taking the focus away from the central tendency of attitudinal change, I present a way of examining the degree to which differing patterns of change exist. By identifying people with these differing patterns of change, it will be possible to better understand the nature of attitudinal change. Understanding this nature is important from theoretical and applied standpoints. At a theoretical level, a fuller understanding of attitude change helps to know about the nature of ideological orientations and sheds light on whether we should treat these attitudes as stable traits or labile states. From an applied level, this approach could help to identify people who are open to shifting their political beliefs and could help to devise strategies of make political appeals to differing groups of people.

The data utilized for this chapter came from two pre-existing datasets. The first dataset is the Michigan Youth-Parent Panel Socialization Study (hereafter, MSS; Jennings, Markus, Niemi, and Stoker 2005). This longitudinal dataset began in 1965 as a study of high school seniors and their parents. Those high school seniors were then recontacted in 1973, 1982, and 1997 when the participants would have been 26, 35, and 50 years-old, respectively. This dataset is one of the few longitudinal datasets in political science which include such a broad swath of the lifespan, affording the ability to track the individuals from young adulthood to middle age. The second dataset came from the

American National Election Study (ANES). This dataset is not longitudinal in nature. Rather it is a cross-sectional dataset, and it will act as an important validity check.

The analytical strategy for this chapter will be two-fold. The first part will be a fairly simplistic breakdown of the basic patterns of political attitudes over the lifespan. In this section of the chapter, I will be focused on presenting the raw patterns of attitudes by age, as well as the raw patterns of attitudinal change by age. A variety of attitudes will be assessed in this part of the chapter. Ideological identification, as measured by the common seven-point scale ranging from "Strongly Liberal" to "Strongly Conservative", will be assessed, along with party identification and individual issue attitudes. These various items will be used so the gamut of political attitudes can be assessed. The individual issue attitudes will be selected to tease apart economic political attitudes from social political attitudes.

The second part of this chapter's research design will focus on using statistical techniques which will allow for the identification of differing patterns of change among people. Growth mixture modeling (GMM) will be the first such technique. GMM is a method which allows for identifying unobserved subpopulations in longitudinal datasets based on differences in change over time between these subpopulations (Ram and Grimm 2009). Simply put, this method will be able to place people into groups based on their patterns of change over time. So, people who are attitudinally stable over the lifespan can be differentiated from people who are attitudinally labile over the span. Of those who are attitudinally labile, it will be possible to identify those who become more liberal and those who become more conservative. Like the first part of the research design, these

analyses will focus on a variety of attitudes so it is possible to discern how these patterns might change based on the context of issue attitudes.

1.5 Chapter 3

Once the basic patterns of attitudinal change have been established, the question becomes why do some people change over time while others do not? I begin to answer this question in Chapter 3. In this chapter I will focus on establishing the biological roots to these differences. Existing theories argue the sources of attitudinal change are purely environmental effects, either via socialization or life events. It is my goal in this chapter to demonstrate that some people are more prone to attitudinal lability as a direct product of genetic predispositions.

Understanding the degree to which attitudinal stability is a product of nature and/or nurture is vital to understanding attitudinal stability as a whole. Heritability analyses partitioned the variance associated with attitudinal stability into three components—additive genetic effects, shared environmental effects, and unshared environmental effects. These analyses provided a much clearer picture as to where we can find the sources of attitudinal stability.

The data for this chapter came from a sample of Australian twins who were contacted at two time points roughly 18-24 months apart. Between the years 2007 and 2009, data were collected from 250 complete twin pairs in Australia. At that time, a number of political attitude questions were asked in the form of the Wilson-Patterson battery (Wilson and Patterson 1968), along with a number of questions pertaining to personality traits including a 44-item assessment of the Big 5. These data compose Wave I. Following that, 402 twins from Wave I were successfully recontacted between the years 2009 and 2011, and those twins were asked the same questions.

The research design takes advantage of the genetic information inherent to twin datasets. As the sample includes both monozygotic twins who are 100 percent genetically identical and dizygotic twins who are 50 percent genetically identical, it is possible to compare the rate of similarity in monozygotic twin pairs with the rate of similarity in dizygotic twin pairs to estimate the degree to which the rate of similarity is a product of additive genetic effects and/or a product of shared or unshared environmental effects. This classic twin design has been utilized for decades to ascertain the degree to which traits (or, in the parlance of behavioral genetics, phenotypes) are genetically heritable.

For the purposes of this chapter, the phenotypes of primary interest are attitudinal stability and the direction of attitudinal change. To capture these phenotypes, I took the absolute and real values of the differences between the Wilson-Patterson items measured in Wave I from those measured in Wave II. This process was completed with the full Wilson-Patterson scale, two reduced Wilson-Patterson scales (one to capture social attitudes and another to capture economic attitudes), and for each individual Wilson-Patterson item. Although the direction of ideology has been shown to be heritable (see Alford, Funk, and Hibbing 2005), the absolute value of change was assessed, as I am not so much concerned about the direction of attitudinal change so much as I am interested in the existence of attitudinal change. After these change variables were created, structural equation model (SEM) models were utilized to ascertain the degree to which the variation in these traits is attributable to genetic or environmental effects. Although there are a few methods to calculate these estimates, SEM was used as it provides error estimates (unlike the simpler Falconer Method) and allows for the straightforward comparison of competing models (unlike utilizing a regression-based approach).

1.6 Chapters 4 and 5

Chapters 2 and 3 answer many important questions pertaining to the nature of attitudinal stability. While Chapter 2 addresses the patterns of attitudinal stability and Chapter 3 addresses the biological sources of attitudinal stability, Chapters 4 and 5 focus on identifying the sources of attitudinal stability and directionality. Using both previously discussed longitudinal datasets, these chapters tested the degree to which personality and life events shape the propensity to be attitudinally stable through the lifespan. Chapter 4 focuses on the role of personality, and Chapter 5 focuses on the role of sociological life events.

Each dataset provides its own unique advantages to overcome disadvantages inherent to the other dataset. In Chapter 4 I examine the Australian twin dataset which cannot adequately address the effects of life events over a long period of time, but it is rich with personality-related variables and can test the degree to which shifts in personality shape the directionality of attitudinal change. In Chapter 5 I return to the MSS dataset which has the benefits of capturing numerous life events over a long period time, but it does a poor job assessing the personality of its subjects.

Using the Australian twins dataset in Chapter 4, I examined the degree to which changes in personality influence the direction of attitudinal change. Here it is possible to capture the influence of Big Five personality traits as well as interesting measures of empathy such as the Reading of the Mind in the Eyes Task (RME) and the Empathy Quotient (EQ). The RME displays images of expressive eyes and asks participants to classify the expression in those eyes. People who score high on this task can be said to be more empathic (at least in this one facet of empathy) than those who score lower on this task. Here I calculated a change score for a variety of political attitudes, and with an OLS

regression, use these personality variables as the independent variables used to predict change.

To assess the degree to which life events affect the propensity for attitudinal lability in Chapter 5, I utilized the MSS dataset from Chapter 2. In Chapter 2 I placed people into groups based on their propensity for attitudinal lability. There were two different groups based on the directionality of attitudinal instability, and three groups based on patterns of attitudinal stability. In the first analyses, I focus on only two groups: the attitudinally stable and the attitudinally labile (regardless of direction). Using a logistic regression approach, I examine group membership as a function of life events and some psychological traits. I then split the groups into three: those who are attitudinally stable, those who become more conservative, and those who become more liberal. Using logistic models, I was able examine the degree to which certain life events predict the probability of being in one of these three groups.

1.7 What is to Come?

Throughout the analyses in this dissertation a common theme emerges. Patterns of attitudinal stability, while defined generally by a pattern of stasis, vary across individuals. The direction of attitudinal change appears to be in line with the folk wisdom. Of the small people who do change their attitudes, the largest tendency is a move towards more conservative political attitudes. However, there is also a smaller group of people who move in a liberal direction. Some people do seem more predisposed to lability than others, and some people seem more predisposed to move in conservative or liberal direction. The likelihood of changed attitudes and the direction of changed attitudes are influenced by several effects rooted in biology, psychology, and the environment. In the end, most people do not seem to lose their dinosaur as they grow older.

Chapter 2: Establishing Patterns of Attitudinal Change

2.1 Introduction

George Babbitt, the eponymous protagonist of Sinclair Lewis' 1922 novel *Babbitt*, is an inherently conservative man who leaves behind the conformity of his Midwestern life to experience a nonconformist, socially liberal lifestyle that includes dabbling in leftist politics. The time he spends with the socially rebellious crowd in his hometown alienates him from his family and friends. Eventually, as his wife falls ill, Babbitt realizes he finds this new life untenable, and he re-embraces the conservative life he left behind. Although he consciously chooses a conservative life, he retains a sympathy for non-conformity. At the end of the novel, George's son Ted and the neighbors' daughter scandalously elope after a party and George's wife and friends vociferously denounce their behavior. George, in contrast, tells his son he approves of the marriage, as George believes it best that his son has chosen to forgo the conformity George himself could not fully leave behind.

Lewis' examination of the political psychology of one (fictional) man reflects the central research questions this chapter seeks to address. First, do people, as folk wisdom suggests, become more conservative as they grow older? Second, if political attitudes do change across the lifespan, what drives this what drives the attitudinal change? Lewis comes down firmly on the side of conventional wisdom's answer to the first question; being politically liberal is a young person's game, and as we grow older, more sober, and more mature we inevitably move toward the stability and comfort of tradition and defense of the status quo that conservatism represents. While Lewis makes a convincing fictional case for this political evolution, the empirical evidence backing this story is mixed. Some studies suggest that people do indeed become more conservative as they get

older (Cornelis et al. 2009; Wilson 1973), while others suggest that political orientations stay fairly stable, or even become more liberal as people grow older (Alwin, Cohen, and Newcomb 1991, Jennings and Niemi 1981, Dangelis, Hardy, and Cutler 2007). Below I try to bring some clarity to the contradictory answers to this first question by examining shifts in self-reported ideology in a longitudinal study that covers a 24-year-long span. Using data from the Michigan Youth-Parent Socialization Panel Study, I will be able to explore this question by looking at the exact same population as they age from 26 years old in 1973 to 50 years old in 1997.

The second question is perhaps of more importance. While there has been considerable attention paid to the question of stability in political attitudes across the lifespan, there has been surprisingly little empirical investigation of individual-level variation in long-term shifts in political attitudes. Indeed, if anything political science research has tended to treat such variation as evidence for the existence of non-attitudes rather than trying to identify potential systematic causes of this variation (e.g. Converse 1964). Below I seek to identify covariates of attitudinal change across the span of adulthood in an attempt to identify underlying causes of this variation.

To provide a brief roadmap of what is to follow, I will first discuss the four dominant models of attitudinal stability in the extant literature. As stated previously, most of these models suggest attitudes should remain fairly stable (with notable caveats) throughout the lifespan. I add to the literature by suggesting patterns of attitudinal change ought to be treated as an individual difference. After this discussion, I will delve into the small literature that pertains to the direction of attitudinal change throughout life, and I will then explore potential explanations for attitudinal change. In brief, the results suggest

that political attitudes, as most models suggest, are stable over the long-term. Yet I also find that a significant number of people do change their ideological orientation throughout life, and these shifts are not uniform across the ideological spectrum. Liberals are more likely to become conservatives than vice versa, suggesting there may be some empirical basis to folk wisdom, and these results suggest several reasons why this is the case.

2.2 Background and Hypotheses

When considering the general direction of attitudinal change throughout the lifespan, there are four possibilities to encounter. First, we might see a general trend toward conservatism as people grow older. Second, we might see the opposite and observe a shift toward liberalism. The third possibility is that we will not see change in either direction. Although change may exist, some people may become more conservative, others more liberal, and others may not experience any change. The net result of this divergent pattern of change would be the observation of attitudinal change at the individual level but with no observable change in the direction of those attitudes in the aggregate. The fourth possibility, consistent with the lifelong persistence model, would suggest attitudinal change is extremely rare; therefore, there is no attitudinal shift toward any one direction. It is the first two possibilities that suggest systematic attitudinal shifts and are thus most relevant to a central question addressed in this dissertation, i.e. investigating what systematically drives attitudinal changes if such change does indeed occur.

There is a fair amount of empirical evidence to suggest that people do become more conservative as they get older with much of this work done in social psychology (e.g. Cornelis et al. 2009; Franssen, Dhont, and Van Hiel 2012; Grant et al. 2001;

Kossowska, Jasko, and Bar-Tal 2012; Tilley and Evans 2014; Van Hiel and Brebels 2011; Wilson 1973). Common to these studies is the idea that ideology is largely an independent or dependent facet of personality. As such, if we take ideology to be dependent on other features of personality, then changes in personality through the lifespan should lead to changes in ideology. The direction of personality changes common to aging tends to have a positive relationship with political conservatism (Cornelis et al. 2009). Correlational studies have shown that as people grow older, they tend to have higher needs for closure (Kossowska, Jasko, and Bar-Tal 2012; Van Hiel and Brebels 2011). Indeed, this work tends to find that these personality changes mediate the relationship between conservatism and age. All of this is consistent with the directional hypotheses of the biological predispositions model but contradicts the other four models discussed earlier, at least in the sense that attitudinal change is as much a product of variation in individual-level traits as the context of a particular political environment.

Though social psychology research tends to find considerable support for a directional shift rightward across the lifespan, some work runs directly counter to this claim. Some argue that as people grow older, they become more tolerant (Glenn 1974; Dangelis, Hardy, and Cutler 2007; Schwadel and Garneau 2014). These findings suggest a liberalizing effect of age rather than a conservatizing effect of age. The question becomes whether or not these findings are the result of how the question is being studied. Political tolerance is likely related to overall political ideology, but it is easy to imagine a person becoming more tolerant of groups like the LGBT community while still maintaining or generating an overall conservative worldview.

The hypotheses for this chapter are derived from the first major theoretical expectation of the dissertation: the most common pattern of attitudinal change through the lifespan will be a pattern of stasis. However, for those who do change, there are also expectations regarding the direction of change.

H1: Patterns of attitudinal stability will be more common than patterns of attitudinal lability.

H2: Of those who are attitudinally labile, the direction of change will be more likely to be in a conservative direction.

H3: The direction of attitudinal change for outgroup tolerance will be in a liberal direction.

2.3 Data and Methods

The data used for the analyses were drawn from the Michigan Youth-Parent Panel Socialization Study (hereafter, MSS; Jennings, Markus, Niemi, and Stoker 2005). These data have been described in great detail in other work (see Jennings and Niemi 1981), but they provide a unique opportunity to study the dynamics of political attitudes throughout the adult life. The MSS was initiated by surveying high school seniors and their parents in 1965. The study then re-interviewed those same people in 1973 and 1982. In 1997 the researchers returned to the original youth cohort and interviewed them and their children. For the purposes of this part of my study, I will examine the ideological self-identification of that original youth cohort from 1973 to 1997.[3] The longitudinal nature of this dataset provides a number of unique advantages for answering the question at hand. The years of life covered in 1973, 1982, and 1997 (26, 35, 50) also allow us to examine

[3] Data on self-reported ideology were unavailable for the 1965 wave of the panel.

sources of attitudinal change in years often thought to be relatively immune from change as Jennings and Niemi argue.

Most studies that attempt to answer the question of whether or not people become more conservative as they grow older rely on cohort analyses derived from cross-sectional data. There are some advantages to that approach, but it typically relies on the assumption that the only causes of attitudinal change within a cohort are due to intra-cohort aging and learning and not attrition from the cohort (Dangelis, Hardy, and Cutler 2007). The assumption of no attrition would be acceptable if there were no systematic differences in the mortality rates of liberals and conservatives but recent evidence suggests there are systematic differences in mortality rates for liberals and conservatives (see Pabayo, Kawachi, and Muenni 2015; Subramanian et al. 2009; Subramanian et al. 2010). Though attrition did occur throughout the MSS, when examining change at the individual level, it can be assured that attrition is not confounding those individual level changes. Regardless of attrition longitudinal designs are ideal for answering the questions I am asking. These data allow me to track changes within individual people. Thus, I am spared inferential issues inherent to studies examining these questions through cross-sectional approaches.

For the first set of analyses, I compared the MSS dataset with three ANES subsamples. I examined the degree to which participants in the MSS and the ANES changed across time on party identification, ideology, attitudes on women's rights, and attitudes on minority assistance. These four positions were examined for two reasons. First, by examining patterns of change in not only ideology, but with another identification measure and two attitudinal measures, I can see if the pattern of change in

ideology is similar to other kinds of political changes. Second, I was able to match each of these four measures with equivalent ANES measures observed at the same time point as the MSS. Three sets of ANES data are used. The first is an average of all ANES participants for a given year, and the second is an average of a subset of ANES participants in the same age cohort as the MSS cohort. Finally, the third measure is an average of a subset of ANES based on the initial age of MSS dataset. For instance, three of the analyses are based on data which was initially collected when the MSS participants were roughly 26 years old. As such, I took the average of all ANES participants between the ages of 26 and 34 for the initial time point and each subsequent time point. After using the ANES data to disentangle attitudinal change in the aggregate, I delve deeper into the MSS data to examine individual patterns of attitudinal change.

2.4 Ideological Self-Report in the Aggregate

Figure 1 tracks the mean value of party identification, ideology, attitudes on women's rights, and attitudes on minority assistance along various time points for two samples.[4] The first line in each graph represents the mean of all 935 individuals in the MSS, the second line represents the mean of all respondents in the ANES in the year prior to data collection for the MSS, the third line represents the mean of those in the ANES data who were in the same age cohort as the MSS cohort, and the final line represents the mean of those in the ANES who were in the initial age group of the MSS cohort.[5] The three sets of ANES data can be used to parse out any possible aggregate effects of age, period, and cohort. In particular, the full ANES dataset allows me to

[4] For all measures, "don't know" responses were recoded into the middle category. Analyses showed that this recoding did not significantly alter the findings.
[5] 1982 is the only time point where the samples were collected in exactly the same year.

establish what the general pattern of attitudes was across American society during the relevant timeframe.

If the MSS data moves in synch with the full ANES data, then any change in the MSS dataset can be attributed to the effects of societal pressure caused by the particular period of time these data were collected. The other two sets work to establish any possible effects of cohort and age. The ANES Cohort label identifies those in the ANES dataset who were in the same age cohort as the MSS cohort at any given time. This set of data provides two advantages. First, it provides a validity check on the MSS cohort data, as a large divergence between the two datasets might suggest an issue regarding the external validity of the MSS data. Second, patterns of change between these two datasets can indicate generational effects. Finally, by utilizing a subset that represents the age group of the MSS cohort at the initial time point, it is possible to tease out some possible effects of age. The ANES Age subset should be fairly similar to the MSS cohort at the initial time point. Any divergence between the two datasets after that initial time point may indicate differences based on age.

For example, in the top left corner of Figure 1 the aggregate patterns of change for party identification can be seen. Of the four items reported in this figure, party identification is the only item for which there is data for each of the four time points covered in the MSS data. Compared to the other three sets of data, the MSS cohort is markedly more Democratic from 1973 onward even though they started out as slightly more Republican in 1965. In 1965 the mean party identification score of those in the MSS (M = 3.48, SD = 1.94) was significantly more Republican than the party identification scores for the full ANES (M = 3.255, SD =3 .255, $t(2100.01) = 2.69$, $p <$

.01)[6], as well as their age cohort in the ANES (M = 2.97, SD = 1.80, $t(155.51) = 2.87$, $p < .01$).

The largest divergence between the MSS cohort and the ANES comes at the 1973 time point. The MSS cohort went from being significantly more Republican than the ANES groups in 1965 to being far more Democratic. In 1973 the MSS (M = 2.85, SD = 1.61) was more Democratic the whole ANES sample (M = 3.62, SD = 1.97, $t(1713.24) = 11.41$, $p < .001$), their ANES age cohort (M = 3.72, SD = 1.76, $t(1162.77) = 9.44$, $p < .001$), and the younger 18-26 age ANES cohort (M = 3.53, SD = 1.64, $t(943.13) = 7.20$, $p < .001$). A plausible hypothesis for the divergence actually supports a period effect based on slight differences in the timing of the ANES and MSS studies. The ANES data were collected in 1972 compared to 1973 for the MSS data. The Watergate effect may explain why the MSS cohort took such a turn toward the Democratic Party at this time. Dinas (2013) has shown that younger people during this time were more responsive to the Watergate scandal and more likely to change their attitudes as a result.

Lending further credence to this idea is the fact that the MSS cohort became more similar with their age cohort in later years. In 1982 the MSS cohort (M = 3.21, SD = 1.85) was similar to their age cohort (M = 3.42, SD = 1.96, $t(403.71) = 1.52$, $p = .13$), and the MSS cohort (M = 3.45, SD = 1.84) was also similar, albeit still slightly more Democratic than their age cohort in 1997 (M = 3.73, SD = 2.13, $t(412.17) = 7.20$, $p = .06$). This increase in similarity resulted from the MSS cohort becoming more Republican between 1973 (M = 2.85, SD = 1.61) and 1982 (M = 3.21, SD = 1.85, $t(1679.51) = 4.27$, $p < .001$) and their ANES age cohort becoming more Democratic between 1973 (M =

[6] All t-tests performed from here on are two-sample t-tests assuming unequal variances. Degrees of freedom reported are Satterthwaite's degrees of freedom.

3.72, SD = 1.76) and 1982 (M = 3.42, SD = 1.96, t(449.02) = 2.10, p = .04). This pattern is consistent with a short-term shock like the Watergate scandal leaving an indelible impression on younger Americans. Importantly, no grand conclusions can be made regarding the conservatizing effect of age as 18-25-year-olds were more Republican in 1982 (M = 3.72, SD = 1.80) than the MSS (M = 3.21, SD = 1.85, t(304.41) = 3.56, p < .001), full ANES (M = 3.46, SD = 2.03, t(276.17) = 1.87, p = .06), and the ANES cohort matched with the MSS (M = 3.42, SD = 1.96, t(443.20) = 1.68, p = .09). Given these results, aging does not necessarily make people more conservative, and it is not necessarily true that younger generations are more liberal than older generations.

Examining the patterns of change between 1973 and 1997 for the ideological identification and minority assistance also does not provide strong evidence for a conservatizing effect of age. With regards to ideology which can be found in the upper right-hand corner of Figure 1, the MSS cohort does move in a more conservative direction between 1973 (M = 3.85, SD = 1.36) and 1982 (M = 4.29, SD = 1.39, t(1666.95) = 6.74, p < .001) while remaining stable between 1982 and 1997 (M = 4.33, SD = 1.29, t(1707.70) = 0.49, p = .63). A similar pattern is seen with regards to the MSS cohort on the item pertaining to government assistance for minorities between 1973 (M = 3.80, SD = 1.71) and 1982 (M = 4.49, SD = 1.57, t(1789.10) = 9.03, p < .001) and 1982 and 1997 (M = 4.52, SD = 1.48, t(1822.51) = 0.39, p = .70).

Given the remarkable amount of synchronicity between all four sets of data on these issues, it is difficult to say the conservative leap between 1973 and 1982 for the MSS cohort was the result of aging, as during this time those younger than MSS cohort moved in similar directions. In fact, by 1997 18-25-year-olds (M = 4.92, SD = 1.65) were

more conservative than the MSS cohort (M = 4.52, SD = 1.48, $t(425.18) = 3.65$, $p < .001$) on the issue of minority assistance. Additionally, this same 18-25-year-old ANES cohort was slightly more liberal (M = 4.15, SD = 1.43) than the MSS cohort in regards to ideological identification in 1997 (M = 4.33, SD = 1.29, $t(348.22) = 1.80$, $p = .07$). This mixed evidence does not paint a convincing argument for the existence of a conservatizing effect of age separate from national trends. However, given the remarkable stability within the MSS cohort, it does seem that attitudes remain fairly stable, though when attitudes are changing in this cohort, the changes tend to be in a conservative direction.

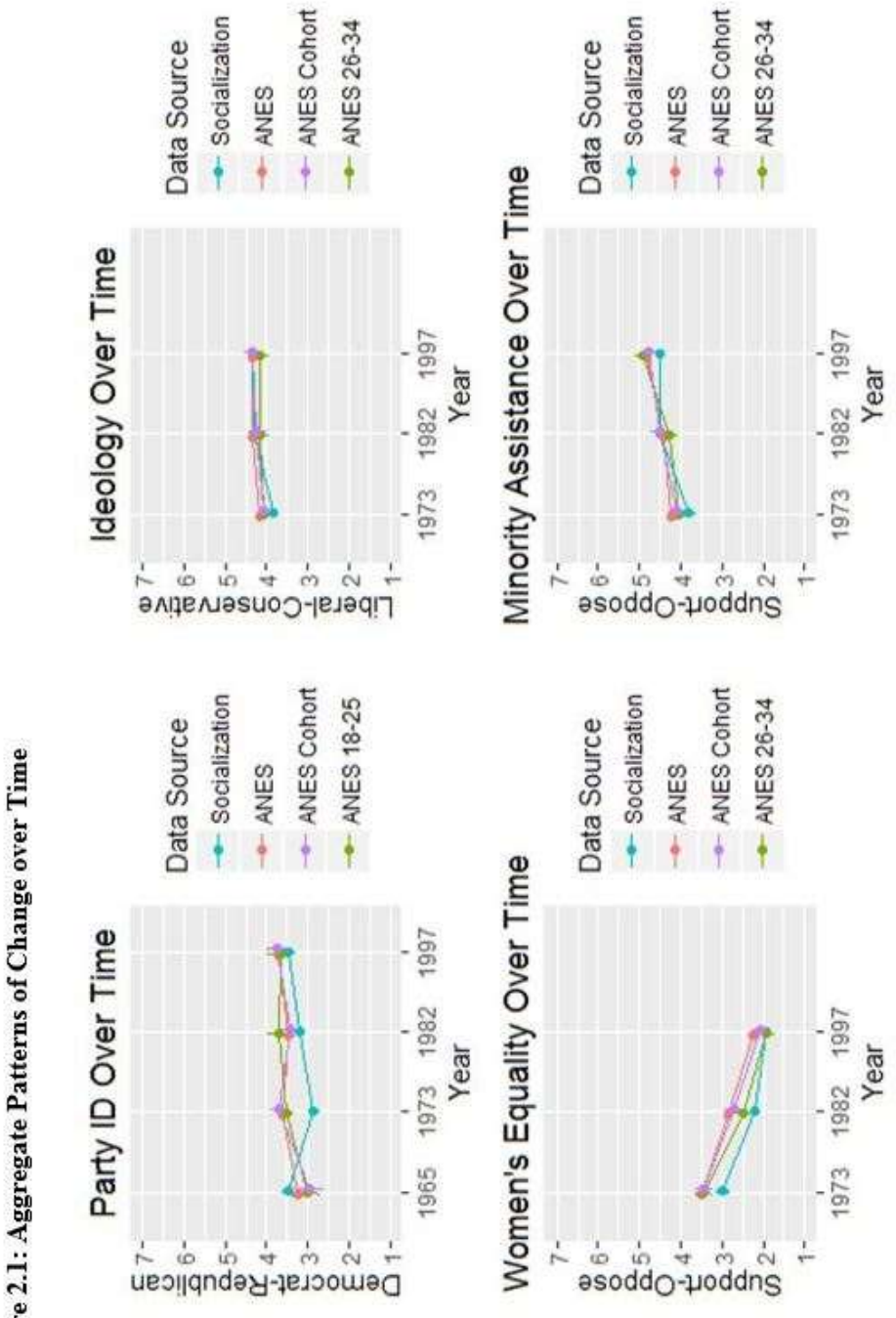


Figure 2.1: Aggregate Patterns of Change over Time

The issue of women's equality found in the bottom left-hand corner of Figure 1 presents a different pattern than is found with the other three items, and these findings certainly run counter to the argument that aging leads to more conservative attitudes. In 1973 the MSS cohort (M = 2.99, SD = 1.94) was more liberal than the full ANES (M = 3.51, SD = 2.27, $t(1891.64) = 6.65$, $p < .001$) and their age cohort in the ANES (M = 3.44, SD = 2.25, $t(1042.74) = 3.99$, $p < .001$), but by 1997 the MSS cohort (M = 1.93, SD = 1.36) was much closer to the full ANES (M = 2.24, SD = 1.65, $t(2238.14) = 5.11$, $p < .001$), their ANES age cohort (M = 2.06, SD = 1.41, $t(419.28) = 1.28$, $p = .20$), and 18-25-year-olds (M = 1.91, SD = 1.47, $t(453.45) = 0.30$, $p = .76$). There is a clear pattern of liberalized attitudes among the MSS cohort when their attitudes in 1973 (M = 2.99, SD = 1.94) are compared with their attitudes in 1982 (M = 2.20, SD = 1.59, $t(1771.5) = 9.60$, $p < .001$) and their attitudes in 1982 are compared with their attitudes in 1997 (M = 1.93, SD = 1.36, $t(1801.35) = 3.76$, $p < .001$). These results lend credence to the idea attitude change through the lifespan is not solely a conservatizing process, and taken with the other three graphs in Figure 1 it is evident that there needs to be a more nuanced answer to the question of how attitudes change throughout the lifespan.

2.5 Moving to the Individual Level

Descriptive statistics can be misleading, and descriptive statistics in the aggregate can be even more so. However, before delving into more rigorous analyses, I will examine the individual-level patterns of change for my primary variable of interest—ideology—over the three time points in the panel. I broke the seven-point scale of ideology into a three-point scale where liberals, including weak liberals, were one category, moderates were one category, and conservatives, including weak conservatives, were another category. I did this to identify people who completely changed the

ideological label they assigned to themselves. In each table I utilize self-reported ideology in 1973 as the baseline and track its change between 1973 and 1982 along with the change between 1982 and 1997 before showing the overall level of change between 1973 and 1997.

Table 1 tracks the patterns of attitudinal change for members of the MSS cohort who described themselves as liberal in 1973. These self-identified liberals have a noticeable pattern of attitudinal instability over this 24-year span thou, by 1997, well over half of this group no longer described themselves as liberal. In other words, though the greatest tendency was to remain liberal, nearly 34 percent described themselves as conservatives, and 22 percent described themselves as moderate a quarter of a century on. There does appear to be some evidence that the rate of stability increased as the cohort got older but attitudinal change was still common, as nearly 56 percent changed between the ages of 26 and 35 while 40 percent changed between the ages of 35 and 50. These findings demonstrate two things. First, some change was in evidence for self-described liberals and, while the rate of change slowed as they got older, the possibility of change never disappeared. Second, this was not a case of liberals reclassifying themselves as moderates. Instead, the greatest tendency of those who did change was to describe themselves as conservative.

Table 2.1: Ideological Movement among Self-Identified Liberals in 1973

Year	Stay Liberal	Liberal to Moderate	Liberal to Conservative	Stay Moderate	Moderate to Liberal	Moderate to Conservative	Stay Conservative	Conservative to Liberal	Conservative to Moderate
1973-1982	44.24 (146)	24.85 (82)	30.91 (102)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
1982-1997	31.21 (103)	5.76 (19)	7.27 (24)	10.00 (33)	6.97 (23)	7.88 (26)	19.09 (63)	5.76 (19)	6.06 (20)
1973-1997	43.94 (145)	21.82 (72)	34.24 (113)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)

Note: All cell entries represent the percentage of respondents in each cell (number of self-identified 1973 liberals in parentheses). There were a total of 330 self-identified liberals in 1973.

In Table 2 patterns of attitudinal change for people who in 1973 self-identified as moderates are shown. Like self-identified liberals, there is a pattern of a certain amount of instability, but this instability is not greater than the instability seen with the liberals. In fact, 48 percent of self-identified moderates in 1973 still identified as moderate in 1997. Compared with the 44 percent of liberals who remained liberal, it is difficult to say the patterns are all that different between these two groups. The rate of change also slowed for this group, as 45 percent changed between 1973 and 1982 compared to the 35 percent who changed between 1982 and 1997. Furthermore, of the 52 percent of self-identified moderates who went on to identify as liberal or conservative, the split was not even between those two groups. 39 percent of self-identified moderates went on to identify as conservative, while only 13 percent went on to identify as liberal. Much like the group of liberals, moderates demonstrated a modest amount of change over 24 years, and of those who did change, the change was typically a rightward shift in orientation. Very few moderates became liberal in that timeframe. In all, this finding fits the general hypothesis that states stability is the norm and change tends to occur in a conservative direction.

Table 2.2: Ideological Movement among Self-Identified Moderates in 1973

Year	Stay Liberal	Liberal to Moderate	Liberal to Conservative	Stay Moderate	Moderate to Liberal	Moderate to Conservative	Stay Conservative	Conservative to Liberal	Conservative to Moderate
1973-1982	- (-)	- (-)	- (-)	55.38 (211)	14.96 (57)	29.66 (113)	- (-)	- (-)	- (-)
1982-1997	6.30 (24)	6.30 (24)	2.36 (9)	36.75 (140)	4.46 (17)	14.17 (54)	22.31 (85)	2.10 (8)	5.25 (20)
1973-1997	- (-)	- (-)	- (-)	48.29 (184)	12.86 (49)	38.85 (148)	- (-)	- (-)	- (-)

Note: All cell entries represent the percentage of respondents (number of self-identified 1973 moderates in parentheses). There were a total of 381 self-identified moderates in 1973.

The patterns of attitudinal change of people who identified as conservative in 1973 are displayed in Table 3. If the patterns of liberals and moderates are notable for a certain amount of instability, the pattern for conservatives is remarkable for its stability. 66 percent of people who identified as conservative in 1973 still identified as conservative in 1997. This pattern of stability remains virtually identical in the periods between 1973-1982 and 1982-1997 at 35.72 and 36.61 percent, respectively. Of the little change that occurred, there was a greater tendency for conservatives to reclassify themselves as moderate (19 percent) than liberal (14 percent). It appears as though there is something about these people who identified themselves as conservative that led them to have a greater resistance to change. Indeed, these findings bolster arguments from those who find conservatives tend to be more rigid (e.g. Jost et al. 2003). In all, these descriptive findings support the idea that when people undergo attitudinal changes they have a tendency to become more conservative, or, at the very least, they have a tendency to be more likely to describe themselves as conservatives. However, the greatest tendency for all members of the cohort was not to become more conservative. The tendency of the cohort was to essentially stick with their ideological label over that 24-year span. 51 percent of the cohort did so.

Table 2.3: Ideological Movement among Self-Identified Conservatives in 1973

Year	Stay Liberal	Liberal to Moderate	Liberal to Conservative	Stay Moderate	Moderate to Liberal	Moderate to Conservative	Stay Conservative	Conservative to Liberal	Conservative to Moderate
1973-1982	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	64.29 (144)	11.61 (26)	24.11 (54)
1982-1997	4.46 (10)	2.68 (6)	4.46 (10)	8.48 (19)	4.02 (9)	11.61 (26)	50.45 (113)	5.80 (13)	8.04 (18)
1972-1997	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	66.52 (149)	14.28 (32)	19.20 (43)

Note: All cell entries represent the percentage of respondents (number of self-identified 1973 conservatives in parentheses). There were a total of 224 self-identified conservatives in 1973.

2.6 Identifying Individual Differences in Patterns of Change

The previous two sets of analyses have established the need for a more individualized approach to understanding attitudinal change over the lifespan. In the first set, which examined the aggregate patterns of change in the MSS cohort compared with those from the ANES, there was no clear pattern of attitudinal change as it pertained to age. Within the MSS data, there was marked stability, but the direction of any extant change could be conservative or liberal depending on the item. Compared with younger generations, the MSS cohort was either the same, more conservative, or more liberal than the younger cohorts. The next set of analyses demonstrates clear patterns of stability and direction in regards to ideological identification among the MSS cohort. These data show a strong propensity for stability, but most change that did occur was in a conservative direction. Regardless of modality, there were also a number of people who changed in other directions. Treating attitudinal stability as an individual difference, therefore, seems warranted given these basic patterns of data.

This next step works to identify groups of people based on their patterns of attitudinal change over time. In particular, I utilize growth-mixture modeling to examine patterns of change over eleven attitudes collected in the MSS data set. Growth-mixture modeling allows for the identification of latent classes based on patterns found in repeated measures (Ram and Grimm 2009). As each of the eleven items was measured repeatedly in the MSS, it is possible to use growth-mixture modeling to identify patterns regarding both attitude stability and the direction of attitudinal change. I ran the analyses with MPlus version 7.1 (Muthén and Muthén 2014). This approach is preferable for attempting to identify individual differences.

Although growth-mixture modeling can be an exploratory exercise, I took a confirmatory analytical approach. With this approach, I will begin with the hypothesis that there are five general patterns of change to be expected. The first three patterns are patterns of stability. Namely, I expect there to be people who start off conservative and remain conservative, people who start off moderate and remain moderate, and people who start off liberal and remain liberal. The last two patterns are patterns of lability. Specifically, these patterns include people who change in a conservative direction and people who change in a liberal direction. It is possible that more categories exist beyond these five groups, but in terms of theoretical understanding they would not add much. For instance, allowing for a sixth group might simply separate out the group of people who become more conservative into two categories with one group representing those who became more conservative than the other group. This approach allows us to discern these groups with a statistical rigor not possible with other approaches.

I separated the eleven items into two main groups—issue attitudes and feeling thermometers—with seven items in the issue attitudes group and four items in the feeling thermometers groups. I expect issue attitudes to follow a basic pattern of stability with any change tending to occur in a conservative direction. With regards to the feeling thermometers, I expect the reverse to be true. I expect stability for these tolerance attitudes, but any change will likely be in a more tolerant direction. The results for the issue attitudes group are shown in Table 4, and the results of the feeling thermometers group are shown in Table 5. I ran model fit analyses for each item. Initially, I constrained the model to five latent classes for each item, and then I used the Vuong-Lo-Mendell-Rubin Likelihood Ratio Test (VLMR-LRT) to decide if the model was a better fit than a

model with one fewer class. If the model was a better fit than the *K*-1 model ($p<.05$), then I selected that model. If the model was not a better fit, I then ran the *K*-1 model to see if the four-class model fir better than a three-class model. I continued this process until I found a model with a better fit than the model with one fewer class.

After each model is selected, it is possible to determine the proportion of the sample that fit into each of the groups. For instance, in Table 4 the only item which fit into a five-class model was the seven-point ideology scale. This model indicates 25 percent of the sample stayed conservative, 16 percent stayed liberal, 33 percent stayed moderate, 21 percent changed in a conservative direction, and 4 percent moved in a liberal direction. For six out of the seven issue attitudes, a general pattern of stability holds; whereby a majority remains relatively stable over time while a minority changes over time. Across all items, an average of 75 percent of participants remained relatively stable over time, and 25 percent of participants were relatively labile over time. The only item for which this pattern did not occur was a question about protecting the rights of the accused. Over 60 percent of the sample displayed a change pattern, with most of those people changing in a conservative direction.

These patterns suggest the predominant pattern over time is one of stability. Of those who did change over time, there was a clear shift towards conservatism as 17 percent of the sample became more conservative across items and only 7 percent became more liberal. Another way to look at this pattern is that, on average, 71 percent of people who changed did so in a conservative direction while 29 percent moved in a more liberal direction. The only items where this pattern did not hold were the issue of government guaranteed jobs (22 percent moved liberal, none moved conservative) and the issue of

women's role in society (8 percent moved liberal, 6 percent moved conservative). There is support for the main expectations, as the general pattern is one of stability. Of those who did change, there was a higher likelihood of them changing in a conservative direction for most issues. Yet, there were important deviations with women's roles and guaranteed jobs. People tending to become more liberal on the issue of women's roles in society fits with the hypothesis pertaining to tolerance. However, the deviation of guaranteed jobs from this pattern is not predicted by any hypothesis.

Table 5 shows the means and slopes associated with each latent class identified in the GMMs. Each latent class is defined by the pattern of change for a given item, and there are five possible latent classes per item, as people could Stay Conservative, Stay Liberal, Stay Moderate, Move Liberal, or Move Conservative on each item. The means are the mean value at Time 1 of the latent class for a given variable. For instance, those in the Stay Conservative latent class for ideological self-identification had a mean value of 5.05 on the seven-point ideology scale in 1973. The slopes represent the degree and direction of change over time for the latent class. Positive slopes indicate change in a conservative direction, and slopes with higher absolute values indicate steeper degrees of change. Returning to the example of the Ideology Stay Conservative latent class, their slope was .207 ($p<.001$). This modest, positive slope indicates that those in the Ideology Stay Conservative latent class became slightly more conservative on average between 1973 and 1997[7].

[7] Validation measures, specifically the classification probabilities for most likely latent class membership, can be found in the appendix. Classification probabilities ranged from .520 to .996 with most being in the .80-.90 range.

Table 2.4: Issue Attitudes Growth Mixture Models

Issue	Stay Conservative	Stay Liberal	Stay Moderate	Move Conservative	Move Liberal	*p*-value: Better than *K*-1
Ideology	.25309 (184)	.16506 (120)	.33012 (240)	.21458 (156)	.03714 (27)	.0294
Party ID	.32956 (291)	.45187 (399)	-	.17327 (153)	.04530 (40)	<.001
Guaranteed Jobs	.77479 (631)	-	-	-	.22521 (151)	<.001
Legalized Marijuana	.36019 (299)	.24432 (214)	.30570 (268)	.08974 (62)	-	<.001
Minority Assistance	.61130 (530)	.21684 (188)	-	.13841 (120)	.03345 (29)	<.001
Protect Rights of the Accused	.21677 (181)	.17006 (142)	-	.54491 (455)	.06826 (57)	.0449
Women's Role	-	.68521 (616)	.17241 (155)	.06118 (55)	.08120 (73)	<.001
Average	.36367	.27619	.11546	.17458	.07008	-

Cells represent the proportion of the sample classified into each latent class. Empty cells indicate the group was not represented in the best fitting model. *p*-values are derived from the Vuong-Lo-Mendell-Rubin Likelihood Ratio Test with $p<.05$ meaning the model fit better than a model with one fewer latent class. The *N* for each is found in parentheses.

Table 2.5: Issue Attitudes Latent Class Means and Slopes

Issue Attitude & Latent Class	Mean (s.e.) at Time 1	*p*-value of Mean	Slope (s.e.)	*p*-value of Slope
Ideology SC	5.05 (.297)	<.001	.207 (.062)	<.001
Ideology SL	2.56 (.122)	<.001	-.023 (.048)	.63
Ideology SM	3.85 (.107)	<.001	.052 (.04)	.19
Ideology MC	3.42 (.215)	<.001	.789 (.105)	<.001
Ideology ML	4.90 (.242)	<.001	-.894 (.100)	<.001
PID SC	4.90 (.117)	<.001	.197 (.03)	<.001
PID SL	2.72 (.08)	<.001	-.138 (.017)	<.001
PID MC	1.96 (.18)	<.001	.984 (.052)	<.001
PID ML	6.13 (.339)	<.001	-.895 (.10)	<.001
Jobs SC	4.45 (.08)	<.001	.299 (.038)	<.001
Jobs ML	4.85 (.218)	<.001	-.592 (.083)	<.001
Marijuana SC	6.72 (.032)	<.001	-.529 (.042)	<.001
Marijuana SL	1.29 (.04)	<.001	.514 (.049)	<.001
Marijuana SM	3.90 (.052)	<.001	.270 (.046)	<.001
Marijuana MC	1.60 (.115)	<.001	1.537 (.102)	<.001
Minority Asst. SC	4.73 (.126)	<.001	.084 (.059)	<.001
Minority Asst. SL	2.68 (.192)	<.001	.136 (.075)	.07
Minority Asst. MC	3.00 (.20)	<.001	.967 (.111)	<.001
Minority Asst. ML	5.34 (.344)	<.001	-1.079 (.272)	<.001
Accused Rights SC	5.43 (.156)	<.001	.057 (.066)	.39
Accused Rights SL	2.33 (.174)	<.001	-.020 (.08)	.80
Accused Rights MC	3.11 (.226)	<.001	.677 (.105)	<.001
Accused Rights ML	5.20 (.299)	<.001	-.921 (.191)	<.001
Women's Role SL	2.06 (.076)	<.001	-.308 (.026)	<.001
Women's Role SM	3.66 (.162)	<.001	-.020 (.063)	.75
Women's Role MC	4.05 (.547)	<.001	.547 (.110)	<.001
Women's Role ML	5.14 (.211)	<.001	-1.43 (.095)	<.001

Scales for all items range from 1-7. Standard errors are in parentheses. Positive slopes indicate change in a conservative direction. Negative slopes indicate change in a liberal direction.

Most of the latent classes identified as stable (9/15 latent classes) display similar patterns of change. When the slopes indicate significant change over time, the slopes tend to be modest (between .200 and .300) and in the direction of the identified group which is to say people who start off liberal and stay liberal tended to get a little more liberal and people who start off conservative and stay conservative tended to get a little more conservative. There are exceptions to this pattern, particularly in regards to the issue of marijuana. People who started off conservative on the marijuana issue and stayed conservative started off at a very high level of conservatism (M = 6.72, SE = .032) but had a relatively high degree of change in a liberal direction over time (slope = -.529, SE = .049, $p < .001$). Even though this group displayed a relatively high degree of change, their high starting point led them to still be conservative on the issue in 1997. Similarly, people who started off liberal on the marijuana issue started off extremely liberal (M = 1.29, SE = .04) but became significantly more conservative on the issue (slope = .514, SE = .049, $p < .001$). These results suggest a significant process of moderation on this issue.

The models in Table 6 are based off four feeling thermometers that were presented to MSS participants in 1965, 1973, 1982, and 1997. These feeling thermometers asked participants to mark their feelings toward the given target on a scale ranging from 0-100 with 0 indicating the coldest possible feelings toward the target group and 100 indicating the warmest possible feelings toward the target group. The first two target groups are demographic groups, black people, and white people, and the last two groups are economic groups, labor unions and big business. Here, as with issue attitudes, people tended to remain relatively stable in their feelings towards these groups with 89 percent remaining stable on average. My expectation, however, was that people who did

change overtime would tend to become more tolerant. Yet, of the remaining 11 percent who were labile over time, the greatest tendency was a move towards intolerance. This finding is driven by the fact that the white people feeling thermometer had the most lability in an intolerant direction, as nearly 30 percent of respondents became more intolerant of white people between 1965 and 1997. This number dwarfs the percentage of people who became more intolerant of black people (.6 percent), labor unions (2 percent), and big business (0 percent).

The stability of these feeling thermometers is quite remarkable. It appears peoples' attitudes towards groups are quite stable throughout time. I expected any change to these attitudes would be in a more tolerant direction, but this expectation is only supported in regards to black people. A little over 6 percent of respondents became more tolerant towards black people. Although many did not become more tolerant, even fewer became less tolerant, as only .006 percent became more intolerant. The only other group which saw any appreciable change towards tolerance was white people (7 percent). There was no meaningful change in a tolerant direction in regards to feelings towards labor unions or big business. These findings run counter to my expectations in interesting ways. A tendency toward increasing tolerance cannot be expected for all groups. As black people are the only truly marginalized group of the four and the only group which saw more change in a tolerant rather than intolerant direction, it is possible this tendency toward increased tolerance applies only to groups marginalized by society. It is possible business and labor union tolerance is perhaps best captured as a subset of left-right politics in the United States, as those on the Right should favor big business and disfavor

labor union and vice versa for those on the Left. Indeed, the findings pertaining to these groups best fit the expectations I set for the left-right issue attitudes discussed earlier.

Table 7 presents the means and slopes for the latent classes associated with each of the thermometers. Seven out of the ten latent classes identified showed moderate levels of change. These results are similar in many respects to the levels of change found among the stable latent classes associated with issue attitudes. Much like the change found among the stable latent classes associated with issue attitudes, the levels of change are such that people who were intolerant in 1973 were still intolerant in 1997 and people who were tolerant in 1973 were still tolerant in 1997. Furthermore, people who started off intolerant tended to become slightly more intolerant, and people who started off tolerant tended to become slightly more tolerant. An important caveat to this generalization can be found in regards to the black people feeling thermometer, as those who started off intolerant became slightly more tolerant (slope = 9.61, SE = 1.19, p <.001).

Overall, more work needs to be done to disentangle the differences in how issue attitudes and tolerance attitudes change throughout the lifespan. It is perhaps surprising and even disheartening to see that tolerance attitudes saw far less change between 1965 and 1997 than was seen for issue attitudes. One might expect that the increase in civil rights for black Americans during that timeframe would have warmed the hearts of more white Americans. Yet, most during this time stayed relatively ambivalent toward black Americans.

Table 2.6: Feeling Thermometers Growth Mixture Models

Group	Stay Intolerant	Stay Tolerant	Stay Ambivalent	Move Intolerant	Move Tolerant	*p*-value: Better than *K*-1
Black People	.00787 (6)	.21916 (167)	.70079 (534)	.00656 (5)	.06562 (50)	<.001
White People	-	.46073 (352)	.17670 (135)	.28665 (219)	.07592 (58)	<.001
Labor Unions	.21314 (159)	.14745 (110)	.61528 (459)	.02413 (18)	-	.0487
Big Business	-	.21907 (170)	.78093 (606)	-	-	.004
Average	.05525	.26160	.56842	.07934	.035385	-

Cells represent the proportion of the sample classified into each latent class. Empty cells indicate the group was not represented in the best fitting model. *p*-values are derived from the Vuong-Lo-Mendell-Rubin Likelihood Ratio Test with $p<.05$ meaning the model fit better than a model with one fewer latent class. The *N* for each is found in parentheses.

Table 2.7: Feeling Thermometers Latent Class Means and Slopes

Feeling Thermometer & Latent Class	Mean (s.e.) at Time 1	*p*-value of Mean	Slope (s.e.)	*p*-value of Slope
African-Americans SI	12.91 (7.62)	.09	9.61 (1.19)	<.001
African-Americans ST	77.91 (1.89)	<.001	2.02 (.53)	<.001
African-Americans SA	62.92 (.948)	<.001	-1.76 (.308)	<.001
African-Americans MI	36.43 (6.73)	<.001	-7.48 (2.26)	<.001
African-Americans MT	46.79 (4.44)	<.001	8.36 (1.37)	<.001
White-Americans ST	88.61 (.778)	<.001	-.854 (.236)	<.001
White-Americans SA	59.29 (1.27)	<.001	-.555 (.428)	.20
White-Americans MI	88.54 (.929)	<.001	-8.32 (.305)	<.001
White-Americans MT	58.61 (1.76)	<.001	6.63 (.836)	<.001
Labor SI	45.46 (4.12)	<.001	-4.78 (1.24)	<.001
Labor ST	64.10 (3.44)	<.001	4.54 (.808)	<.001
Labor SA	56.24 (1.27)	<.001	-.759 (.433)	.08
Labor MI	76.15 (9.56)	<.001	-16.05 (3.01)	<.001
Business ST	59.38 (1.70)	<.001	.270 (.738)	.72
Business SA	53.07 (.957)	<.001	-3.31 (.392)	<.001

Scales for all items range from 0-100. Standard errors are in parentheses. Positive slopes indicate change in a tolerant direction. Negative slopes indicate change in an intolerant direction.

2.7 Discussion and Conclusion

These findings add to our understanding of American politics. There are individual differences in how people change over time. The dominant pattern of change among issue attitudes and feeling thermometers was a pattern of stability. In fact, of the seven issue attitudes and four feeling thermometers, only one item—protecting the rights of the accused—had most respondents in latent classes defined by lability. As I expected, when people did change on issues they were most likely to do so in a conservative

direction. However, this pattern did not hold across all issues and feeling thermometers. Moreover, issues pertaining to tolerance of outgroups saw more people change in a liberal or tolerant direction as opposed to a more conservative or intolerant direction.

The nature of attitudinal change through the lifespan is much more nuanced than the conventional wisdom that people simply become more conservative as they grow older. Treating attitudinal change over time as an individual difference makes it possible to explore these nuances further. People, it seems, tend to stay the same politically.[8] When a small portion of a cohort does change attitudinally over time, they tend to move in a conservative direction. It is possible the 17 percent of people who became more conservative over time, when compared with the 7 percent of people who became more liberal, leads to the perception that most people become more conservative as they grow older. However, when it comes to issues of tolerance, people became significantly more liberal on the issues of women's role in society and their feelings toward black people when those attitudes did change.

The approach I took allows us to categorize people into groups pertaining to the nature of their attitudinal change over time, and I can observe differing patterns of change based on the type of attitude. Given the recent rise of nationalistic politics which seek to vilify marginalized groups for political gain, it is important that we begin to disentangle the reasons behind attitudinal change. The difference in patterns of change between issue attitudes and tolerance attitudes is particularly striking. When people change in regards to policy, they tend to do so in a conservative direction. When people change in regards to their attitudes toward marginalized groups, they tend to change in a more tolerant

[8] A lack of data between the ages of 18-26 for many of these issues prohibits me from speaking more broadly about how these data fit into something like the impressionable years model.

direction. However, the probability of change occurring is significantly lower for these tolerance attitudes than it is for policy attitudes. Much ink has been spilt over the rapidly increased tolerance towards the LGBT community in the United States over the past 10-15 years, and this increased tolerance has generally led to more policies that support the LGBT community. It appears attitudes toward black Americans did not improve enough to lead to more policies to support black Americans. Future work should examine the sources of changing attitudes. The ability to identify groups based on their propensity change is much easier given the methods I employed with this chapter. It is possible that these sources are part of the natural aging process. If so, it may be difficult to induce attitudinal change. However, if the sources of change are due to environmental sources, we might be able to push along the process of change.

Chapter 3: Establishing and Examining the Heritability of Attitudinal Stability

3.1 Introduction

Many studies have shown political traits such as ideology, partisan attachment, and political participation are heritable traits (Alford, Funk, and Hibbing 2005; Brandt and Wetherell 2011; Deppe et al. 2013; Fowler and Dawes 2008; Fowler & Dawes 2013; Fowler, Baker, and Dawes 2008; Friesen and Ksiakiewicz 2014; Funk et al. 2013; Hatemi, Medland, and Eaves 2009; Hatemi et al. 2007; Hatemi et al. 2009; Hatemi et al. 2011; Hatemi et al. 2014; Klemmensen et al. 2012; Loewen and Dawes 2012; Settle, Dawes, & Fowler, 2009; Settle et al., 2010; Settle et al., 2011; Smith et al. 2011a; Verhulst, Eaves, and Hatemi 2011). The propensity to be liberal or conservative or a strong or weak partisan is, in part, influenced by our genetics. The heritability of these traits indicates they should be relatively stable traits. That is, people who are liberal have a high likelihood of remaining liberal, and people who are conservative have a high likelihood of remaining conservative. This general takeaway from these studies was corroborated by my findings in the last chapter. For the most part, people in the Michigan Socialization Study held stable political attitudes throughout their lifespan.

Although the modal pattern of attitudes over the lifespan is marked by stability, it is clear from my last chapter and ample anecdotes that some people do change their political attitudes throughout life. In the last chapter I demonstrated there is no one-size-fits-all model of attitudinal stability. This chapter and the next will focus on the question of what predicts differing patterns of attitudinal stability. Broadly, I expect patterns of attitudinal stability to be predicted by biological and psychological sources as well as sociological sources. Here I will focus my attention on the biological and psychological

sources of attitudinal stability and the direction of attitudinal change. Specifically, I will test the degree to which attitudinal stability and the direction of attitudinal change over time are heritable traits. Using a data set of Australian twins who were surveyed at two time points 18-24 months apart, I will be able to determine how much those twins changed attitudinally, the direction in which they changed, and the degree to which these patterns are heritable.

Beyond assessing the heritability of attitudinal stability, utilizing a Classic Twin Design (CTD) allows me to partition the variance associated with stability into three categories—additive genetic effects, common environment effects, and unique environmental effects. The results of the analyses will shed light on where to search for the sources of attitudinal stability and the direction of attitudinal change. If an additive genetic effect is found, then it would suggest the source of attitudinal stability and the direction of attitudinal change might be rooted in some facet of personality. Shared environmental effects might point to a role of familial socialization, and unique environmental effects might point to a role of life events.

3.2 Theoretical Background

Following the last chapter, it can be argued attitudinal stability is a trait that varies among people. The question here becomes: is this trait genetically heritable? As mentioned previously, several political traits have been found to be either genetically heritable, related to physiological processes, or both. Given the biological predispositions underlying political behavior it is not far-fetched to imagine the stability of political attitudes might not also be related to biological processes. If attitudinal stability does have a heritable component, then other questions can be asked regarding whether the heritability of attitudinal stability is shared with other traits such as personality.

In the dozen years since Alford, Funk, and Hibbing (2005) demonstrated the heritability of ideological orientation many studies have examined the psychological and biological foundations of numerous political traits. These studies have reached a number of conclusions which have been replicated repeatedly. Chief among these findings is the idea that liberals and conservatives differ in their physiological reactions to threatening or novel stimuli. An overall negativity bias has been found to be the major difference between liberals and conservatives, as conservatives tend to be more sensitive and attuned to negative stimuli such as threatening sounds and disgusting images (Balzer and Jacobs 2011; Dodd et al. 2012; Hibbing, Smith, and Alford 2014; Peterson, Smith, and Hibbing 2016; Oxley et al. 2008; Smith et al. 2011b; Soroka and McAdams 2015).

This liberal-conservative difference in negativity bias has been found to be more associated with social political attitudes such as abortion and gay marriage than it is with economic issue attitudes such as feelings about small government and taxes (Adams, Stewart, and Blanchar 2014; Brenner and Inbar 2015; Hibbing, Smith, and Alford 2014; Smith et al. 2011b). The exact reason for these differences have not been fully fleshed out and should be left for future work, but there is evidence that social issue attitudes are genetically heritable while economic issue attitudes are less so (see Benjamin et al. 2012; Brandt and Wetherell 2012; Friesen and Ksiakiewicz 2014). The biological underpinnings of these social issue attitudes suggest, in part, that we are predisposed to these attitudes from birth and that they may be difficult to change later in life. We know, however, these attitudes do change for some people. It is possible all the change associated with social issue attitudes comes from environmental sources, but there is also a chance the source of change in these biologically rooted attitudes is itself biological.

3.3 Hypotheses

I expect there will be a heritable component of attitudinal stability and for the direction of any change. Following the findings regarding our understanding of the biological foundations of political attitudes, I expect the heritability of attitudinal stability will be higher for social issue attitudes than it is for economic issue attitudes.

3.4 Data

The data for this chapter are drawn from a sample of twins from Australia who were surveyed at two separate time points as a part of a larger study on the genetic and environmental underpinnings of social, economic, and political behaviors (Hatemi et al. 2015). The first wave of data was collected from July 2008 to December 2009, and the researchers targeted twins between the ages of 19 and 30. The researchers who collected the data were able to collect data from 250 complete twin pairs and 86 single twins during this period of data collection. The second wave of data were collected 18-24 months (between July 2010 and November 2011) after the first wave of data collection. During this time, the researchers were able to recontact 379 twins from the first wave of data collection along with 157 new twins, 566 mothers of twins, 360 fathers of twins, and 120 non-twin siblings of twins. For the purposes of this study, I examined the data of all twin pairs for whom there were political attitude data at both time points. After removing single twins and twin pairs with missing attitudinal data at either time point, I was left with 125 twin pairs. There were 53 monozygotic twin pairs and 72 dizygotic twin pairs.

The attitudinal data came from a version of the Wilson and Patterson (1968) battery modified for use in Australian politics. The battery presented subjects with a list of 30 political attitudes such as “Free Trade”, “Stricter Immigration”, or “War on Terror”, and asked the subjects to select “Yes” if they agreed with the issue, “No” if they

disagreed with the issue, and "Unsure" if they were unsure about the issue. This created a three-point scale (1=Yes, 2=Unsure, 3=No) for each item. Items were recoded so that higher values always indicated the most liberal response option. Data were collected for each item during Wave I and Wave II. For each item, a change variable was created by subtracting the value of the item in Wave II from the value of the item in Wave I and taking the absolute value. A direction of change variable was taken by using the real value of these differences. The resulting change variables have three potential values for the absolute level of change (0=no change, 1=moderate change, 2=full change), and there were five possible values for the real value of change (-2=full change to conservative, -1=moderate to conservative, 0=no change, 1=moderate change to liberal, 2=full change to liberal). After creating change variables for each issue attitude on the Wilson-Patterson inventory, I created six variables which represented change for a subset of attitudes. The first two are Total Change variable which added the total change for all 23 Wilson-Patterson items. I then created four more variables representing change on social issues and economic issues. The items can be found in the endnotes.[i]

3.5 Methods

Using OpenMx v. 2.7.4 for R (Neale et al. 2016), I ran a series of univariate and bivariate structural equation models to capture the variance associated with additive genetic effects, common environmental effects, and unique environmental effects. These models work under the assumptions laid out by the CTD. Namely, assumptions can be made about the genetic and environmental relationships between sets of twins. There are two different kinds of twin pairs—monozygotic and dizygotic. Monozygotic twins, often referred to as identical twins, share 100 percent of their genes with each other. Dizygotic twins, or fraternal twins, are like any other non-twin sibling pair in that they share 50

percent of their genes on average. It is assumed that all twin pairs shared a common environment growing up, as they grew up in the same household, attended the same schools, had the same religious upbringing, etc.[9] Given these two assumptions, it is possible to partition the variance of a given trait into additive genetic, common environmental, and unique environmental effects.

The univariate analyses will separate the three phenotypes of interest—Total Wilson-Patterson Change, Social Issues Wilson-Patterson Change, and Economic Issues Wilson-Patterson Change—into these three components. For each phenotype four models were run. The first model—the full ACE model—includes all three potential sources of variance. The second model—a reduced AE model—includes only additive genetic and unique environmental sources of variation. The third model—the CE model—is a fully environmental model as it only allows for common and unique environmental sources of variation. The final model—the E model—only allows for the unique environmental effect. As the AE, CE, and E models are nested within the full ACE model, it is possible to use model fit statistics to choose the best fitting model. The best fitting model will be the most parsimonious model that is not significantly different from the full model. If all the submodels perform significantly worse than the full ACE model, then the full ACE model will be treated as the best fitting model.

[9] There is some debate over the degree to which we can assume monozygotic and dizygotic twin pairs truly have equal environments growing up. It is argued that dizygotic twins are more likely to be treated as individuals, thus having less of a common environmental similarity, than monozygotic twins. Much ink has been spilt over this issue of the Equal Environments Assumption, and good summaries of both sides of the debate can be found here (Charney 2008) and here (Alford, Funk, and Hibbing 2008; Hannagan and Hatemi 2008). I do not wish to add to this debate further, but I find the arguments laid out by Alford, Funk, and Hibbing (2008) and Hannagan and Hatemi (2008) to be the most convincing.

3.6 Results

Table 3.1 displays the correlations broken down by twin pair type for the eight phenotypes of interest for this chapter. The correlations were calculated by correlating the value of a given phenotype for Twin 1 with the value of the same phenotype for Twin 2. Traits with significant heritable effects will show higher correlations for MZ twins than DZ twins. As such, it is likely that the total Wilson-Patterson change ($r_{mz} = .21$; $r_{dz} = -.02$) phenotype and the social Wilson-Patterson change ($r_{mz} = .33$; $r_{dz} = .04$) phenotype are somewhat heritable. Both variables display significantly higher correlations between MZ twin pairs than they do for DZ twin pairs. Economic Wilson-Patterson change ($r_{mz} = .02$; $r_{dz} = -.09$) does not appear to be driven by heritability. Of the directional variables, two of the three seem like they might have a heritable component. Both the social ($r_{mz} = .20$; $r_{dz} = -.04$) and economic ($r_{mz} = .21$; $r_{dz} = .13$) items have higher MZ correlations than DZ correlations. The total Wilson-Patterson item ($r_{mz} = .10$; $r_{dz} = .17$), however, seems as though it might have more influence from the common environment given the larger DZ twin correlation relative to the MZ twin correlation.

Table 3.1: Phenotypic Correlations between MZ and DZ Twin Pairs

Variable	MZ Twins	DZ Twins
Change Variables		
Total WP Change	.21	-.02
Social WP Change	**.33**	.04
Econ. WP Change	.02	-.09
Direction of Change Variables		
Total WP Direction	.10	.17
Social WP Direction	.20	-.04
Econ. WP Direction	.21	.13
n pairs	53	72

Note: Bold correlations indicate a significant correlation at $p<.05$.

Table 3.2 displays the results of the univariate ACE analyses for the three ideological change variables. As described earlier, I ran four structural equation models for each of the three ideological change variables. It is possible to then compare these four models with each other to find the best fitting and most parsimonious (parsimony defined as the fewest number of ACE components) model. Models with lower -2 log-likelihoods are better fitting than models with higher -2 log-likelihoods. The comparison provides a *p*-value to ascertain whether the -2 log-likelihoods are significantly different (lower *p*-values indicate significantly worse fit).

The analyses only find a role for heritability for social Wilson-Patterson change. Change on all Wilson-Patterson items and change on economic Wilson-Patterson items was entirely the product of unique environmental forces. For the total Wilson-Patterson, the AE model was the same as the full ACE model, and is the best fitting model. However, the A component, while showing an estimate of .14 (95% CI [0, .36]), was not significantly different from zero. Given the overall small sample size, it is very likely this estimate would be significantly greater than zero with the extra power. For economic issue change, all models performed as well as the full ACE model, and the heritability and common environmental estimates were 0 for all the models. It is possible that small heritability ($A^2 = 0$, 95% CI [0, .21]) and common environmental ($C^2 = 0$, 95% CI [0, .13]) effects, but these effects, even with a significantly larger sample, would likely be small.

Table 3.2: Univariate ACE Analyses of Ideological Change

	Parameter Estimates						
Model	A^2	C^2	E^2	-2LL	$\Delta\chi^2$	Δdf	*p*-Value
Total WP Change							
ACE	.14 (0-.36)	0 (0-0)	.86 (.64-1)	1415.27	-	-	-
AE	**.14 (0-.36)**	-	**.86 (.64-1)**	**1415.27**	**0**	**1**	**1**
CE	-	.07 (0-.24)	.93 (.75-1)	1416.01	.74	1	0.39
E	-	-	1	1416.70	1.43	2	0.49
Social WP Change							
ACE	.27 (0-.48)	0 (0-.27)	.73 (.52-.97)	1206.30	-	-	-
AE	**.27 (.03-.48)**	-	**.73 (.52-.97)**	**1206.30**	**0**	**1**	**1**
CE	-	.16 (0-.32)	.84 (.68-1)	1208.25	1.95	1	0.16
E	-	-	1	1211.30	5	2	0.08
Econ. WP Change							
ACE	0 (0-.21)	0 (0-.13)	1 (.79-1)	960.45	-	-	1
AE	0 (0-.21)	-	1 (.79-1)	960.45	0	1	1
CE	-	0 (0-.13)	1 (.87-1)	960.45	0	1	1
E	-	-	**1**	**960.45**	**0**	**2**	**1**

Note: Best fitting model is highlighted.

As I expected, any heritability associated with attitudinal change was found with social issues rather than economic issues. For social Wilson-Patterson change, the AE was the best performing model, and there were significant effects for both the additive genetic (A^2=.27, 95% CI [.03-.48]) and unique environmental (E^2=.73, 95% CI [.52-.97]) components. Therefore, within this population of twins, 27 percent of the variance associated with change on social issue attitudes can be attributed to genetic effects. These findings add more to the growing literature surrounding the biology of political attitudes, as the attitudes most associated with biological traits tend to be social issues. I have shown here that even the attitudinal stability surrounding these issues can be explained in part by biological forces. Intriguingly, these are fairly conservative tests of attitudinal stability as the stability was measured through two time points only 18 months apart. Regardless of genetic effect, it is also clear that unique environmental influences play the largest role in predisposing people towards attitudinal instability.

For the next set of analyses, I examined the variation associated with the direction of attitudinal change. Here, as with the last set of analyses, I expect social issue attitudes to be most predicted by heritability. I ran univariate ACE analyses with the directional change variables, just as I did for the last set of change variables. In Table 3.3 I present the results of these analyses. For Total Wilson-Patterson change, the best fitting model was the CE model. This is unsurprising given the larger correlation for this trait between DZ twins rather than the expected MZ twins. In the CE model, we see common environmental effects (C^2=.13, 95% CI [.00-.30]) explaining at least some of the variation, but unique environmental effects (E^2=.87, 95% CI [.70-1]) comprising the bulk of variation explained.

Moving on to social Wilson-Patterson change, the AE model is the best fitting model with additive genetic factors explaining 10 percent (95% CI [0-.36]) of the variation associated with the direction of change on social issue attitudes. Again, unique environmental effects (E^2=.90, 95% CI [.64-1]) explain the vast majority of variation associated with this trait. Finally, the direction of economic issue attitude change was the first trait predicted by additive genetic (A^2=.16, 95% CI [0-.36]), common environmental (C^2=.07, 95% CI [0-.34]), and unique environmental (E^2=.77, 95% CI [.56-.99]) effects. The AE sub-model, although it performs worse than the full ACE model, suggests the A estimate may be as high as .24 (95% CI [.01-.44]). Contrary to my expectations, the A estimate for the direction of economic issue attitude change in both the ACE and AE models is larger than the A estimate in the models predicting social issue attitude change.

Table 3.3: Univariate ACE Analyses of Ideological Change Direction

	Parameter Estimates						
Model	A^2	C^2	E^2	-2LL	$\Delta\chi^2$	Δdf	*p*-Value
Total WP Change							
ACE	0 (0-0)	.13 (0-.30)	.87 (.70-1)	1573.70	-	-	-
AE	.15 (0-.36)	-	.85 (.64-1)	1574.17	.47	1	0.49
CE	**-**	**.13 (0-.30)**	**.87 (.70-1)**	**1573.70**	**0**	**1**	**1**
E	-	-	1	1575.78	2.08	2	0.35
Social WP Change							
ACE	.10 (0-.36)	0 (0-.18)	.90 (.64-1)	1242.10	-	-	-
AE	**.10 (0-.36)**	**-**	**.90 (.64-1)**	**1242.10**	**0**	**1**	**1**
CE	-	0 (0-.20)	1 (.80-1)	1242.67	.56	1	0.45
E	-	-	1	1242.67	.56	2	0.75
Econ. WP Change							
ACE	**.16 (0-.44)**	**.07 (0-.34)**	**.77 (.56-.99)**	**1148.03**	-	-	-
AE	.24 (.01-.44)	-	.76 (.56-.99)	1148.10	.07	1	0.79
CE	-	.18 (.01-.35)	.82 (.65-.99)	1148.24	.20	1	0.65
E	-	-	1	1152.44	4.41	2	0.11

Note: Best fitting model is highlighted.

3.7 Discussion and Conclusion

It is very possible that the results of this chapter were hampered by a power issue with the data. Regardless, there was meaningful support for the most important expectations. There is a heritable component of attitudinal change and the direction of attitudinal change, and that heritable component is most evident for change on social issue attitudes. The results from this chapter are instructive in terms of where we should look for the sources of attitudinal stability. Much of the variance surrounding attitudinal stability is associated with unique environmental sources. This finding means we need to examine life events and other external sources when looking for the sources of attitudinal instability. In the next chapter I will focus more on uncovering these sources of lability. It is clear more work needs to be done to uncover these environmental sources of attitudinal stability, but there also should be a focus on gene-environment interactions. The power issue with this sample greatly limited my ability to explore simple shared genetic pathways between personality traits and attitudinal stability. Yet, it can also be the case that certain traits influenced by genetics—personality or otherwise—may make some

people more susceptible to change their prior beliefs as the result of particular environmental stimuli.

Beyond the environmental sources of change, it is clear genetics does play a role, however limited, in the stability of social issue attitudes. Given the relatively short period of time between waves (~18-24 months), it is intriguing that any effect of heritability was uncovered in the first place. Although I have not examined the direction of this instability and thus cannot show these twins were moving in the same direction, it still shows the heritability of political attitudes is more complex than initially imagined. The twin pairs in this sample were fairly young at the time of both waves (19-30 years old). This portion of lifespan development is associated with attitudinal instability (Jennings and Niemi 1981). This portion of lifespan development also happens to be the time when political attitudes can begin to be explained by genetic heritability (Hatemi et al. 2009). With a larger longitudinal twin design that has more variation associated with age it would be possible to better understand how these patterns of heritability look like across the lifespan. It is very possible that attitudinal change is more heritable early in life, but this heritability may taper off later in life as environmental sources of instability become more prominent.

Finding these sources of attitudinal stability is an important task to undertake. Partisan polarization is arguably one of the most pressing issues facing American democracy today. Certainly, we can, and should, always expect vigorous debate and disagreement within a healthy democracy. Yet, the partisan rancor Americans face today is at historic levels. Americans on both sides of the political aisle are beginning to see those on the other side as enemies. Understanding the sources of attitudinal stability

might help us to better grasp how to bring Americans back together to a place of amicable—rather than vitriolic—disagreement. If the sources of attitudinal stability can be traced to biology, as I have done in this chapter, and we can trace these biological sources to easily observable traits, then it becomes possible to identify people who are more likely to change their existing attitudes. Again, I must stress that heritability accounts for a very small amount of variation in attitudinal stability, but the existence of heritability effects does help me to further understand the roots of attitudinal stability.

Chapter 4: Exploring the Psychological Correlates of Attitudinal Instability

4.1 Introduction

As I established in the two prior chapters, attitudinal stability is a trait that differs across people and can partly be explained by genetic heritability. In the last chapter, I began the process of trying to examine where the sources of attitudinal instability may lie. The main finding was that genetic heritability worked to influence the stability of social issue attitudes. As I argued in the last chapter, a significant heritability effect indicates there are likely underlying psychological dispositions driving the likelihood of change. Yet, as the last chapter also demonstrated, unique environmental effects, not genetics, comprised the largest portion of variance associated with attitudinal stability. Therefore, it is likely some of the sources of attitudinal stability will be psychological, but it will be more fruitful to examine the role of life events play in attitudinal instability. To this point, much of the work examining why people change their political attitudes has focused on these kinds of events (see Dinas 2013, Erikson and Stoker 2011, Healy and Malhotra 2013, Sears 1981, Sears and Valentino 1997). Life events are idiosyncratic and can affect people in different ways. The fact that life events are expected to be the main predictor of attitudinal stability does not preclude biological influences beyond those discussed previously. In fact, evidence has shown gene-environment interactions can influence political attitudes (Hatemi 2013).

In this chapter and the next I will analyze the various sources of attitudinal instability. Too often we see attitudinal instability treated as evidence for the lack of meaningful attitudes (see Converse 1964). As such, there has not been much work exploring the sources of attitudinal stability. The previous two chapters demonstrated

attitudinal stability ought to be treated as an individual difference and not readily dismissed as the result of non-attitudes. Although the predominant pattern of attitudes over the lifespan appears to be a pattern of stability, there are a meaningful amount of people who did display initial patterns of instability which remained persistent throughout the lifespan. On top of that, these patterns of instability may be rooted partly in biology, as the last chapter demonstrated. Therefore, it behooves us to further understand what drives these moments of instability. The next two chapters will add to the overall understanding of the role of attitudes.

The analytic strategy for the next two chapters will utilize the same datasets as the previous two chapters. To explore the effects of life events and other forces of socialization on attitudinal instability I will return to the Michigan Youth-Parent Socialization Study (Jennings, Markus, Niemi, and Stoker 2005) in the next chapter. This dataset which I will describe in fuller detail later includes data on many events throughout the lives of its subjects. These data include items on parenthood, education, military service, and changes in economic standing. I will utilize the group categorizations which were derived from the analyses in Chapter 2 as dependent variables. I expect there will be a good deal of variation in attitudinal stability explained by these kinds of more sociological life events. Where the MSS provides bountiful data regarding life events, it has a relative dearth of data pertaining to the psychological states of its participants. As such, I focus my attention in the current chapter on how psychological dispositions influence attitudinal stability.

For this chapter I will return to the dataset from where I took the Australian twin data. The twin data utilized in the last chapter came from a much larger subset of

longitudinal data collected in Australia (Hatemi et al. 2015). The larger subset of data includes single twins, parents, and non-twin siblings. I will use this larger dataset to examine the psychological correlates of attitudinal instability and the direction of attitude change.

4.2 Theory

Psychological dispositions will very likely influence individual susceptibility to attitudinal shifts. If, as I demonstrated in the last chapter, attitudinal stability is partly heritable, the question becomes—why? It is very possible there are shared genetic pathways between attitudinal stability and other heritable traits. One potential shared genetic pathway is personality. Personality traits are deeply rooted in our biology (see Plomin and Caspi 1990), and it makes a good deal of sense to think certain personality traits could predispose people towards attitudinal lability. There are a number of personality traits which have been linked with political attitudes and behavior. Traits such as authoritarianism, social dominance, cognitive styles, self-esteem, and personal values have all been linked to political traits (see Jost et al. 2003). The Big Five battery of personality traits—openness to new experience, conscientiousness, extraversion, agreeableness, and emotional stability—have long been used to predict political attitudes and behaviors (see Mondak 2010). These traits may also be associated with attitudinal stability.

Regarding openness to new experience, individuals who are open to new experience tend to be people who seek out new art, cultures, and ideas (McCrae and Costa 1987). Politically, people who are high on openness tend to be politically liberal (Mondak 2010). Traits associated with openness are creativity, curiosity, intelligence, and novelty seeking (McCrae and Costa 1987).). Those low in openness are seen as being

close-minded (McCrae and Costa 1987).). As people who are more open are more likely to seek out new ideas, it is likely that people who are high on this trait would be more likely to come across new political ideas. In fact, Bakker, Hopmann, and Persson (2015) show a weak effect of openness in predicting variability in German political party affiliation. Although being more likely to come across new political ideas may lead people to change their existing beliefs, openness may cause the reverse process.

The stratification of experience phenomenon suggests that as a person comes across more new ideas in their lifetime, they become less likely they are to change because of those new ideas (Mannheim 1952; Sears 1981). Mannheim (1952, p. 177) discusses stratification of experience thusly:

> "Early impressions tend to coalesce into a natural view of the world. All later experiences then tend to receive their meaning from this original set, whether they appear as that set's verification and fulfillment or as its negation and antithesis. Experiences are not accumulated in the course of a lifetime through a process of summation or agglomerations, but are "dialectically" articulated in the way described… This much, however, is certain, that even if the rest of one's life consisted in one long process of negation and destruction of the natural worldview acquired in youth, the determining influence of these early impressions would still be predominant. For even in negation our orientation is fundamentally centered upon that which is being negated, and we are thus still unwittingly determined by it."

As such, our prior attitudes—here I would argue the attitudes developed during the impressionable period of young adulthood between the ages of 18-26—form our worldview from which all new ideas and attitudes are assessed. So, perhaps unintuitively, people become less likely to change their attitudes—and even become more hardened in their existing beliefs—because of new information. If, as I imagine, people who are high in openness are more likely to come across information, ideas, and attitudes, then it could very conceivably follow that during the impressionable years of 18 and 26 these people

are more recalcitrant in their attitudes, but after their worldview is constructed and crystalized, they might actually become less likely to reorient their attitudes as the result of all the information, ideas, and attitudes they come across.

On the opposite end of the political spectrum, people who are high in conscientiousness tend to be politically conservative (Mondak 2010). Conscientiousness is associated with people who are self-disciplined, organized, and hard-working. People who display high levels of conscientiousness are bound to a sense of duty and have been shown to have higher levels of traits such as conformity (DeYoung, Peterson, and Higgins 2002). Given the conscientious person's tendency towards discipline and conformity it is possible these people are more rigid in their attitudes. As such, people who are high in this trait may be less likely to change their political attitudes throughout their lives. Since people who are more open tend to be more liberal and people who are more conscientious tend to be more conservative, it is possible the asymmetry found in Chapter 2—where people who started off liberal were more likely to become conservative than the reverse for people who started off conservative—is the result of personality influencing the likelihood of attitudinal stability. So, examining the interaction of these personality variables and age will be important in uncovering whether they lead to the asymmetric conservative shift.

Traits such as extraversion, agreeableness, and emotional stability are also linked to political attitudes and behaviors. Unlike openness and conscientiousness, however, these traits tend to have more context-based effects on political attitudes. Bakker (2016) demonstrated a link between agreeableness and economically liberal attitudes. Individual-level income levels mediated this linkage whereby those who were low in agreeableness

were more likely to endorse conservative economic attitudes if they were poor and more likely to endorse liberal economic attitudes if they were rich. However, the linkage between these personality traits and attitudinal stability is a different matter. Extroverts tend to be socially active people who know many other people. The increased social networks of extroverted individuals may lead them to come across and adopt new ideas. Agreeable people tend to be warm, empathetic, and seek out cooperation. These traits may predispose a person towards adopting new beliefs to go along with the crowd. Finally, emotional stability which is associated with people who are calm, cool, and collected. People who are more emotional stable may also be more stable with their attitudinal beliefs (Bakker, Hopmann, and Persson 2015).

Beyond the Big Five personality traits I will also examine the degree to which social sensitivity and empathy influences attitudinal instability. Particularly, I will be utilizing the "Reading the Mind in the Eyes" task (RME) to measure levels of social sensitivity, and the Empathy Quotient (EQ) battery to measures levels of empathy. The RME presents a series of photographs to participants. Each picture displays a set of eyes which each express a separate emotion. Participants are then asked to determine which emotion the eyes are displaying. This measure has been inversely associated with autism and provides a good test of the degree to which people are sensitive to the feelings of others (see Baron-Cohen et al. 2001). Social sensitivity does not constitute the sum total of empathy, but it is an important ability required for empathy. The EQ is a battery of questions which work to measure the various affective and cognitive components associated with empathy (Baron-Cohen and Wheelwright 2004). Items such as "I often find it difficult to judge if something is rude or polite" and "I don't tend to find social

situations confusing" are used to measure EQ.

Together RME and EQ capture similar concepts, and both have been associated with autism spectrum disorder and prosocial behaviors more broadly (Bailey, Henry, and Von Hippel 2008). Prosociality, as defined as the action of engaging in behaviors for the common good, has been associated with the tendency to form psychological attachments to family and friends (Markiewicz, Doyle, and Brendgen 2001), organizations (O'Reilly and Chatman 1986), and groups (Armenta et al. 2011). As attitudes are themselves psychological attachments and can help one form group attachments to political party or ideological labels, it follows that the tendency to be socially sensitive or empathetic may be negatively associated with attitudinal instability. We know, for instance, that attitudes such as party identification are driven by patterns of group attachments (Green, Palmquist, and Schickler 2002). People who are more "groupish"—that is to say people who are likely to have higher levels of prosociality—are more likely to identify as strong partisans.

Prosociality should not be confused with any of the other personality traits discussed above. Of the Big Five items, prosociality and the likelihood to form attachments is most likely associated with agreeableness, but these traits are separate from the traits covered in the Big Five. Furthermore, there may be some question as to how the forming of social attachments might relate to openness. It is possible that openness may cause people to create attachments with many different objects, but this process in of itself would not lead to the negative relationship I predict between prosociality and attitudinal instability. More important than the number of attachments people form, prosociality should affect the strength of the attachments people form. It is

possible, as an example, for a person who is high in openness and low on prosociality to develop many weak attachments to objects, but the weakness of these attachments makes them more prone to be thrown out capriciously. A person low in openness but high in prosociality might develop fewer attachments, but these attachments should be strong and relatively immutable.

Throughout my analyses, I examine the main effects of the Big Five personality traits, social sensitivity as measured by the RME, and empathy as measured by the EQ as they pertain to patterns of attitudinal stability for both total and social Wilson-Patterson batteries I utilized in the previous chapter. I chose to focus on these two batteries and to drop the economic battery because given the results of the previous chapter, these are the two batteries I expect to be most explained by personality. I will also be examining how personality variables interact with age. There are many things that could mediate the relationships between these personality variables and attitudinal stability. For instance, I could have chosen to interact these traits with sex, educational attainment, and a host of other items. I chose to focus these interaction analyses on the mediating role of age because the literature surrounding attitudinal stability suggests age is a major influence in the likelihood of stability. Specifically, the period between the ages of 18 and 26 are marked by relative instability compared to later years, and interacting personality with age allows me to see how personality traits mediate this age-based expectation of instability.

4.3 Hypotheses

Following the theoretical expectations discussed above, I assume personality, including social sensitivity and empathy, will predict the likelihood of attitudinal instability. I expect openness to be positively associated with attitudinal instability. The

process of seeking out new ideas should make people high in this trait to be more likely to be attitudinally labile. However, the expectations of stratification of experience suggest openness may make people less likely to change as they grow older, as people are less likely to change as the result of new information as they grow older. I expect conscientiousness and emotional stability to be negatively associated with change. There are no specific expectations for the roles of extraversion or agreeableness. Both social sensitivity and empathy should be negatively associated with attitudinal instability.

The direction of attitudinal change will likely be associated with the traditionally expected effects. Openness should be associated with change in a leftward direction, and conscientiousness should be associated with change in a rightward direction. The other three Big Five classifications likely will not have any significant effect on the direction of attitudinal change. It is possible that some of these variables may be associated with attitudinal change, but the literature surrounding the relationship between personality and political attitudes does not provide many expectations for these variables, as their importance regarding political attitudes seems to be rooted more in the interaction between these variables and environmental context.

Although I would expect these variables to influence the direction of attitudinal change given particular contexts, I will leave that question for future work, as it is beyond the scope of this chapter. The social sensitivity and empathy variables should, however, be associated with change in a leftward direction. Unlike the relationship between personality and the likelihood of attitudinal change, I do not expect age to significantly moderate the relationship between any of these personality variables and the direction of change.

4.4 Data

The data come from the same source described in the last chapter. The first wave of data was collected in the latter half of 2008 to December 2009, and the second wave of data were collected 18-24 months after the first wave was collected. The full data set includes 1,844 people, but, excluding those who did not complete both waves of the study, the total N was 370. Of those 370, 226 were female and 144 were male. As only twins were surveyed in the first wave, all of the participants are individual twins who ranged in age from 19-31 (M = 25.44, SD = 3.08). To eliminate the issue of non-independence inherent to a dataset which included twin pairs, I randomly deleted one twin from each pair included in the dataset. As a result, I was left with a final N of 245. In addition to this larger dataset, I also return to the twin dataset utilized in the last chapter to provide a preliminary look at how personality traits and attitudinal lability might be related. Control variables for gender, income, education, and political leanings will be included.

The attitudinal data are the same as four of the six variables utilized in the last chapter. There are two variables representing the real and absolute values of total change on the Wilson-Patterson scale and for social change on the Wilson-Patterson scale. The Big Five personality data came from 44-item Big Five Inventory (John and Srivastava 1999). These data were gathered during Wave I.[10] The Big Five Inventory (BFI) uses 44 items to capture five dimensions of personality—openness to experience, conscientiousness, extraversion, agreeableness, and emotional stability. People high in openness to experience tend to be curious, imaginative, and artistic. Conscientious people

[10] Big 5 personality data were collected during Wave II via the shorter Ten-Item Personality Inventory. As the 44-item Big Five Inventory is a more robust measure of personality, I opted to use the Wave I data for the purposes of analysis.

tend to be organized, careful, and hardworking. Extraversion captures those who are sociable, enthusiastic, and adventurous. Agreeable people are warm, compliant, and modest. Emotionally stable people tend to be relaxed, content, and confident. Each of these dimensions were measured with anywhere between 8-10 items in the BFI. Each item consisted of a sentence that started with "I see myself as someone who…" and ended with a statement pertaining to a personality trait such as "…likes to reflect and play with ideas". Participants were then asked to rate the degree to which the agreed with the statement of themselves on a five-point scale ranging from "Strongly Disagree" to "Strongly Agree". The exact items used and the summary statistics for these variables can be found in the endnotes.[ii]

To capture social sensitivity and empathy the researchers who collected the data measured both RME and EQ. The RME task asked participants to select the emotion displayed in seventeen separate pictures of emotionally expressive eyes. The eyes conveyed both positive and negative emotions ranging from fear to lust. The RME score added up the number of correct responses, and the values in the data range from a low of 4 correct responses to a perfect high of seventeen responses (M = 12.25, SD = 2.30). The EQ was calculated from a battery of 18 items where participants were given a sentence, and they were required to indicate the degree to which they agreed with the sentence (exact item wording and summary statistics in endnotes[iii]).

4.5 Methods

I utilized OLS regression models to examine the relationships between personality traits and attitudinal stability. For each personality trait, I ran eight separate models with four models for both Wilson-Patterson batteries examined. For each battery, I ran two main effects models—one predicting the stability of the attitude with a given personality

trait and one predicting the direction of change for the attitude with the given personality trait. I also ran two personality by age interaction models, again predicting stability and the direction of change, for both attitudinal batteries. Following my analyses of individual personality traits, I then ran four full models predicting the stability and direction of change of both attitudinal batteries. These four models included all personality variables as well as an age by openness interaction.

4.6 Results

The fuller Australian twins dataset which included 245 single twins to examine the bivariate relationships between attitudinal change on the total Wilson-Patterson battery, the social Wilson-Patterson battery, and personality. Table 4.1 displays the bivariate correlations between change on all Wilson-Patterson items, the Big 5 personality traits, and the two measures, RME and EQ, associated with social sensitivity and empathy. The bottom left corner of the correlation matrix represents the relationships between the personality variables and the existence of change, and the upper right corner of the matrix represents the relationships between personality and the direction of change. The results of these analyses are interesting. There is strong support, as I expected, for the idea that emotional stability ($r = -.23,\ p < .001$), social sensitivity as measured by the RME ($r = -.25,\ p < .001$), and empathy ($r = -.15,\ p < .05$) are negatively associated with the likelihood of attitudinal change. Openness ($r = -.08,\ p = .21$) and conscientiousness ($r = .17,\ p < .01$) did not behave as I expected. The signs on both are reversed, as I expected openness to be positively associated with instability and conscientiousness to be negatively associated with change.

The relationships between personality and the direction of attitudinal change are all weaker than I expected, but many of them are in the direction I predicted. Openness

($r = -.12,\ p = .06$), social sensitivity ($r = -.12,\ p < .05$), and empathy ($r = -.09,\ p = .15$) are all negatively associated with the direction of attitudinal change. Given the coding of the directional variable where change in a conservative direction was coded higher, these findings suggest that higher levels of openness, social sensitivity, and empathy led people to change in a liberal direction. The other four personality variables—conscientiousness ($r = -.08,\ p = .21$), extraversion ($r = -.04,\ p = .47$), agreeableness ($r = -.03,\ p = .65$), and emotional stability ($r = .05,\ p = .47$)—were not meaningfully related to the direction of attitudinal change. Of these non-relationships only conscientiousness is truly surprising. I predicted conscientiousness would push people to change in a conservative direction, but the sign for the relationship is negative and the relationship is not significant.

Table 4.1: Bivariate Correlations between Total Wilson-Patterson Change/Direction of Change and Personality Traits

Variable	Total WP	Openness	Conscientiousness	Extraversion	Agreeableness	Emotional Stability	RME	EQ
Total WP	-	-.12ǂ	-.08	-.04	.03	.05	**-.12**	-.09
Openness	-.08	-	.02	**.29**	**.20**	**-.14**	.04	**.31**
Conscientiousness	**.17**	.02	-	**.38**	**.15**	**-.18**	.01	**.21**
Extraversion	.04	**.29**	**.38**	-	**.16**	**-.17**	.01	**.34**
Agreeableness	-.04	**.20**	**.15**	**.16**	-	**-.23**	.06	**.46**
Emotional Stability	**-.23**	**-.14**	**-.18**	**-.17**	**-.23**	-	.02	-.11ǂ
RME	**-.25**	.04	.01	.01	.06	.02	-	.10ǂ
EQ	**-.15**	**.31**	**.21**	**.34**	**.46**	-.11ǂ	.10ǂ	-

Note: Bottom left correlations represent correlations between the existence of change and personality. Top right correlations represent correlations between the direction of change and personality. Bold correlations indicate a significant correlation at $p<.05$. ǂ indicates a significant correlation at $p<.10$.

Much like the previous analyses, Table 4.2 presents the bivariate relationships between the personality variables and attitudinal change, but for these analyses I examined the relationship between personality and the subset of social issue attitudes. As I demonstrated in the last chapter, change on these attitudes is most closely associated with genetic heritability. Unlike the previously analyzed total battery, there are no meaningful relationships between either openness ($r = -.01,\ p = .76$) or conscientiousness ($r = .08,\ p = .22$) and change on social issue attitudes. There were expected effects for emotional stability ($r = -.13,\ p < .05$), social sensitivity ($r = -.28,\ p < .001$), and empathy ($r = -.10,\ p = .10$). Therefore, whatever relationships there are between openness, conscientiousness, and the total Wilson-Patterson battery are likely due to change on some other sub-battery of Wilson-Patterson items.[11]

The direction of change on social issue attitudes was only related to extraversion ($r = -.13,\ p < .05$). These findings suggest that people higher in their overall levels of extraversion were more likely to change in a liberal direction on these social issue attitudes. Going against my expectations, openness ($r = .02,\ p = .77$) and conscientiousness ($r = -.04,\ p = .59$) were not related to change on social issue attitudes. Agreeableness ($r = .06,\ p = .33$), emotional stability ($r = -.00,\ p = 1$), social sensitivity ($r = -.06,\ p = .30$), and empathy ($r = .06,\ p = .39$) were also all unrelated to the direction of change on social issue attitudes. The direction of social issue change could still be influenced by these personality variables, but any role they have is very likely mediated by sociological forces.

[11] People high in openness were less likely to change their attitudes regarding foreigners ($r = -.6,\ p < .05$), and people high in conscientiousness were more likely to change their attitudes regarding economic ($r = .17,\ p < .01$) and environmental issues ($r = .24,\ p < .001$).

Table 4.2: Bivariate Correlations between Social Wilson-Patterson Change/Direction of Change and Personality Traits

Variable	Social WP	Openness	Conscientiousness	Extraversion	Agreeableness	Emotional Stability	RME	EQ
Social WP	-	.01	-.04	**-.13**	.06	-.00	-.07	.06
Openness	.02	-	.02	**.29**	**.20**	**-.14**	.04	**.31**
Conscientiousness	.08	.02	-	**.38**	**.15**	**-.18**	.01	**.21**
Extraversion	.05	**.29**	**.38**	-	**.16**	**-.17**	.01	**.34**
Agreeableness	-.06	**.20**	**.15**	**.16**	-	**-.23**	.06	**.46**
Emotional Stability	**-.13**	**-.14**	**-.18**	**-.17**	**-.23**	-	.02	-.11ǂ
RME	**-.28**	.04	.01	.01	.06	.02	-	.10ǂ
EQ	-.10ǂ	**.31**	**.21**	**.34**	**.46**	-.11ǂ	.10ǂ	-

Note: Bottom left correlations represent correlations between the existence of change and personality. Top right correlations represent correlations between the direction of change and personality. Bold correlations indicate a significant correlation at $p<.05$. ǂ indicates a significant correlation at $p<.10$.

After examining these bivariate relationships, I moved to multiple regression models to examine how personality relates to attitudinal change when controlling for factors such as sex, left-right political identification, income, and educational attainment. For the e four dependent variables—change and direction on all Wilson-Patterson items and change and direction on social Wilson-Patterson items—I ran two models for each of the seven personality items. The first model for each is a main effects model which examines the main effect of the given personality variable, and the second model includes an interaction term to examine how age and personality interact to influence attitudinal instability.

I present the models for openness in Table 4.3. In the main effects models, openness works in the expected direction for the direction of total Wilson-Patterson change (b = -.21, $t(244) = -2.66$, $p <$. 01). This finding demonstrates that when controlling for demographic factors openness predisposes people to change in a liberal direction. This finding was not replicated when I examined the relationship between openness and the direction of social issue attitude change (b = -.00, $t(244) = -0.08$, p = .935). So, whatever liberal change people high in openness exhibit, that change is coming from issues other than social issues. The main effects models for the existence of total and social issue change also do not support the expectations for the relationship between openness and attitude change. Openness is negatively associated with the existence of total change (b = -.10, $t(244) = -1.96$, p = .051), and it is not associated with the existence of social issue change (b = -.03, $t(244) = -0.76$, p = .450). Just as was seen with the bivariate relationships, openness seems to predispose people towards stable political attitudes and not towards instability.

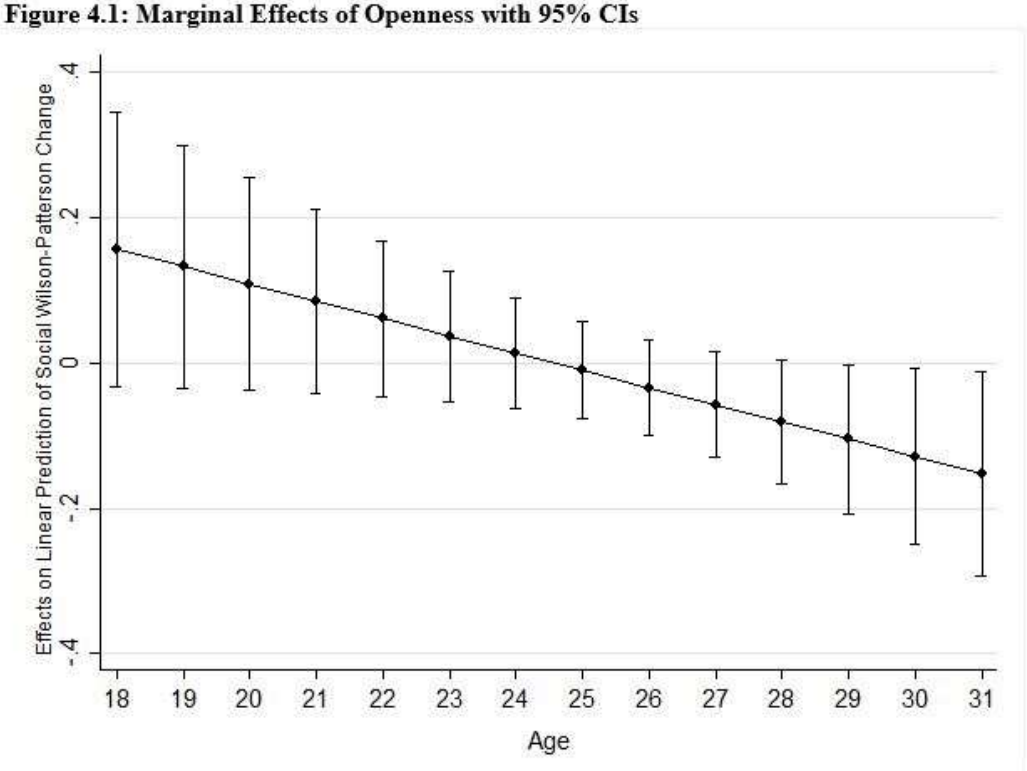
Table 4.3: Openness and Age

	Total Change	Total Change	Total Direction	Total Direction	Social Change	Social Change	Social Direction	Social Direction
Openness	-.10ǂ	.79ǂ	-.21**	-.39	-.03	.58ǂ	-.00	-.21
Age	-.07	.89ǂ	-.16	-.36	-.07	.58ǂ	-.04	-.27
Openness x Age	-	-.03ǂ	-	.01	-	-.02*	-	.01
Sex (Male = 1)	1.91***	1.91***	3.26***	3.26***	.57ǂ	.57ǂ	.79*	.80*
Left-Right (right>left)	-.21	-.12	-.18	-.20	.09	.14	-.37	-.39
Income	.16	.15	.45	.45	.17	.16	-.10	-.09
Education	-.15	-.14	-.16	-.16	-.21ǂ	-.21ǂ	.08	.08
Constant	16.98	-7.86	8.64	13.56	5.96	-10.91	1.43	7.20
N	245	245	245	245	245	245	245	245
Adj. R^2	.06	.07	.09	.08	.02	.03	.00	.00

Note: *** $p<.001$, ** $p<.01$, * $p<.05$, ǂ $p<.10$

However, the interaction models tell a different story about the relationship between openness and attitudinal instability. As I expected, there are significant interactions between age and openness for both total Wilson-Patterson change (b = -.03, $t(244) = -1.93$, $p = .055$) and social Wilson-Patterson change (b = -.02, $t(244) = -2.02$, $p < .05$). These interactions work as I expected. Figure 4.1 displays a graph of the marginal effect of openness on social Wilson-Patterson change (y-axis) as it relates to age (x-axis). As I show in the figure, the relationship between openness and attitudinal instability changes as people grow older. At the earliest point 18-year-olds who are high in openness to experience are nearly more likely to be attitudinal labile (dy/dx = .16, $t(244) = 1.63$, $p = .105$). This marginal effect decreases over time. By the time people who are high in openness to experience turn 29 they are significantly less likely to be attitudinally labile (dy/dx = .10, $t(244) = -2.03$, $p < .05$).

Figure 4.1: Marginal Effects of Openness with 95% CIs



Conscientiousness was expected to be negatively associated with attitudinal change and positively associated with change in a conservative direction. In the bivariate results, the relationship between conscientiousness and attitudinal change was not as expected with conscientiousness being positively associated with total Wilson-Patterson change, not associated with social Wilson-Patterson change, and not associated with the direction of either total or social Wilson-Patterson change. Of the models presented in Table 4.4, conscientiousness only shows a significant effect in the main effects model for total Wilson-Patterson change (b = .19, $t(244) = 3.20$, $p < .01$). Again, as with the bivariate model, conscientiousness is positively related to total change, meaning people high in conscientiousness were more likely to change their attitudes. Furthermore, conscientiousness was not associated with the direction of total change (b = -.08, $t(244) = 0.94$, $p = .351$), the existence of social change (b = .06, $t(244) = 1.49$, $p = .137$), nor the direction of social change (b = -.02, $t(244) = -0.34$, $p = .737$).

Unlike openness, the effects of conscientiousness on the dependent variables were not mediated by age. In the total change (b = .01, $t(244) = 0.41$, $p = .681$), direction of total change (b = -.01, $t(244) = -0.24$, $p = .812$), social change (b = .00, $t(244) = 0.29$, $p = .770$), and direction of social change (b = -.02, $t(244) = -1.40$, $p = .163$) models there were no significant effects for the interaction of age and conscientiousness. So, when conscientiousness affects attitudinal instability, it does not affect social issue attitudes, and its effects do not change as people grow older. As explained in a previous footnote, the effect of conscientiousness on total Wilson-Patterson change work through change on economic issue attitudes and environmental issue attitudes. Future work should further disentangle these effects.

Table 4.4: Conscientiousness and Age

	Total Change	Total Change	Total Direction	Total Direction	Social Change	Social Change	Social Direction	Social Direction
Conscientiousness	.19**	.00	-.09	.08	.06	-.03	-.02	.46
Age	-.07	-.32	-.14	.08	-.07	-.19	-.04	.59
Consci. x Age	-	.01	-	-.01	-	.00	-	-.02
Sex (Male = 1)	2.00***	2.00***	2.98***	2.98***	.61ǂ	.61ǂ	.78ǂ	.77ǂ
Left-Right (right>left)	-.01	-.01	.01	.00	.14	.14	-.37	-.38
Income	.09	.10	.44	.44	.15	.15	-.09	-.10
Education	-.11	-.11	-.10	-.11	-.20ǂ	-.20ǂ	.09	.08
Constant	7.67	13.78	5.01	-.51	3.29	6.14	1.83	-13.76
N	245	245	245	245	245	245	245	245
Adj. R^2	.08	.08	.06	.06	.03	.02	.00	.01

Note: *** $p<.001$, ** $p<.01$, * $p<.05$, ǂ $p<.10$

For the next two factors of the Big Five—extraversion and agreeableness—I did not have many set expectations for how they would influence change and the direction of attitudinal change, and neither displayed any significant bivariate relationships with the four dependent variables. For the sake of due diligence, I ran the models for both extraversion and agreeableness, and the results for these models can be found in Table 4.5 and Table 4.6. As expected, mostly null results are presented in these tables. However, there are some marginal effects for both extraversion and agreeableness. In terms of extraversion, it is not related to total change (b = .05, $t(244) = 0.93$, $p = .351$) or direction (b = -.03, $t(244) = -0.40$, $p = .692$) nor is it related to social change (b = .03, $t(244) = 0.82$, $p = .411$). It does, however, have a marginal effect on the direction of social change (b = -.07, $t(244) = -1.74$, $p = .084$) indicating extroverted people may be more likely to change in a liberal direction on social issues. None of the interaction models found significant effects for extraversion.

In seven of the eight models for agreeableness presented in Table 4.6, there is no significant effect for agreeableness. Agreeableness does have a marginal relationship with the direction of social change when it interacts with age, as there is a marginally significant interaction between the two (b = -.03, $t(244) = -1.85$, $p = .066$). The visualization of this interaction can be found in Figure 4.2. This relationship shows that between the ages of 18 (dy/dx = .29, $t(244) = 2.04$, $p < .05$) and 24 (dy/dx = .10, $t(244) = 1.70$, $p = .090$) the marginal effects of agreeableness make agreeable people more likely to change in a conservative direction on social issue attitudes. From the age of 25 (dy/dx = .07, $t(244) = 1.32$, $p = .187$) on, however, this relationship disappears, and agreeable people become no more or less likely to move in either direction.

Table 4.5: Extraversion and Age

	Total Change	Total Change	Total Direction	Total Direction	Social Change	Social Change	Social Direction	Social Direction
Extraversion	-.05	.50	-.03	.42	.03	.18	-.07ǂ	.40
Age	-.06	.40	-.15	.32	-.07	.10	-.05	.45
Extra. x Age	-	-.02	-	-.02	-	.01	-	-.02
Sex (Male = 1)	1.88***	1.84***	3.02***	2.98***	.59ǂ	.57	.70ǂ	.65
Left-Right (right>left)	-.08	-.09	.04	.04	.12	.12	-.38	-.38
Income	.12	.12	.44	.44	.15	.15	-.06	-.06
Education	-.11	-.13	-.11	-.13	-.20ǂ	-.21ǂ	.08	.06
Constant	12.31	.493	3.19	-8.72	4.30	.26	3.42	-9.10
N	245	245	245	245	245	245	245	245
Adj. R^2	.04	.05	.06	.06	.02	.02	.01	.02

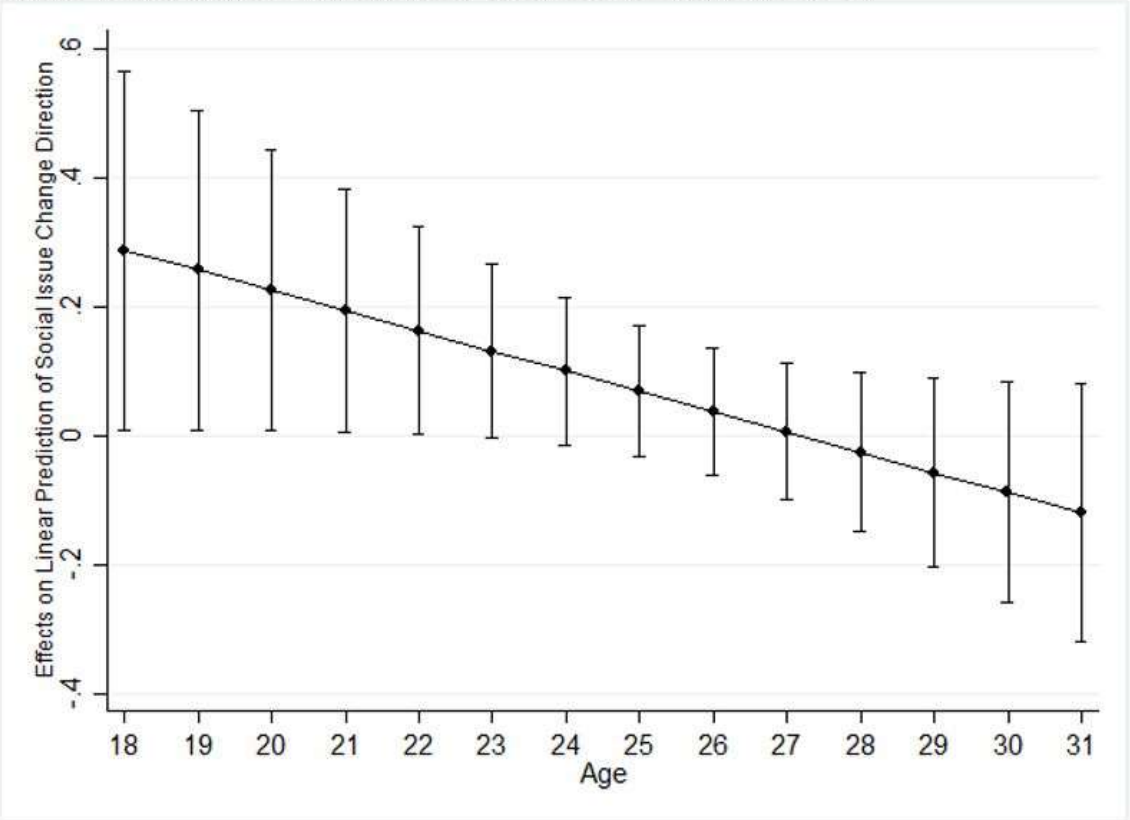
Note: *** $p<.001$, ** $p<.01$, * $p<.05$, ǂ $p<.10$

Table 4.6: Agreeableness and Age

	Total Change	Total Change	Total Direction	Total Direction	Social Change	Social Change	Social Direction	Social Direction
Agreeableness	-.04	-.48	-.04	.54	-.04	.10	.04	.85ǂ
Age	-.07	-.66	-.15	.62	-.08	.12	-.03	1.04ǂ
Agree. x Age	-	.02	-	-.02	-	.01	-	-.03ǂ
Sex (Male = 1)	1.80***	1.76**	3.05***	3.09***	.53	.55	.81*	.87*
Left-Right (right>left)	-.11	-.11	.03	.03	.10	.10	-.34	-.34
Income	.15	.15	.42	.41	.16	.16	-.09	-.10
Education	-.13	-.12	-.11	-.11	-.21ǂ	-.21ǂ	.09	.55
Constant	15.60	30.72	3.73	-16.25	6.91	1.80	-.37	-28.29
N	245	245	245	245	245	245	245	245
Adj. R^2	.04	.04	.06	.06	.02	.02	.01	.02

Note: *** $p<.001$, ** $p<.01$, * $p<.05$, ǂ $p<.10$

Figure 4.2: Average Marginal Effects of Agreeableness with 95% Cis



Extraversion and agreeableness do not seem to have very strong relationships with attitudinal strength. What small relationships that do exist are products of the relationships between these two personality factors and the direction of social attitudinal change. It is very possible these two factors are more associated with change on other kinds of issue attitudes. In fact, bivariate relationships show a marginal effect between agreeableness and the direction of environmental issue attitude change ($r = -.12,\ p = .059$). Bivariate analyses also showed a marginal effect between extraversion and the direction of economic change ($r = -.11,\ p = .08$) and a significant relationship between extraversion and the direction of change for attitudes about foreigners ($r = .13,\ p < .05$). In all, these two factors should be explored further when examining the direction of attitudinal change.

For emotional stability, I expected emotionally stable people to also be more stable in their attitudes. Earlier I did show significant negative bivariate relationships between emotional stability and the likelihood of total and social Wilson-Patterson change. These relationships were in the expected direction. Moving to the multiple regression models, the results for emotional stability are presented in Table 4.7. As expected, there was a negative relationship between total change and emotional stability (b = -.13, $t(244) = -2.67$, $p < .01$), but this relationship disappeared when examining the relationship with social issue change (b = -.04, $t(244) = -1.24$, $p = .215$). These results show that emotional stability does lead people to be more stable with their political attitudes, but this relationship does not extend to social issue attitudes. Given the significant bivariate relationship between emotional stability and social issue change, it appears the control variables erased any effect.

Emotional stability also did not predict the direction of social change (b = .02, $t(244) = 0.48$, $p = .617$), but it did predict the direction of total Wilson-Patterson change (b = .16, $t(244) = 1.99$, $p < .05$). There were no specific relationships expected here, and there were no significant bivariate relationships between emotional stability and the direction of attitudinal change. Regardless, the results do show that people higher in emotional stability were more likely to move in a conservative direction when controlling for sex and other demographic characteristics. It is very possible the inclusion of sex in the model led to the significant effect for emotional stability. The sudden significance of emotional stability in this model suggests there could be an interaction between sex and

emotional stability.[12] This potential relationship is intriguing and would add to our understanding of attitudinal change, but I will leave those analyses to future work.

Table 4.7: Emotional Stability and Age

	Total Change	Total Change	Total Direction	Total Direction	Social Change	Social Change	Social Direction	Social Direction
Emotional Stability	-.14**	-.36	.16*	.68	-.04	-.14	.02	.12
Age	-.05	-.27	-.16	.32	-.07	.16	-.04	.05
Emo. Stab. x Age	-	.01	-	-.02	-	.00	-	-.00
Sex (Male = 1)	1.53**	1.53**	3.39***	3.39***	.46	.46	.83*	.83*
Left-Right (right>left)	-.05	-.04	.01	.04	.13	.13	-.37	-.37
Income	.12	.11	.46	.47	.15	.15	-.09	-.09
Education	-.08	-.08	-.15	-.14	-.19	-.19	.08	.08
Constant	16.90	22.38	-1.32	-13.65	6.10	8.41	.93	-1.46
N	245	245	245	245	245	245	245	245
Adj. R^2	.07	.07	.07	.07	.02	.02	.00	.00

Note: *** $p<.001$, ** $p<.01$, * $p<.05$, † $p<.10$

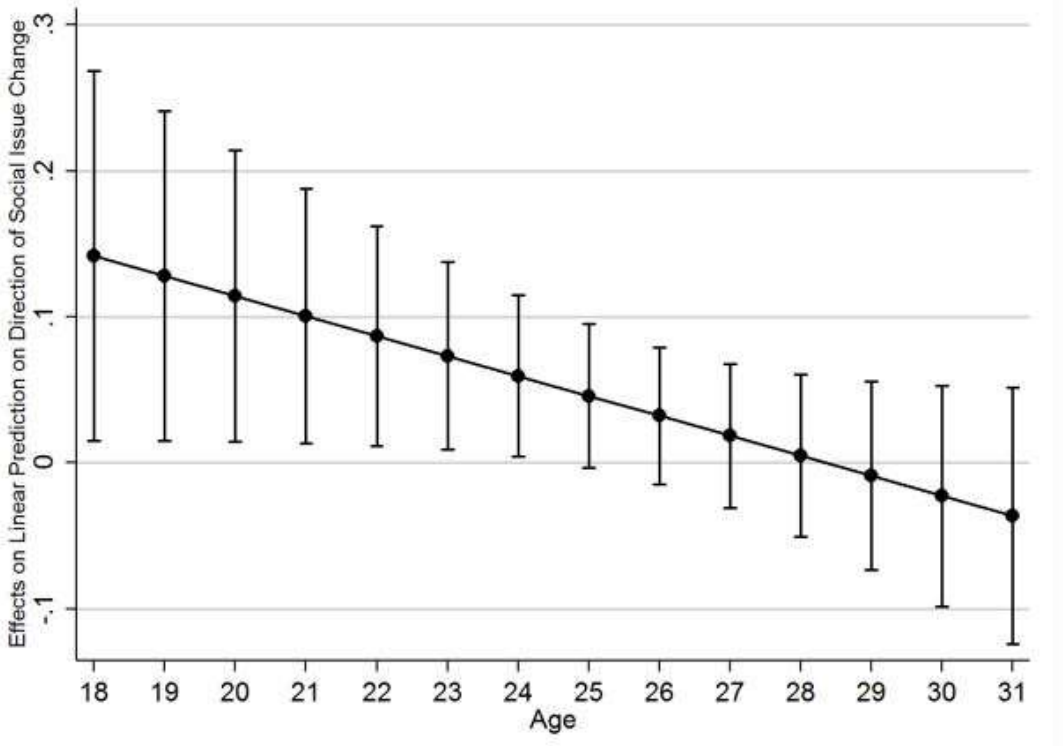
[12] Spoiler alert: There was a marginally significant interaction between emotional stability and sex (b = -.28, $t(244) = 1.69$, $p = .09$). An examination of the marginal effects showed emotionally stable men were more likely to move in a conservative direction (dy/dx = .27, $t(244) = 2.62$, $p < .01$) while emotionally stable women were not prone to shift in any particular direction (dy/dx = -.01, $t(244) = -0.10$, $p = .923$).

Social sensitivity as measured by the RME task and empathy as measured by the EQ battery were the final two items I examined. Both items capture traits which are regularly associated with prosocial behaviors. I argued prosociality leads to psychological attachment which, in turn, should lead to more stable political attitudes. The bivariate relationships between these items and total and social attitudinal change provided strong support for these expectations. I also expected these items to be associated with change in a liberal direction, but I only found support for this proposition when examining the relationship between the RME and the direction of social issue attitude change. The models for these two items are presented in Table 4.8 (RME) and Table 4.9 (EQ).

Of the two items, RME was most clearly associated with both the existence and direction of attitudinal change. In the main effects models for the existence of change, RME was associated with both total (b = -.41, $t(244) = -3.97$, $p < .001$) and social (b = -.29, $t(244) = -4.38$, $p < .001$) change. There were interactions between RME and age in either model examining the existence of change. So, there is again strong evidence for the idea that social sensitivity predisposes people towards stable political attitudes, and this relationship does not change as people grow older. Controlling for demographic factors EQ no longer plays the same strong role in predicting attitudinal instability as it did in the bivariate models. EQ does not predict social issue change (b = -.03, $t(244) = -1.29$, $p = .199$), and it is marginally associated with total issue change (b = -.06, $t(244) = -1.79$, $p = .075$). EQ does interact with age to predict the direction of social issue change (b = -.01, $t(244) = -1.83$, $p = .069$). This interaction is plotted in Figure 4.3. It works so that between the ages of 18 (dy/dx = .14, $t(244) = 2.20$, $p < .05$) and 25 (dy/dx = .05, $t(244) = 2.12$, $p = .067$) people high in empathy are more likely to move in a conservative

direction on social issue attitudes, but from the ages of 26 (dy/dx = -.31, $t(244) = -1.95$, $p = .053$) to 31 (dy/dx = -.31, $t(244) = -1.95$, $p = .053$) people high in EQ are not likely to move in any specific direction. This finding is unexpected, as EQ was expected to predict change in a leftward direction regardless of age.

Figure 4.3: Average Marginal Effects of EQ with 95% Cis



Social sensitivity seems like a much stronger predictor of attitude change than empathy writ large. Returning to RME, there is also some evidence to suggest it works to influence the direction of attitudinal change. Specifically, there was a marginal relationship in the main effects model between RME and the direction of total Wilson-Patterson change (b = -.29, $t(244) = -4.38$, $p < .001$). This relationship is mediated by age as there is also a marginal interaction between RME and age when predicting the direction of total Wilson-Patterson change (b = -.11, $t(244) = -1.93$, $p = .055$). RME was not associated with the direction of social issue attitude in the main effects model (b = -

.08, $t(244) = -1.05$, $p = 2.93$) and does not interact with age to predict social issue attitude change direction (b = -.03, $t(244) = -0.99$, $p = .321$). The interaction between RME and age for the prediction of the direction of total attitude change can be found in Figure 4.4. Here we see that between the ages of 18 (dy/dx = .54, $t(244) = 1.17$, $p = .249$) and 25 (dy/dx = -.21, $t(244) = -1.23$, $p = .221$) RME is not associated with change in a leftward direction, but from 26 (dy/dx = -.31, $t(244) = -1.95$, $p = .053$) to 31 (dy/dx = -.85, $t(244) = -2.61$, $p < .01$), RME is associated with leftward change.

Figure 4.4: Average Marginal Effects of RME with 95% CIs

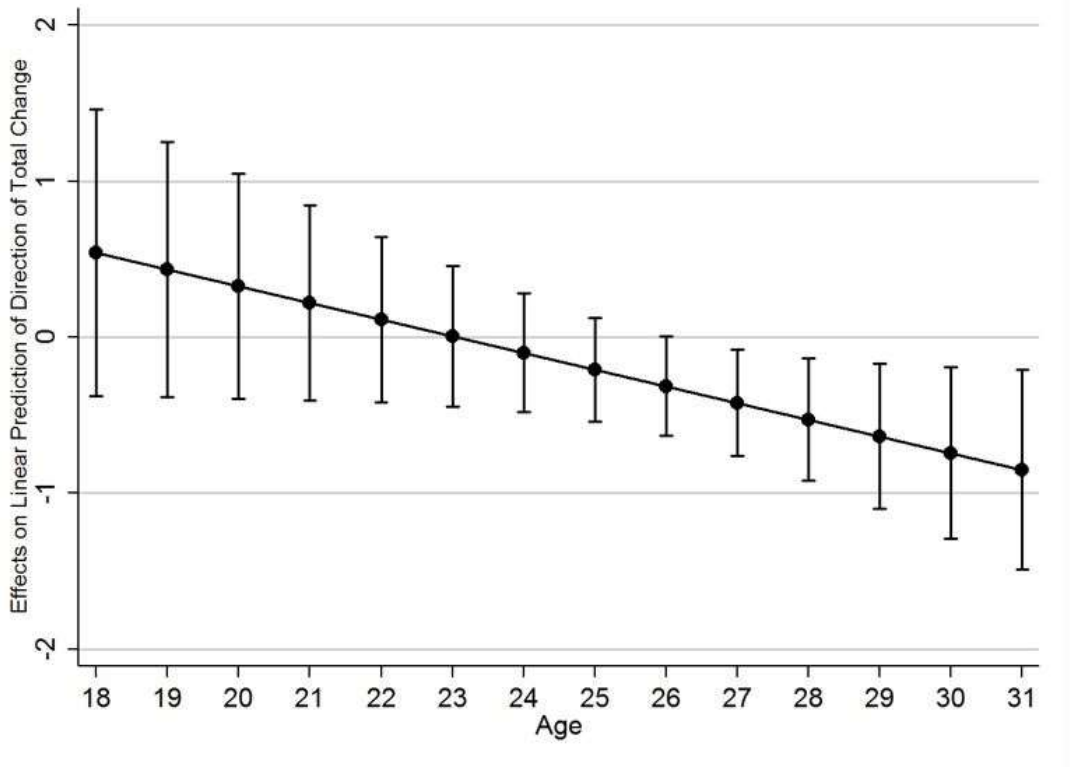


Table 4.8: Reading the Mind in the Eyes and Age

	Total Change	Total Change	Total Direction	Total Direction	Social Change	Social Change	Social Direction	Social Direction
RME	-.41***	-.73	-.30ǂ	2.46ǂ	-.29***	-.40	-.08	.61
Age	-.08	-.23	-.16	1.15ǂ	-.08	-.13	-.04	.28
RME x Age	-	.01	-	-.11ǂ	-	.00	-	-.03
Sex (Male = 1)	1.74**	1.73**	3.01***	3.11***	.50	.50	.78*	.80*
Left-Right (right>left)	-.14	-.15	.01	.08	.08	.08	-.37	-.35
Income	.19	.18	.45	.53	.19	.19	-.09	-.07
Education	-.04	-.04	-.04	-.00	-.15	-.15	.10	.11
Constant	18.75	22.73	5.82	-28.56	8.63	10.00	2.32	-6.31
N	245	245	245	245	245	245	245	245
Adj. R^2	.10	.10	.07	.08	.09	.09	.01	.01

Note: *** $p<.001$, ** $p<.01$, * $p<.05$, ǂ $p<.10$

Table 4.9: Empathy Quotient and Age

	Total Change	Total Change	Total Direction	Total Direction	Social Change	Social Change	Social Direction	Social Direction
EQ	-.06ǂ	.07	-.04	.02	-.03	.10	.03	.39*
Age	-.08	.24	-.15	-.02	-.08	.25	-.03	.89ǂ
EQ x Age	-	.00	-	-.00	-	-.00	-	-.01ǂ
Sex (Male = 1)	1.60**	1.62**	2.92***	2.93***	.45	.47	.91*	.97*
Left-Right (right>left)	-.08	-.07	.05	.06	.12	.13	-.37	-.33
Income	.21	.19	.46	.45	.19	.18	-.13	-.17
Education	-.10	-.10	-.09	-.09	-.19ǂ	-.19	.08	.09
Constant	17.84	9.54	4.80	1.23	7.04	-1.30	-0.90	-24.90
N	245	245	245	245	245	245	245	245
Adj. R^2	.05	.05	.06	.06	.02	.02	.01	.02

Note: *** $p<.001$, ** $p<.01$, * $p<.05$, ǂ $p<.10$

Finally, I ran four models which included all the variables I have examined up to this point. These models all include an interaction effect for openness to new experience and age. I display the results of the full models for total Wilson-Patterson change and the direction of Wilson-Patterson change in Table 4.10 (total change) and Table 4.11 (social change). In terms of main effects for predicting total change, conscientiousness (b = .17, $t(244) = 2.75$, $p < .01$), emotional stability (b = -.14, $t(244) = -2.66$, $p < .01$), and RME (b = -.38, $t(244) = -3.83$, $p < .001$) all remain significant predictors of attitudinal stability when controlling for each other and demographics. Extraversion (b = .05, $t(244) = 0.81$, $p = .421$), agreeableness (b = -.03, $t(244) = -0.36$, $p = .721$), and EQ (b = -.05, $t(244) = -1.42$, $p < .001$) do not have significant effects. The interaction between openness and age remains significant (b = -.04, $t(244) = -2.39$, $p < .05$). These relationships are in the same direction as they were in the reduced models.

These findings are mostly all in line with my expectations. Earlier I had speculated the ideological asymmetry between conscientiousness and openness, where political liberals are more likely to be open and political conservatives are more likely to be conscientious, could be behind the slight tendency of people to move in a conservative direction as they grow older. I speculated openness could make people more likely to change and conscientiousness could make people less likely to change thus leading to that pattern. However, this pattern does not seem to be true. Conscientiousness does lead to attitudinal stability, but openness causes people to be labile early in adulthood only to make them more stable as they grow older.

Moreover, based on the results of the directional model I can show that openness does not predict increased conservatism. So, whatever causes the slight conservative shift

throughout the lifespan is not people higher in openness adopting more conservative political beliefs. In fact, we should expect people higher in openness to become even more firmly to the left as they grow older. In earlier figures, I graphed the marginal effects of openness and other variables based on age. In Figure 4.5 plots the linear prediction of total Wilson-Patterson change by age. Here the effect of openness is charted at its mean level as well as at two standard deviations above and below the mean. Again, the figure shows how people high in openness become less susceptible to change as they grow older while people low in openness grow more susceptible to change.

Table 4.10: Full Model for Total Wilson-Patterson Change and Direction of Change

	Total Change	Total Direction
Openness	.95*	-.52
Conscientiousness	.17**	-.10
Extraversion	.05	.09
Agreeableness	-.03	.06
Emotional Stability	-.14**	.15ǂ
RME	-.38***	-.34*
EQ	-.05	.02
Age	-1.05*	-.47
Open x Age	-.04*	.01
Sex (male = 1)	1.60**	3.66***
Left-Right (right>left)	-.02	-.33
Income	.13	.50
Education	-.00	-.14
Constant	-6.73	14.99
N	245	245
Adj. R^2	.18	.09

Note: *** $p<.001$, ** $p<.01$, * $p<.05$, ǂ $p<.10$

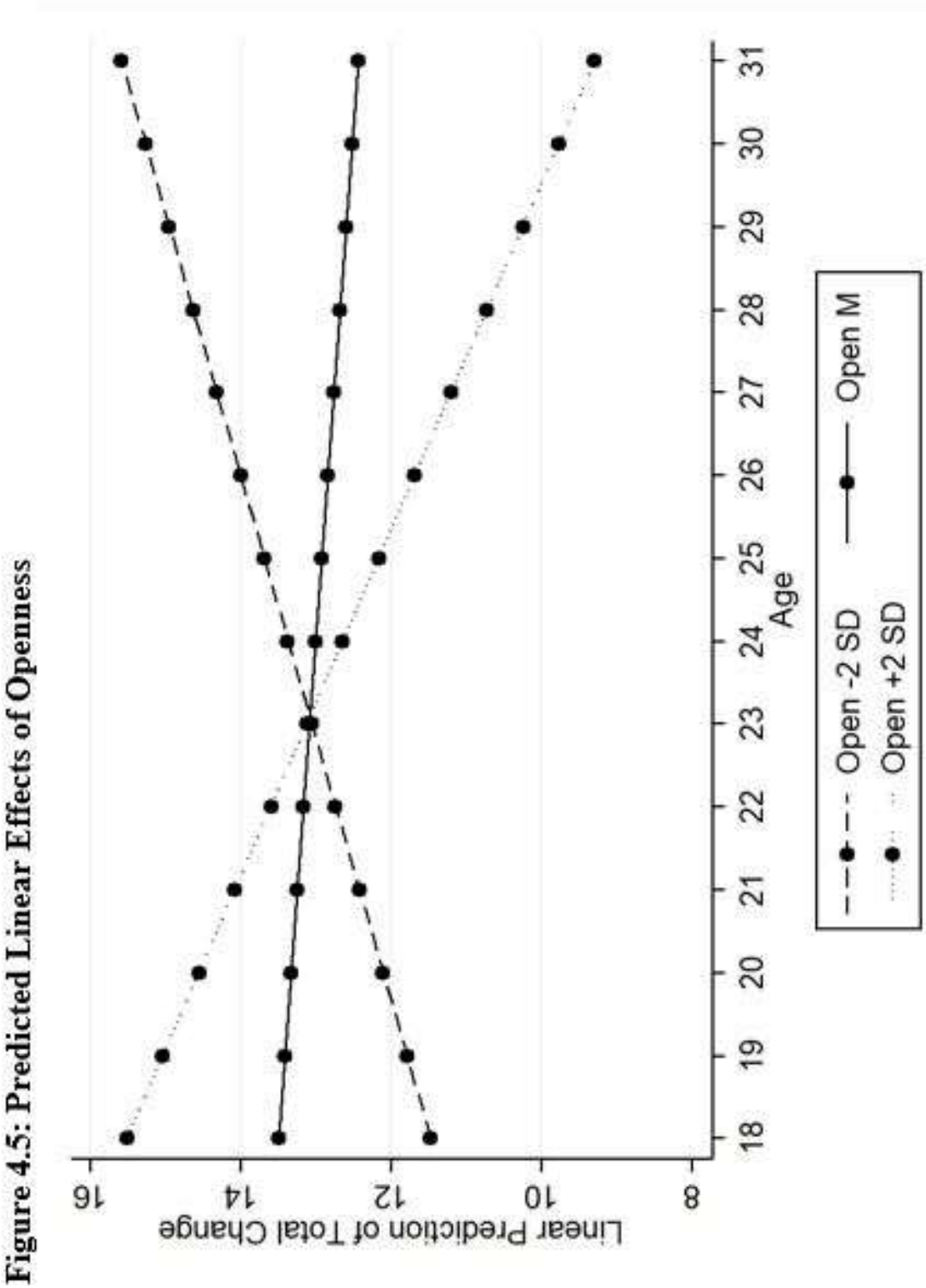


Figure 4.5: Predicted Linear Effects of Openness

The direction of total Wilson-Patterson change did not have as many significant predictors. Only emotional stability (b = .15, $t(244) = 1.82$, $p = .071$) and RME (b = -.34, $t(244) = -2.09$, $p < .05$) worked to predict the direction of change. In all, the results of these two models present compelling evidence to suggest personality traits predispose people towards differing patterns of attitudinal stability. The evidence for this finding is most convincing when examining the existence of attitudinal change, but there is also some evidence to propose a link between personality traits and the direction of attitudinal change. I only examined how personality interacts with age in these analyses, but it would not be surprising to see personality to interact with other factors as it works to influence both the existence and direction of attitudinal change.

Moving to a more contextualized example of how personality influence attitudinal change, Table 4.11 presents evidence that the influence of personality on attitudinal change can be domain specific. When examining the effect of personality on the existence of social issue change, the effects for conscientiousness (b = .05, $t(244) = 1.14$, $p = .256$) and emotional stability (b = -.05, $t(244) = -1.35$, $p = .180$) which were seen in the total change models disappear. When compared with the total change models, these findings point to the fact that any influence conscientiousness and emotional stability had on attitudinal stability was due to their influence on other kinds of issue attitudes. RME (b = -.14, $t(244) = -2.66$, $p < .01$) and the interaction between openness and age (b = -.14, $t(244) = -2.66$, $p < .01$) remained significant predictors of attitudinal stability. Their effects remain the same; so that, people with higher levels of social sensitivity are less likely to change, and the effect of openness leads people high in this trait to become more attitudinally stable as they grow older.

Table 4.11: Full Model for Social Wilson-Patterson Change and Direction of Change

	Social Change	Social Direction
Openness	.62*	-.28
Conscientiousness	.05	.00
Extraversion	.04	-.10*
Agreeableness	-.03	.02
Emotional Stability	-.05	.02
RME	-.28***	-.10
EQ	-.02	.05ǂ
Age	.62ǂ	-.34
Open x Age	-.03*	.01
Sex (male = 1)	.46	.88*
Left-Right (right>left)	.14	-.43
Income	.15	-.07
Education	-.13	.07
Constant	-7.62	8.30
N	245	245
Adj. R^2	.11	.01

Note: *** $p<.001$, ** $p<.01$, * $p<.05$, ǂ $p<.10$

Like the model for the direction of total Wilson-Patterson change, the model for social Wilson-Patterson change does not have many significant predictors. Both extraversion (b = -.10, $t(244) = -2.112$, $p < .05$) and EQ (b = .05, $t(244) = 1.69$, $p = .092$) demonstrate effects on the direction of social issue attitude change. Again, the positive effect for EQ, indicating change in a conservative direction, is unexpected, but as I showed earlier EQ interacts with age so that people who are higher in EQ and between the ages 18-25 were prone to shift in a conservative direction, but from 26 on the marginal effect continued to decrease and EQ was no longer a significant predictor of the direction of social issue change. Given a sample with participants older than 3, it is quite possible I would find people high in EQ may be more likely to move in a liberal direction as they grow older. A similar relationship was found earlier when examining the interaction between RME and age as they predicted the direction of total issue change.

4.7 Discussion and Conclusion

Through multiple analyses I have demonstrated that personality works to shape our likelihood to change our attitudes. Other than some previous work on the stability German political party identification, this chapter is one of the first works to establish a link between personality and attitudinal stability. I had already demonstrated attitudinal stability can be partially explained by genetic heritability. I then showed that personality factors, such as the Big Five inventory, performance on the Reading the Mind in the Eyes task, and Empathy Quotient scores, can also be partially explained by genetic heritability. With a larger longitudinal twin dataset, it would be possible to test whether the genetic pathways leading to attitudinal stability are the same pathways that lead to these individual personality traits.

Of all the traits examined in this chapter, the RME had the strongest effect in predicting the existence of attitudinal change across both measures. Empathy, as measured by the EQ, showed a strong bivariate relationship with these variables, but its effects were easily wiped out by including RME in the model. Social sensitivity seems to be the important cognitive and affective component of empathy if we want to predict attitudinal stability. I would argue the reason social sensitivity leads people to stand pat in their beliefs is because of its association with prosocial behaviors more broadly. This finding suggests our attitudes are partly rooted in our social lives and help to provide a sense of group attachment and identity.

Regardless of which personality factors are better than others at predicting attitudinal stability, it is clear personality also interacts with forces such as age to lead to different effects throughout the lifespan. Future work will probably also show that personality interacts with more than just age. Personality likely interacts with gender,

education, income, and changes in the environment to lead people to differing likelihoods of attitudinal instability. For instance, do agreeable people become more conservative if they move from a liberal area to a conservative one or vice versa? To test these kinds of important and intriguing questions a new largescale endeavor must be undertaken. Longitudinal data should be collected starting in early adolescence and moving through adulthood. These data should account for psychological and sociological factors so that we may begin to more fully understand how these two forces work to shape the development of attitudes throughout the lifespan.

Returning to the interaction between age and personality, I have shown how processes previously discussed in the literature, such as the impressionable years model, are influenced by individual-level differences in personality. The data did not allow me to see how personality works with age beyond the age of 31, but it seems clear from the analyses that there are likely personality types which predispose people towards instability much later than the prevailing literature would suggest. Furthermore, as people who are high in openness to experience start off more likely to change their attitudes between the ages of 18-26 but less likely to change their attitudes afterwards, I have also shown how the impressionable years model seems to provide more explanation for the behaviors of people high in openness to experience than it does for others.

There is also the question of what it means for personality to predict one's tendency towards attitudinal stability. The potential linkage between prosociality and attitudinal stability is profound. If attitudes are an integral role to our overall social cohesion, then we have yet another reason for why attitudes are persistent and unlikely to change en masse. However, scholars of persuasion might be able to devise ways in which

prosociality can be used for the purposes of changing people's attitudes. One mechanism we have seen in recent months, perhaps, is the elite-level cue of Donald Trump. In the past year, we have seen Republican attitudes shift on issues as varied as North American Free Trade Agreement and United States foreign relations with Russia. As the attitudes required for group membership have changed, we have seen those group members change rather than to leave their group.

Throughout the models there was a strong and reliable effect for gender. Men were more likely than women to change, and men were also more likely to change in a conservative direction. I did spend much time focusing on this particular set of results, but the strength of these findings is suggestive of gender-based differences in patterns of attitudinal stability. These findings were replicated in the sets of analyses I present in the next chapter. My primary focus for this dissertation is on how factors such as personality and life events affect the likelihood of attitudinal stability. However, it is clear from these results more work needs to be done in regards to this question of gender. Men appear to adhere more to the folk wisdom than women, as they are more likely to become more conservative as they grow older. There is an important set of questions here. Are these gender differences rooted more in biological development across the lifespan, or are these differences rooted more in sociological development based on existing gender role expectations? There are known age-related sex differences in brain development which could explain these findings given the right data (DeBellis et al. 2001), but traditional family roles could also be an explanation, as many men are expected to the head of the household.

For the sake of brevity and due to having more theoretical expectations associated with social issue attitude change, I did not spend any time in this chapter focusing on economic issue attitude change. Preliminary analyses showed there were no real significant differences when examining economic issue attitude change. There did not seem to be a significant effect for openness, but emotional stability, RME, and EQ were negatively associated with change while conscientiousness was positively associated with change. No personality items were related to the direction of economic issue attitude change. The lack of relationships with the direction of economic issue attitude change is somewhat surprising, as conscientiousness should be expected to display change in a conservative direction. Regardless, it is clear that the predictors of attitudinal stability change across issue domain. This finding adds another wrinkle to our understanding of attitudinal stability, as patterns of stability are not equal across policy type. Future work should further examine the mechanisms underlying these domain-based differences.

To return to the major refrain of this dissertation so far, it is becoming increasingly clear that we will do a disservice to the discipline if we do not begin to treat attitudinal stability as an individual difference which some people will be more prone to than others. The lack of attitudinal stability from one moment to the next is not necessarily evidence for the existence of non-attitudes or the lack of ideological sophistication in the public. We also need to take attitudinal domain into account when we are examining attitudinal change, as there are separate sets of predictors for separate issue factors. In the next chapter I will examine the sociological roots of attitudinal instability to show that major life events also cause people to reconsider and update their preexisting beliefs.

Chapter 5: Exploring the Sociological Correlates of Attitudinal Instability

5.1 Introduction

Forces of socialization cannot be ignored when trying to understand why attitudes change over the lifespan. As I showed in Chapter 3, unique environmental effects were more important to understanding variation in attitudinal stability than all combined additive genetic and common environmental effects combined. In the last chapter I argued personality influences our predispositions towards attitudinal stability. However, I took special care to note how personality likely influences the degree to which life events and other forces of socialization work in tandem to shape our political attitudes. In this chapter I will examine how unique environmental effects influence attitudinal stability.

Here I will return to the Michigan Youth-Parent Socialization Study (Jennings, Markus, Niemi, and Stoker 2005) employed for the analyses in Chapter 2. In an ideal world, this rich set of data would include personality as well as life events variables. There are a handful of variables that approximate some aspects of personality such as self-confidence, personal trust, and opinion strength, but most of the psychologically pertinent variables included in the study are psychological variables that directly pertain to politics like political efficacy, political trust, and political interest. The MSS more than makes up for its paucity of psychologically relevant variables with a wealth of data covering a variety of life events. Facets of life-stage development like role acquisition, status mobility, and changing peer influences are all covered in great detail. As for dependent variables, I will use the latent classes I calculated in Chapter 2. I will examine the latent class membership associated with four of the eleven variables I explored in that earlier chapter—party identification, ideology, minority assistance, and women's role in society.

In that second chapter I uncovered a pattern that held true for most of the political attitudes I analyzed. The central pattern was one in which attitudes tended to remain stable throughout the lifespan, but when attitudes did change, attitudes tended to change in a markedly conservative direction. As folk wisdom suggests people become more conservative as they age, this finding both buttressed and modified this prevailing wisdom. Although there was a conservative tendency of those who changed, there was also a small but significant group of people who moved in a liberal direction throughout their lives. There are important questions to be answered as to why some people stand pat in their beliefs, why some people move in a conservative direction, and why others move in a liberal direction.

Uncovering the correlates driving stability and lability in conservative or liberal directions will help to further the overall understanding of attitudinal change as it pertains to the aging process. From here I will go through the literature surrounding how forces of socialization have been found to affect attitudinal stability. A good portion of this literature has to this point been solely interested in understanding how socialization influences the existence of attitudinal stability but not the direction of attitudinal change. Following the results of Chapter 2, I will be able to demonstrate how socializing forces influence both the likelihood of attitudinal instability. So, after discussing the literature surrounding the existence of attitudinal stability, I will work through the literature surrounding the direction of attitudinal change to uncover what expectations there will be regarding how forces of socialization influence the direction of attitudinal change. The literature to this point has focused on cross-sectional data or has examined panel data in ways that overlook the possibility that these kinds of latent classes exist. Unlike previous studies, this chapter

includes the first analysis of attitudinal change and the direction of attitudinal change that uses discrete groups defined by patterns of change as the primary unit of analysis. As I have shown in the previous chapters, this approach is the ideal way to examine the nature of attitudinal stability.

5.2 Theory

In terms of forces of socialization, Dinas (2013) identified six potential sources of political attitude change—role acquisition, status mobility, changing peer influences, stratification of experience, inertia, and identity diffusion. This list is an accurate and useful representation of where scholars have looked for the causes of attitudinal stability. Given the results of the last chapter, I would add psychological dispositions a seventh potential source of attitudinal stability, but I will not be focusing on this source in this chapter as it was covered in detail in the last chapter. Below I will explore the literatures associated with these seven sources of attitudinal stability. The exact causes of attitudinal instability are likely complex and interacting effects stemming from the sources below. In terms of exploring the specific causes of attitudinal instability throughout the lifespan, I will put less focus on the roles of inertia, stratification of experience, and identity diffusion. Although the importance of these influences cannot be overstated, they do not do much in the way of providing theoretically plausible and specific instances where attitudes can be expected to change.

Role Acquisition

Throughout life people take on new roles. They become wives and husbands; mothers and fathers. People move on from their roles as high school and college students, and they become employees and bosses. Some join the military while others become street protestors. Societal roles are in constant flux and have been shown to influence

how people think politically. Brothers who have sisters have been shown to hold more socially conservative attitudes in regards to gender roles (Healy and Malhotra 2013). Older people must deal with many role changes, as people around them pass away, they retire, and deal with illness. These role changes lead individuals to think about their attitudes more than may have been needed in the past. This process of thinking, in turn, leads people to change their attitudes (Sears 1981). The findings of Hatemi et al. (2009) also follow the results reported by Sears (1981). They find the additive genetic effect for political attitudes only begins to appear at around the age of 21, but by the time people pass the age of 75 the genetic effect begins to disappear.

Status Mobility

In many ways status mobility is related to the previously discussed force of role acquisition. Unlike role acquisition status mobility is more concerned with the effect of economic resources and the acquisition of new social classes. This argument has a good deal of support in conventional wisdom. It is often said the reason people become more conservative as they grow older is because they begin to earn more money and subsequently have more money taken in the form of taxes. The literature surrounding how status mobility shapes political attitudes has been mixed up to this point (Turner 1992). There are debates within this literature surrounding the mechanisms by which social mobility causes attitudes to change. We do know, however, that life altering events can cause people to reevaluate things in their lives such as their political attitudes (Hatemi 2013). Moving up the socioeconomic ladder may not necessarily cause people to change their attitudes, as increasing affluence may be part of the life's natural trajectory. On the flipside, losing one's socioeconomic standing is a more traumatic and unexpected

event. The process of moving down the socioeconomic may be the kind of shock that causes people to reconsider previously held political beliefs.

Changing Peer Influences

Outside of the strong forces of familial socialization, the friends we make shape our political outlook (Langton 1967; Settle et al. 2010). Over time we lose old friends, and we gain new friends. New friends expose us to new ideas, and these ideas may cause us to shift our political beliefs. The acquisition of new peers oftentimes stems from moving away from childhood homes. Going away to college or joining the military are seen as two instances where people undergo drastic changes in their peer influences. The conservative media and others are wont to portray college campuses as incubators of liberal ideology. Whether colleges do make people more liberal remains to be seen, but the likely driver of liberalization on college campuses is not college professors but the new groups people are introduced to on campus. Military experience also introduces people to new people and environments. Unlike the experience of going to college, military experience likely promotes shifts in a conservative direction. Alternatively, the competing goals of military service versus college education could also lead to these differences. College education asks students to think critically about their assumptions while military service asks new recruits to adhere to a strict hierarchy. These competing goals could lead to a liberalizing effect of college and a conservatizing effect of military service.

Inertia, Stratification of Experience, and Identity Diffusion

Inertia is a fairly straightforward source of attitudinal stability. The power of inertia was displayed in the second chapter of this dissertation. People are remarkably

stable in regards to the attitudes they hold throughout life. Attitudinal path dependency is a powerful predictor of attitudes one day to the next and one year to the next. As attitudes develop over time they become more likely to crystallize in the minds of those who hold attitudes. Literatures focused on both the socializing (see Jennings and Niemi 1981) and genetic (see Hibbing, Smith, and Alford 2014) factors of attitudinal development both maintain inertia as the predominant predictor attitudes over time.

Stratification of experience is a psychological phenomenon that can lead to the previously discussed force of inertia. The running tally model of political learning leans on stratification of experience heavily as a means of explaining attitude change throughout the lifespan (Achen 1992; Fiorina 1981). This psychological force makes it so that the more political stimuli people encounter over their lives, the less likely they are to change their attitudes as a result of new stimuli (see Mannheim 1952). Impressionable years models also factor in stratification of experience as a force driving attitudinal instability during young adulthood. Another force that works to explain the impressionable years model is identity diffusion. Identity diffusion pertains to the process of "finding one's self" during young adulthood. During this period of time people are seeking out their social and political identities. As people become older, their identities become more entrenched and they are more likely to hew closer to homogenous communities of likeminded individuals (Sears 1981). The phenomenon is evidenced by the much-cited creation of "echo chambers" on social media and elsewhere. Through this process people are less likely to come across new information challenging their political beliefs. As a result, people become more entrenched in their political beliefs.

These forces do not provide explanations for the exact reasons why people change. They are predictors of attitudinal *stability* rather than attitudinal lability. The theoretical expectations gleaned from the hypotheses tell us more about when attitudes will change than they tell us why attitudes will change and in what direction. Certainly, some of these theories can be pushed further to help us understand how particular stimuli may drive attitudinal instability. For instance, work on "affective tipping points" has demonstrated how, even in the face of motivated reasoning, people can change their attitudes towards their preferred candidates (see Redlawsk, Civettini, and Emmerson 2010). These kinds of reasons are important to explore further as they pertain to attitudinal stability, but the analytical approach of this chapter focuses more on trait-level explanations for attitudinal instability. Examining explanations such as the affective tipping point are best suited for research designs that allow for the exploration of how specific tallies are acquired and how those tallies accumulate and lead to attitudinal shifts.

Direction of Attitudinal Change

Many scholars examining the direction of attitudinal change over the lifespan focus solely on the role age plays with shaping political attitudes (Dangelis, Hardy, and Cutler 2007; Glenn 1974). However, there have been a handful of studies which have examined how life events and other forces of socialization work to shape the direction of attitude change. Examining how the Vietnam War shaped political attitudes, Erikson and Stoker (2011) found draft numbers to be predictive of change in liberal and more Democratic directions. In particular, they found those who had lower draft numbers, meaning those who had the greatest likelihood of being involuntarily drafted into the war effort, were more likely than those with higher draft numbers to move in a persistently

liberal direction. Recent work on the effect of the Great Recession of 2008 showed economic troubles during the recession caused attitudes towards welfare to improve only to go back to normal when the economic situation rebounded (Margalit 2013). Here again we can see that the direction of change in going to be dependent on the context of the socializing event. The literature sets out clear expectations which I will illuminate below.

5.3 Hypotheses

In my analyses, I examined the roles of five of the forces discussed above. Specifically, I examined effects for inertia, role acquisition, status mobility, changing peer influences, and psychological forces. These forces are expected to drive both the likelihood of change and the direction of any change that does occur. From here I will discuss how I examined these factors and my expectations for each. The force of attitudinal inertia, for instance, is typically defined as the ability to predict an attitude at any point in the future by knowing what said attitude is in the present. If inertia shapes our attitudes and I am a conservative today, then I will be a conservative tomorrow, next month, and next year. In the second chapter I demonstrated the power of inertia, as political attitudes are defined by stability throughout the lifespan. Inertia in the social sciences is typically defined in such a way. Here, however, my definition of inertia will be defined in a way more similar to physics.

Given no change by an external force, an object (here defined as an attitude) should remain in a constant state of motion in a straight line. If that object is acted upon by an external force, it will continue along its altered trajectory in a constant state of motion in a straight line. Furthermore, it is common knowledge that attitudes do not exist in a vacuum, and holding an attitude about one issue is likely to predict a host of other issues. So, when I discuss inertia in this chapter, I do so in a way that suggests the

stability of one issue attitude should predict stability of other issue attitudes. When external forces induce attitudinal change and the trajectory (i.e. the direction) of an attitude is altered, I expect the trajectories of other issue attitudes to change in the same direction. In my analyses, I use the group classifications associated with other attitudes to predict both the existence and direction of attitudinal change for whichever variable I am examining. For the sake of brevity, I will refer to this factor as inertia throughout the chapter.

In terms of role acquisition, I focus solely on familial role acquisition, specifically changes in marital status as well as becoming a parent. Healy and Malhotra's (2013) work on how sisters make young men more likely to hold socially conservative opinions and to identify as Republican is instructive here. Namely, it is possible to see how changing family dynamics can lead to changing attitudes. In the models, I run for role acquisition I examine the effects of divorce in 1982, divorce in 1997, years married, the number of daughters a person had in 1982, and the number of sons a person had in 1982. I expect both parenthood and drastic changes in marital status (i.e. divorce) to be negatively correlated with stability, as these are events which could arguably cause people to reconsider their political beliefs. Gendered family roles, as discussed by Healy and Malhotra, should also lead any change to be in a conservative direction.

For status mobility, I created four separate measures of upward and downward social mobility. These measures track changes in relative affluence between the years of 1973 and 1982 as well as between 1982 and 1997. In part, the expectations of these variables are rooted in conventional wisdom. Conservative shifts as people grow older are regularly attributed to upward social mobility. The idea being, of course, that with

increased income comes increased tax bills, and with increased tax bills comes eroding support for governmental assistance programs. However, improved standing in society could lead to no change at all. If a person's actions and attitudes have led them to levels of relative prosperity, what motivation would they have to reevaluate their actions and attitudes? Downward social mobility should work in the reverse, as rougher economic circumstances should lead people to rely on governmental assistance programs thus increasing support for government and liberal principles. This process of losing wealth should cause people to reevaluate their attitudes and actions. As such, I expect upward social mobility to be positively associated with attitudinal stability, but when change does occur and the conventional wisdom is correct, then we should see upward social mobility to lead to a more conservative outlook. Downward social mobility, on the other hand, should be negatively associated with attitudinal stability and negatively related to change in a conservative direction.

For changing peer influences I examined the role of three aspects—moving to a new region of the United States, attending college by 1973, and serving in the military by 1973. I created two variables representing people who moved to the South between 1973 and 1997 as well as one for people who moved out of the South between 1973 and 1997. For each of these, I would expect negative relationships for change if the conventional wisdom holds. However, a college education may make people less susceptible to change, and it could very likely have a positive relationship with stability, as knowledgeable people are more likely to remain adamant in their beliefs (Taber and Lodge 2006). Moving to the South should make people more conservative. Moving out

of the South should make people more liberal. College should make people more liberal, and military service should make people more conservative.

Finally, the psychological factors I explore in this chapter are not like the personality dispositions I examined in the last chapter. For these variables, I used baseline levels from 1973 as my unit for analyses. This process is unlike the one I used to created change variables pertaining to status mobility and moving across country but is more like the process I used to measure role acquisition. These baseline levels of traits in 1973 like self-confidence, opinion strength, personal trust, political trust, internal political efficacy, external political efficacy, and political knowledge should have the greatest influence on patterns of attitudinal stability between 1973 and 1997. I would expect all of these traits—especially opinion strength, internal political efficacy, and political knowledge—to be positively associated with attitudinal stability. As for the direction, there are no clear expectations for the direction these traits would predispose people towards. I would make an exception for political trust. Given the positive relationship between liberalism and support for governmental interventions, I would expect this trait to perhaps lead towards liberal shifts over time.

5.4 Data and Methods

The data for this chapter again come from the MSS and from the latent class models I ran in the second chapter. To reiterate, these data were collected across four waves between the years 1965 and 1997. In 1965, researchers contacted high school seniors and their parents. The researchers then recontacted these students and their parents in 1973 and 1982. In 1997, the researchers reinterviewed the students, who by that time were 50 years old, and they also interviewed the children of that original student sample. For the purposes of the analyses here, I will again only focus on that original

student sample which was interviewed across all four time points.

The results of the latent class analyses in the second chapter will serve as the dependent variables for my analyses in this chapter. In particular, I will use logistic regression models to examine which variables are associated with group membership across four political attitudes—political ideology, party identification, minority assistance, and women's role in society. These attitudes were chosen because the first two are broad political attitudes, and the other two are specific issue attitudes defined by separate patterns of change. Specifically, minority assistance is defined by a conservative pattern of change, and women's role in society is defined by a liberal pattern of change. For each issue attitude, there are five possible group classifications. Three of these classifications—Stay Conservative, Stay Moderate, and Stay Liberal—are groups defined by relative stability. The other two classifications—Move Conservative and Move Liberal—are defined by their patterns of directional instability. Not every attitude has people represented in all five groups. In fact, only ideology has people in all five categories. The remaining attitudes have people in four of the five possible groups. Neither party identification nor minority assistance had people in the Stay Moderate group, and the women's role in society attitude had no people in the Stay Conservative group. A breakdown of group membership can be found in Table 5.1.

To explain the likelihoods of individual group membership I will use a variety of variables in the MSS data set as well as the group classifications of other variables calculated in the second chapter. There are five major classifications for the variables I will use to predict group membership—inertia, role acquisition, status mobility, changing peer influences, and psychological. In terms of inertia, I will use the group classifications

associated with other attitudes examined in Chapter 2. It should follow that change or stability across one political attitude should predict change or stability across another.

Table 5.1: Group Classifications

Issue	Stay Conservative	Stay Liberal	Stay Moderate	Move Conservative	Move Liberal	Total N
Ideology	184 (.25)	120 (.17)	240 (.33)	156 (.21)	27 (.04)	727
Party ID	291 (.33)	399 (.45)	-	153 (.17)	40 (.05)	883
Minority Assistance	530 (.61)	188 (.22)	-	120 (.14)	29 (.03)	867
Women's Role	-	616 (.69)	155 (.17)	.06118	73 (.08)	899

Cells represent the total number of respondents in each group. The proportion of the sample classified into each latent class is found in the parentheses.

I define role acquisition in purely familial terms. Specifically, I will examine the influence of divorce, years married, and the number of sons or daughters as potential predictors of change. In terms of status mobility, I created four dummy coded variables each utilizing a cutoff of the equivalent of $100,000 in 1997 as a measure of wealth.[13] Two variable accounts for people who went from relative rags to relative riches with one covering the period between 1973 and 1982 and the other covering the period between 1982 and 1997, and the other two variables account for people who went in the other direction. Changing peer influences will be measured by looking at people who moved from the North to the South and vice versa, as well as military service and attending college. I will also examine more psychologically pertinent variables as they were measured in 1973 such as political interest, self-confidence, opinion strength, personal trust, political trust, internal political efficacy, and external political efficacy.

Again, I will use logistic regression models to run my analyses, as this method is preferable when examining discrete nominal dependent variables such as the group classifications associated with each political attitude. For each issue attitude, I will run three sets of logistic analyses. The first set of analyses examine the likelihood of being in one of the three possible categories defined by stability versus being in one of the two categories defined by change. As such, I coded a dummy to equal one if a person was in a stable category and zero if they were in a labile category. These analyses allow me to examine which factors lead to stability more broadly. After I ran these analyses, I then ran two sets of models predicting the direction of change. For one, I coded every person

[13] Roughly $60,000 in 1982 and $20,000 in 1973. Estimates were calculated with the US Bureau of Labor Statistics inflation calculator found here: http://data.bls.gov/cgibin/cpicalc.pl?cost1=100%2C000.00&year1=1997&year2=1965

in the Move Conservative category for a given attitude as a one and everybody else as a zero. For the other, I coded every person in the Move Liberal category as a one and everybody else as a zero.

5.5 Results

The first set of attitudes I examined were those surrounding placements on the seven-point ideology scale. Six models examining the stability of this placement are presented in Table 5.2. The first five models represent the five basic groupings of variables—inertia, role acquisition, status mobility, changing peer influences, and psychological factors, and the sixth model is a full model which includes all the previously explored in the prior models. Every model controlled for the race and gender of the respondents. Results for these analyses, and all analyses from here on out, are reported as odds ratios.

Odds ratios significantly higher than one indicate that particular variable increased the likelihood of an outcome—here being categorized as stable—while odds ratios significantly lower than one indicate that particular variable decreased the likelihood of an outcome. Odds ratios have an advantage in that they are readily interpreted so that however higher or lower an odds ratio is, the odds ratio tells us how much more or less likely an outcome is for every unit change in a given variable when holding all other variables constant. For instance, a significant odds ratio of 1.79 would indicate that for every unit change for that given variable the odds of the outcome occurring increase by 79 percent; whereas, a significant odds ratio of 0.80 would indicate that for every unit change in that given variable the odds of the outcome occurring decrease by 20 percent.

In the first model presented in Table 5.2 I present the results for how stability across three other political attitudes—party identification, minority assistance, and women's role in society—predict the stability of ideological identification. Each variable was coded as one if a person was in a stable category for that variable and zero if they were not. Stability of attitudes towards party identification (OR = 2.41, 95% CI (1.66, 3.49), p <.01) were all positively associated with the likelihood of being stable regarding ideological identification. However, this is the only variable with any explanatory power across all six models presented in Table 5.2.

To indicate what these results truly mean regarding the probability of being in a stable ideology category, the predicted probability of being stable for ideology is .79 (95 % CI [.76, .83], p < .01) for people who were stable for party identification. So, if a person was in a stable party identification category, then there is a nearly 80 percent chance that they would be in a stable ideology category. However, people in labile party identification categories had a predicted probability of being in a stable ideology category of .62 (95 % CI [.55, .69], p < .001) giving them a roughly sixty percent chance of being stable ideologically. These findings are as I expected. Stability in one attitude is positively predicted by stability in other attitudes. These findings suggest there is a good deal of attitudinal constraint occurring between party identification and ideology.

The next three models included variables pertaining to familial role acquisition, status mobility, and changing peer influences. In regards in role acquisition, marital status does not seem to play a role in the stability of political attitudes, as divorce in 1982 or 1997 or the number of years married. Neither the number of daughters a person had in 1982 nor the number of sons a person had in 1982 influenced the likelihood of

ideological stability. Status mobility also did not seem to have as much of an effect, as only people who were downwardly mobile between 1973 and 1982 (OR = 1.73, 95% CI (0.88, 3.72), $p = .183$) came close to showing an effect, and that is a bit of a stretch.

The null findings keep on coming through the changing peer influences and psychological factors models. The overall number of null findings is staggering here given the overall expectations I laid out earlier. Taking on new roles in life, moving up or down socioeconomically, moving new places, going to college, joining the military, and having a psychological attachment to politics should in theory drive people to become likely to change throughout their lifespan. The full model for predicting ideological stability did not change the lack of influence for these variables. The effects for party identification stability (OR = 2.46, 95% CI (1.68, 3.62), $p < .01$) remained, and no other variables became significant when controlling for other variables and factors.

There is a pressing question as to why I did not find the effects I was expecting. As I will show, these null findings do not replicate across many of my other analyses, and sociological factors do predict patterns of stability associated with the other three political attitudes I examine. It is possible there is something about a person calling themselves a liberal or conservative that is immune from the explanatory variables employed here, but I doubt this possibility is the case. I do not have the space here to examine possible interaction effects, but it is also possible that the effects of these phenomena differ across populations. For instance, given gendered expectations, men may be more likely than women to change because of changes in family role or social status. As I will show, there is still much to explore regarding how these forces work to shape political attitudes over the lifespan.

Table 5.2: Predicting Stability of Ideological Identification

	Dependent variable:					
	Stable Identification					
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Party ID	2.41*** (1.66, 3.49)					2.46*** (1.68, 3.62)
Minority Assistance	1.25 (0.82, 1.87)					1.27 (0.83, 1.93)
Women's Role	0.82 (0.49, 1.34)					0.77 (0.45, 1.29)
Divorce 1982		1.04 (0.61, 1.80)				1.08 (0.63, 1.92)
Divorce 1997		0.69 (0.37, 1.31)				0.60 (0.31, 1.17)
Years Married		0.99 (0.97, 1.01)				0.99 (0.97, 1.01)
Number of Daughters		0.90 (0.73, 1.11)				0.89 (0.72, 1.11)
Number of Sons		0.92 (0.74, 1.14)				0.94 (0.75, 1.18)
Wealthy to Poor 73-82			1.73 (0.88, 3.72)			1.65 (0.82, 3.65)
Poor to Wealthy 73-82			0.86 (0.37, 2.11)			0.85 (0.35, 2.22)
Wealthy to Poor 82-97			0.92 (0.21, 4.96)			0.95 (0.20, 5.50)
Poor to Wealthy 82-97			0.95 (0.67, 1.36)			0.95 (0.63, 1.42)
Move to South				0.94 (0.50, 1.86)		0.98 (0.51, 1.98)
Move out of South				1.00 (0.40, 2.83)		1.07 (0.41, 3.17)
Military Service by 1973				0.96 (0.65, 1.41)		0.80 (0.51, 1.26)
College by 1973				0.85 (0.54, 1.32)		0.80 (0.50, 1.26)
Self-Confidence					0.98 (0.89, 1.09)	0.99 (0.89, 1.10)
Opinion Strength					0.96 (0.87, 1.07)	0.97 (0.87, 1.07)
Personal Trust					1.01 (0.93, 1.09)	1.02 (0.94, 1.11)
Political Trust					0.96 (0.83, 1.10)	0.98 (0.85, 1.13)
Internal Efficacy					1.11 (0.86, 1.43)	1.05 (0.80, 1.37)
External Efficacy					0.94 (0.76, 1.17)	0.92 (0.73, 1.15)
Political Knowledge					1.30 (0.56, 3.01)	1.23 (0.48, 3.14)
Constant	1.73 (0.70, 4.51)	6.11*** (2.79, 14.20)	3.90*** (1.99, 8.20)	4.08*** (2.01, 8.79)	4.71*** (1.63, 14.11)	3.95** (1.06, 15.16)
Observations	727	727	727	727	727	727
Log Likelihood	−390.76	−399.59	−400.81	−401.94	−400.98	−385.20
Akaike Inf. Crit.	793.52	815.18	815.62	817.88	821.97	822.39

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

I then examined the factors relating to the direction of ideological change. Again, these analyses I present in Tables 5.3 and 5.4 examine only those people who were in either the Move Conservative or Move Liberal categories relative to all other categories, and I use the models to predict the likelihoods of moving in a conservative or liberal direction versus being in any other categories. In Table 5.3 I start by examining the likelihood of a person being in the Move Conservative category relative to any of the four other categories. Here, much like the previous findings, there does not seem to be much going on in any of the six models outside of some expected effects regarding the influence of party identification (OR = 4.46, 95% CI (2.92, 6.83), $p < .01$) and minority assistance (OR = 1.64, 95% CI (0.99, 2.70), $p < .10$) categorization. Unlike the previous analyses, where I examined the influence of being a in a stable category for these variable on the likelihood of being in a stable category for ideology, I am here examining how being in the Move Conservative category for these variables influences the likelihood of being in the Move Conservative category for ideology.

The models predicting liberal change do see some sociological influence. Again, there is not a whole lot going on with these models, and the finding of party identification (OR = 6.13, 95% CI (1.71, 19.19), $p < .01$) remains as strong as ever. However, an effect for being divorced in 1997 is found in both the role acquisition submodel (OR = 3.77, 95% CI (1.13, 14.14), $p < .01$) as well as in the full model (OR = 4.91, 95% CI (1.32, 20.88), $p < .05$). Non-divorced people had nearly 3 percent probability (95 % CI [.01, .04], $p < .01$) of becoming liberal, but divorced people had an 11 percent chance (95 % CI [.01, .22], $p < .05$) of becoming liberal, a staggering feat given only 3.7 percent of the sample were in the Move Liberal category.

Table 5.3: Predicting Move Conservative Identification

	Dependent variable:					
	Move Conservative Identification					
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Party ID	4.46*** (2.92, 6.83)					4.38*** (2.84, 6.79)
Minority Assistance	1.64* (0.99, 2.70)					1.67* (0.99, 2.77)
Women's Role	0.84 (0.34, 1.90)					0.83 (0.32, 1.92)
Divorce 1982		0.88 (0.47, 1.57)				0.81 (0.42, 1.50)
Divorce 1997		0.96 (0.46, 1.94)				1.11 (0.50, 2.38)
Years Married		1.01 (0.99, 1.03)				1.01 (0.99, 1.03)
Number of Daughters		1.17 (0.94, 1.45)				1.15 (0.90, 1.45)
Number of Sons		1.11 (0.88, 1.38)				1.06 (0.83, 1.35)
Wealthy to Poor 73-82			0.63 (0.28, 1.26)			0.78 (0.33, 1.63)
Poor to Wealthy 73-82			1.44 (0.57, 3.36)			1.35 (0.49, 3.48)
Wealthy to Poor 82-97			0.30 (0.01, 1.95)			0.34 (0.02, 2.53)
Poor to Wealthy 82-97			1.13 (0.78, 1.65)			1.04 (0.68, 1.62)
Move to South				0.83 (0.38, 1.64)		0.78 (0.34, 1.63)
Move out of South				1.26 (0.44, 3.14)		1.07 (0.34, 2.96)
Military Service by 1973				1.02 (0.68, 1.54)		1.17 (0.72, 1.92)
College by 1973				1.24 (0.78, 1.97)		1.26 (0.77, 2.08)
Self-Confidence					1.01 (0.91, 1.13)	0.99 (0.88, 1.11)
Opinion Strength					1.02 (0.91, 1.13)	1.03 (0.92, 1.16)
Personal Trust					1.01 (0.93, 1.09)	1.00 (0.92, 1.10)
Political Trust					1.01 (0.87, 1.17)	1.00 (0.85, 1.17)
Internal Efficacy					0.91 (0.69, 1.18)	0.96 (0.71, 1.28)
External Efficacy					1.11 (0.88, 1.40)	1.14 (0.89, 1.46)
Political Knowledge					0.54 (0.22, 1.32)	0.69 (0.25, 1.92)
Constant	0.16*** (0.07, 0.33)	0.12*** (0.05, 0.27)	0.16*** (0.07, 0.34)	0.16*** (0.07, 0.34)	0.17*** (0.05, 0.53)	0.09*** (0.02, 0.33)
Observations	727	727	727	727	727	727
Log Likelihood	−342.82	−365.31	−367.30	−368.47	−367.42	−337.44
Akaike Inf. Crit.	697.63	746.61	748.61	750.94	754.83	726.88

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

Table 5.4: Predicting Move Liberal Identification

	Dependent variable:					
	Move Liberal Identification					
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Party ID	6.21*** (1.94, 16.93)					6.13*** (1.71, 19.19)
Minority Assistance	1.17 (0.06, 6.19)					0.61 (0.02, 4.84)
Women's Role	1.65 (0.38, 5.07)					1.70 (0.35, 6.11)
Divorce 1982		1.32 (0.44, 3.48)				1.42 (0.45, 4.10)
Divorce 1997		3.77** (1.13, 14.14)				4.91** (1.32, 20.88)
Years Married		1.01 (0.96, 1.06)				1.01 (0.96, 1.07)
Number of Daughters		0.82 (0.48, 1.32)				0.91 (0.50, 1.55)
Number of Sons		0.98 (0.58, 1.57)				0.97 (0.54, 1.65)
Wealthy to Poor 73-82			0.47 (0.03, 2.29)			0.36 (0.02, 1.93)
Poor to Wealthy 73-82			0.31 (0.01, 2.58)			0.31 (0.01, 3.25)
Wealthy to Poor 82-97			14.91* (1.06, 395.42)			11.22 (0.57, 385.15)
Poor to Wealthy 82-97			0.73 (0.32, 1.65)			0.91 (0.34, 2.44)
Move to South				2.29 (0.65, 6.34)		2.23 (0.59, 6.85)
Move out of South				0.0000 (0.00, 0.00)		0.00 (0.00, 0.00)
Military Service by 1973				1.12 (0.48, 2.92)		1.04 (0.38, 3.12)
College by 1973				0.84 (0.29, 2.49)		0.77 (0.25, 2.47)
Self-Confidence					1.04 (0.83, 1.32)	1.08 (0.84, 1.42)
Opinion Strength					1.13 (0.89, 1.44)	1.13 (0.89, 1.46)
Personal Trust					0.93 (0.78, 1.11)	0.89 (0.74, 1.08)
Political Trust					1.17 (0.85, 1.59)	1.24 (0.88, 1.73)
Internal Efficacy					0.94 (0.52, 1.67)	0.94 (0.49, 1.81)
External Efficacy					0.87 (0.53, 1.43)	0.82 (0.48, 1.42)
Political Knowledge					4.30 (0.64, 30.30)	3.62 (0.43, 31.69)
Constant	0.06*** (0.01, 0.19)	0.04*** (0.01, 0.18)	0.08*** (0.02, 0.23)	0.07*** (0.01, 0.23)	0.02*** (0.002, 0.19)	0.01*** (0.001, 0.13)
Observations	727	727	727	727	727	727
Log Likelihood	−110.46	−110.99	−112.12	−112.90	−112.71	−99.88
Akaike Inf. Crit.	232.93	237.97	238.24	239.80	245.41	251.76

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

Moving to the stability and direction of change for party identification, I present the models predicting the stability and direction of party identification in Tables 5.5, 5.6, and 5.7. The factors predicting the stability of party identification are much like those predicting the stability of ideology in that there are not many. However, there is more going on in these three sets of models when compared to the last three sets of models. In the first five models predicting the stability of party identification presented in Table 5.5 there are effects for ideological stability (OR = 2.00, 95% CI (1.44, 2.79), $p < .01$), military service (OR = 1.35, 95% CI (0.95, 1.91), $p < .15$), and internal efficacy (OR = 1.31, 95% CI (1.02, 1.67), $p < .05$), and each of these factors predicts an increased likelihood of stability.

In the full model the effects of military service and internal efficacy disappear with only the effect of party identification stability (OR = 1.90, 95% CI (1.35, 2.68), $p < .01$) remaining. However, something interesting happens in the full model. The trait of self-confidence attains a level of marginal significance when all other variables are accounted for (OR = 0.91, 95% CI (0.82, 1.01), $p < .10$). This finding is not expected. If anything, we should expect to see self-confidence being predictive of increased attitudinal instability. Instead, self-confident people are slightly less likely to have stable party identifications over time. As I will show in the next analyses, self-confidence does not incline people to choose one party over the other nor does it make people less stable with any other attitude. It is very possible that this finding is an artifact of the model, as it does not seem to replicate elsewhere and is a marginal finding to begin with.

Table 5.5: Predicting Party Identification Stability

	Dependent variable:					
	Stable Identification					
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Ideology	2.00*** (1.44, 2.79)					1.90*** (1.35, 2.68)
Minority Assistance	0.83 (0.55, 1.23)					0.80 (0.52, 1.20)
Women's Role	0.87 (0.55, 1.35)					0.85 (0.53, 1.35)
Divorce 1982		1.08 (0.65, 1.87)				1.07 (0.63, 1.88)
Divorce 1997		1.22 (0.65, 2.36)				1.16 (0.61, 2.30)
Years Married		0.99 (0.98, 1.01)				1.00 (0.98, 1.01)
Number of Daughters		0.96 (0.79, 1.17)				0.98 (0.80, 1.21)
Number of Sons		0.89 (0.73, 1.08)				0.91 (0.74, 1.12)
Wealthy to Poor 73-82			1.37 (0.74, 2.76)			1.22 (0.64, 2.50)
Poor to Wealthy 73-82			0.83 (0.38, 1.99)			0.80 (0.35, 1.98)
Wealthy to Poor 82-97			0.72 (0.18, 3.15)			0.68 (0.17, 3.10)
Poor to Wealthy 82-97			0.84 (0.60, 1.18)			0.92 (0.63, 1.34)
Move to South				0.69 (0.39, 1.25)		0.66 (0.37, 1.23)
Move out of South				0.52 (0.22, 1.33)		0.48 (0.20, 1.26)
Military Service by 1973				1.35* (0.95, 1.91)		1.21 (0.80, 1.83)
College by 1973				1.05 (0.67, 1.62)		1.11 (0.70, 1.75)
Self-Confidence					0.92 (0.84, 1.02)	0.91* (0.82, 1.01)
Opinion Strength					1.01 (0.91, 1.11)	1.00 (0.90, 1.11)
Personal Trust					1.02 (0.95, 1.10)	1.03 (0.95, 1.11)
Political Trust					0.95 (0.83, 1.08)	0.97 (0.85, 1.11)
Internal Efficacy					1.31** (1.02, 1.67)	1.22 (0.95, 1.59)
External Efficacy					1.01 (0.82, 1.24)	0.99 (0.80, 1.23)
Political Knowledge					1.12 (0.51, 2.44)	0.93 (0.39, 2.19)
Constant	38.86*** (10.83, 250.44)	47.27*** (13.47, 301.24)	40.72*** (12.52, 250.40)	36.55*** (11.13, 225.72)	35.79*** (8.85, 245.03)	53.82*** (11.20, 408.74)
Observations	883	883	883	883	883	883
Log Likelihood	−441.06	−447.40	−448.59	−447.07	−445.64	−433.15
Akaike Inf. Crit.	894.13	910.81	911.17	908.14	911.27	918.30

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

Table 5.6: Predicting Change to Republican Party

	Dependent variable:					
	Move Republican Identification					
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Ideology	4.22*** (2.82, 6.32)					4.40*** (2.90, 6.67)
Minority Assistance	1.46 (0.88, 2.38)					1.46 (0.86, 2.42)
Women's Role	1.56 (0.74, 3.09)					1.43 (0.66, 2.93)
Divorce 1982		1.07 (0.59, 1.85)				1.10 (0.59, 1.97)
Divorce 1997		0.92 (0.45, 1.83)				1.04 (0.48, 2.21)
Years Married		1.01 (0.99, 1.03)				1.01 (0.98, 1.03)
Number of Daughters		1.14 (0.92, 1.40)				1.09 (0.86, 1.37)
Number of Sons		1.14 (0.92, 1.41)				1.09 (0.86, 1.37)
Wealthy to Poor 73-82			0.58 (0.25, 1.18)			0.74 (0.31, 1.59)
Poor to Wealthy 73-82			1.26 (0.49, 2.91)			1.48 (0.54, 3.67)
Wealthy to Poor 82-97			0.72 (0.10, 3.47)			0.91 (0.12, 4.82)
Poor to Wealthy 82-97			1.14 (0.79, 1.65)			1.18 (0.77, 1.83)
Move to South				1.27 (0.64, 2.35)		1.37 (0.66, 2.69)
Move out of South				2.50** (0.98, 5.92)		2.85** (1.02, 7.39)
Military Service by 1973				0.77 (0.53, 1.14)		0.87 (0.54, 1.40)
College by 1973				1.02 (0.64, 1.63)		0.93 (0.57, 1.54)
Self-Confidence					1.07 (0.97, 1.20)	1.07 (0.95, 1.20)
Opinion Strength					1.00 (0.90, 1.12)	1.01 (0.90, 1.13)
Personal Trust					0.99 (0.91, 1.07)	0.97 (0.89, 1.06)
Political Trust					0.98 (0.84, 1.13)	0.96 (0.82, 1.12)
Internal Efficacy					0.74** (0.57, 0.97)	0.71** (0.53, 0.94)
External Efficacy					0.95 (0.76, 1.19)	0.97 (0.76, 1.23)
Political Knowledge					0.54 (0.22, 1.27)	0.57 (0.21, 1.53)
Constant	0.02*** (0.003, 0.05)	0.02*** (0.002, 0.06)	0.02*** (0.004, 0.07)	0.02*** (0.004, 0.08)	0.04*** (0.01, 0.17)	0.02*** (0.003, 0.11)
Observations	883	883	883	883	883	883
Log Likelihood	−367.34	−391.36	−392.41	−391.19	−388.25	−356.84
Akaike Inf. Crit.	746.67	798.71	798.81	796.38	796.51	765.69

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

Table 5.7: Predicting Change to Democratic Party

	Dependent variable:					
			Move Democratic Identification			
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Ideology	6.16*** (1.93, 16.68)					5.82*** (1.60, 18.60)
Minority Assistance	1.02 (0.06, 5.14)					1.10 (0.06, 6.49)
Women's Role	0.61 (0.10, 2.10)					0.54 (0.08, 2.07)
Divorce 1982		0.55 (0.13, 1.62)				0.39 (0.08, 1.27)
Divorce 1997		0.60 (0.13, 2.11)				0.55 (0.11, 2.18)
Years Married		1.00 (0.97, 1.04)				1.00 (0.97, 1.04)
Number of Daughters		0.74 (0.47, 1.11)				0.72 (0.44, 1.13)
Number of Sons		1.05 (0.71, 1.52)				1.05 (0.68, 1.58)
Wealthy to Poor 73-82			1.44 (0.42, 3.80)			1.32 (0.37, 3.72)
Poor to Wealthy 73-82			0.93 (0.10, 4.25)			1.09 (0.10, 5.63)
Wealthy to Poor 82-97			4.35 (0.44, 44.48)			2.85 (0.23, 35.48)
Poor to Wealthy 82-97			1.27 (0.65, 2.52)			1.15 (0.55, 2.47)
Move to South				1.82 (0.60, 4.47)		1.65 (0.51, 4.47)
Move out of South				0.00 (0.00, 0.00)		0.00 (0.00, 0.00)
Military Service by 1973				0.73 (0.38, 1.44)		0.46* (0.20, 1.04)
College by 1973				0.74 (0.28, 2.03)		0.78 (0.28, 2.24)
Self-Confidence					1.09 (0.89, 1.34)	1.08 (0.87, 1.34)
Opinion Strength					0.98 (0.81, 1.18)	0.99 (0.81, 1.20)
Personal Trust					0.96 (0.83, 1.11)	0.98 (0.84, 1.14)
Political Trust					1.32** (1.02, 1.71)	1.31* (1.00, 1.72)
Internal Efficacy					0.92 (0.56, 1.49)	0.97 (0.57, 1.63)
External Efficacy					1.16 (0.75, 1.84)	1.14 (0.73, 1.84)
Political Knowledge					4.88** (1.05, 23.59)	4.94* (0.89, 28.91)
Constant	0.00 (0.00, 485,681.60)	0.0000 (0.00, 0.00)	0.00 (0.00, 0.48)	0.00 (0.00, 0.00)	0.00 (0.00,0.00)	0.00 (0.00, 0.00)
Observations	883	883	883	883	883	883
Log Likelihood	−154.19	−156.22	−157.19	−156.45	−152.75	−142.44
Akaike Inf. Crit.	320.38	328.44	328.37	326.90	325.50	336.88

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

In Table 5.6 I present the results of the analyses predicting the likelihood of being in the Move Republican category. The first three models do not show much as there is only an effect in the first model for ideological movement (OR = 4.42, 95% CI (2.82, 6.32), $p < .01$). This finding is particularly large and remains relatively unchanged in the full model (OR = 4.40, 95% CI (2.90, 6.67), $p < .01$). This effect is not particularly surprising, but the magnitude of conservative ideological movement effect is quite large increasing the likelihood of being in the Move Republican category nearly four-and-a-half times over. Altogether 17 percent of people were in the Move Republican category, but people who moved conservative ideologically had a 37 percent chance of also being in the Move Republican party identification category (95% CI [.30, .44]) while people who were not in the Move Conservative ideology category only had a 13 percent chance of being in the Move Republican party identification category (95% CI [.10, .15]).

Beyond this expected, but large effect, the peer influences and psychological factors models each had a significant predictor. People who moved out of the South were significantly more likely to be in the Move Republican category (OR = 2.50, 95% CI (0.98, 5.92), $p < .05$). This finding makes a good deal of sense. During much the period covered in this study conservative Democrats still ruled throughout the Deep South, conservative Southern Democrats who moved north would likely have found more in common with their new Republican neighbors than their Democratic neighbors. Internal efficacy also predicted the likelihood of being in the Move Republican category (OR = 0.74, 95% CI (0.57, 0.97), $p < .05$), but increased levels of internal efficacy negatively predicted being in the Move Republican category. This finding is in line with my overall expectations, as internal efficacy is associated with political trust which in turn should

lead to more support for governmental programs. Both effects held up relatively unchanged in the full model.

Predicting location in the Move Democratic category tells a similar but slightly reversed story. As I have shown with every model up to this point, ideological movement is very predictive of party identification movement in the reduced (OR = 6.16, 95% CI (1.93, 16.68), $p < .01$) as well as the full (OR = 5.82, 95% CI (1.60, 18.60), $p < .01$) models. There are no effects to speak of in the reduced role acquisition, status mobility, or peer influences models. In the reduced psychological factors model, however, there are effects for both political trust (OR = 1.32, 95% CI (1.02, 1.71), $p < .05$) and political knowledge (OR = 4.88, 95% CI (1.05, 25.59), $p < .05$) with both being associated with a higher likelihood of landing somebody in the Move Democratic category. I had expected political trust to be associated with movement in a liberal direction. So, that finding is not all that surprising, but the effect of political knowledge is somewhat unexpected but understandable. Those most understanding of the political world are those who are most likely to comfortable with the apparatuses and machinations of politics and the government, and comfort with the government is a trait typically associated with more liberal and Democratic voters.

The next two attitudes—minority assistance and women's role in society—are different from the previous two attitudes as they are specific issue attitudes rather than general group identifications. Minority assistance is the first of these two issue attitudes I examined, and the results for my analyses surrounding the stability and direction of minority assistance attitudes can be found in Tables 5.8, 5.9, and 5.10. There are significant effects in three of the first five models. Inertia was surprisingly not a predictor

of minority assistance attitudinal stability. These null findings suggest whatever change ongoing with minority assistance attitudes is not being constrained by ideology, party identification, and attitudes about the role of women in society. However, as I have shown and will show, the direction of change associated with minority both shapes the direction of change on other attitudes and is also affected by the direction of change on other attitudes. These findings are intriguing as they suggest attitudes towards help minority groups change because of nonpolitical forces, but the change associated with these nonpolitical forces may also lead to increasingly conservative views on ideology and, as I will show later, attitudes towards women's role in society. I cannot test the causal direction of these relationships here, but I am suggesting that increased racial conservatism may drive increased conservatism more broadly.

In the other models, there are effects for divorce in 1982 (OR = 0.62, 95% CI (0.38, 1.03), $p < .10$), the number of sons (OR = 0.80, 95% CI (0.65, 0.99), $p < .05$), moving out of the South (OR = 0.41, 95% CI (0.18, 0.97), $p < .05$), college education (OR = 1.61, 95% CI (0.99, 2.63), $p < .10$), internal political efficacy (OR = 0.76, 95% CI (0.58, 0.99), $p < .05$), and political knowledge (OR = 2.33, 95% CI (0.98, 5.60), $p < .01$). Of these factors, both college education and political knowledge were, as I expected drivers of attitudinal stability. The negative finding for internal efficacy runs counter to my expectations, as I assumed its close relationship with traits like political knowledge would make it a force of stabilization, but as I will show later it worked to make people more conservative on the issue of minority assistance.

Divorce, changing parental roles, and moving were all expectedly drivers of attitudinal instability. Of these, the finding regarding moving out of the South is the most

interesting and warrants further examination and discussion. Earlier, when I was examining the patterns of stability surrounding party identification, I showed how moving out of the South increased the likelihood of a person being placed in the Move Republican category. However, here I show that moving out the South also makes people more likely to change their opinions about minority assistance. The troubled nature surrounding the history of race in the United States is rarely more apparent than when the history of the South is examined. So, of all issue attitudes, I would expect these variables focusing on movement in and out of the region to have the biggest influence. This finding is far more intriguing when compared with the results in Tables 5.9 and 5.10 which display my analyses surrounding the direction of change associated with minority assistance. Moving out of the South was not more likely to make people more conservative towards minority assistance, but moving out of the South was associated with movement in a liberal direction regarding minority assistance (OR = 5.28, 95% CI (1.07, 19.94), $p < .05$). It is very likely that moving out of the South introduces these former southerners to newer racial norms that they must in turn adopt to fit in.

Beyond the changing peer influences of moving out of the South, there are inertial, role acquisition, status mobility, and psychological effects driving the likelihoods of becoming conservative or liberal about minority assistance. Becoming more likely to identify as conservative (OR = 1.69, 95% CI (1.03, 2.72), $p < .05$) and becoming more conservative about women's role in society (OR = 2.29, 95% CI (1.13, 4.37), $p < .05$) were both associated with increased conservatism regarding minority assistance. I discussed these relationships earlier, and I will spend more time in the conclusion working these relationships out.

Table 5.8: Predicting Stabily of Minority Assistance Attitudes

	Dependent variable:					
	Stable Identification					
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Ideology	1.08 (0.74, 1.55)					1.10 (0.75, 1.61)
Party ID	1.04 (0.69, 1.54)					1.00 (0.65, 1.50)
Women's Role	1.21 (0.75, 1.88)					1.15 (0.70, 1.84)
Divorce 1982		0.62* (0.38, 1.03)				0.62* (0.37, 1.04)
Divorce 1997		1.01 (0.55, 1.90)				1.08 (0.57, 2.06)
Years Married		1.00 (0.98, 1.02)				1.00 (0.98, 1.02)
Number of Daughters		1.00 (0.81, 1.25)				0.99 (0.79, 1.25)
Number of Sons		0.80** (0.65, 0.99)				0.80** (0.64, 1.00)
Wealthy to Poor 73-82			0.73 (0.40, 1.41)			0.74 (0.39, 1.47)
Poor to Wealthy 73-82			1.66 (0.65, 5.35)			1.74 (0.64, 5.89)
Wealthy to Poor 82-97			0.80 (0.15, 6.09)			0.72 (0.13, 5.69)
Poor to Wealthy 82-97			1.36 (0.94, 1.97)			1.33 (0.88, 2.00)
Move to South				0.85 (0.43, 1.83)		0.85 (0.42, 1.86)
Move out of South				0.41** (0.18, 0.97)		0.38** (0.17, 0.93)
Military Service by 1973				1.18 (0.80, 1.73)		1.06 (0.67, 1.66)
College by 1973				1.61* (0.99, 2.63)		1.64* (1.00, 2.72)
Self-Confidence					1.00 (0.90, 1.11)	0.98 (0.88, 1.10)
Opinion Strength					0.95 (0.85, 1.06)	0.95 (0.85, 1.06)
Personal Trust					1.03 (0.95, 1.12)	1.03 (0.94, 1.11)
Political Trust					1.02 (0.88, 1.19)	1.04 (0.89, 1.21)
Internal Efficacy					0.76** (0.58, 0.99)	0.77* (0.58, 1.01)
External Efficacy					0.97 (0.77, 1.22)	0.97 (0.76, 1.22)
Political Knowledge					2.33* (0.98, 5.60)	1.93 (0.75, 5.01)
Constant	4.00*** (1.85, 9.18)	6.45*** (3.10, 14.27)	4.58*** (2.52, 8.97)	4.71*** (2.53, 9.43)	6.07*** (2.19, 17.61)	7.80*** (2.28, 27.71)
Observations	867	867	867	867	867	867
Log Likelihood	−396.61	−392.99	−394.93	−393.03	−393.08	−383.29
Akaike Inf. Crit.	805.22	801.97	803.87	800.05	806.15	818.59

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

Table 5.9: Predicting Moving Conservative on Minority Assistance Attitudes

	Dependent variable:					
	Move Conservative Identification					
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Ideology	1.69** (1.03, 2.72)					1.68** (1.02, 2.73)
Party ID	1.42 (0.85, 2.30)					1.40 (0.84, 2.31)
Women's Role	2.29** (1.13, 4.37)					1.95* (0.92, 3.88)
Divorce 1982		1.42 (0.80, 2.45)				1.47 (0.81, 2.58)
Divorce 1997		0.65 (0.30, 1.31)				0.63 (0.29, 1.33)
Years Married		1.00 (0.98, 1.02)				1.00 (0.98, 1.02)
Number of Daughters		0.99 (0.78, 1.26)				0.99 (0.76, 1.27)
Number of Sons		1.30** (1.04, 1.63)				1.27* (0.99, 1.61)
Wealthy to Poor 73-82			0.75 (0.30, 1.59)			0.78 (0.31, 1.70)
Poor to Wealthy 73-82			0.78 (0.23, 2.06)			0.71 (0.20, 1.97)
Wealthy to Poor 82-97			0.59 (0.03, 4.12)			0.75 (0.04, 5.61)
Poor to Wealthy 82-97			0.86 (0.57, 1.28)			0.82 (0.53, 1.29)
Move to South				1.30 (0.58, 2.63)		1.19 (0.52, 2.50)
Move out of South				1.76 (0.63, 4.21)		1.75 (0.61, 4.37)
Military Service by 1973				0.98 (0.65, 1.52)		1.16 (0.71, 1.93)
College by 1973				0.70 (0.41, 1.20)		0.67 (0.39, 1.17)
Self-Confidence					1.01 (0.90, 1.13)	1.01 (0.89, 1.14)
Opinion Strength					1.03 (0.92, 1.16)	1.04 (0.93, 1.18)
Personal Trust					0.97 (0.89, 1.06)	0.96 (0.88, 1.06)
Political Trust					0.95 (0.81, 1.12)	0.94 (0.80, 1.11)
Internal Efficacy					1.36** (1.02, 1.81)	1.35* (1.00, 1.83)
External Efficacy					1.05 (0.82, 1.35)	1.05 (0.82, 1.36)
Political Knowledge					0.37** (0.14, 0.95)	0.43 (0.15, 1.22)
Constant	0.14*** (0.07, 0.27)	0.13*** (0.06, 0.30)	0.17*** (0.08, 0.32)	0.15*** (0.07, 0.30)	0.14*** (0.04, 0.42)	0.10*** (0.03, 0.36)
Observations	867	867	867	867	867	867
Log Likelihood	−341.70	−344.64	−347.69	−346.82	−344.42	−332.18
Akaike Inf. Crit.	695.40	705.28	709.39	707.64	708.84	716.36

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

Table 5.10: Predicting Moving Liberal on Minority Assistance Attitudes

	Dependent variable:					
	Move Liberal Identification					
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Ideology	1.22 (0.07, 6.36)					1.23 (0.06, 7.23)
Party ID	0.86 (0.05, 4.39)					0.86 (0.04, 5.03)
Women's Role	1.45 (0.34, 4.29)					1.92 (0.42, 6.31)
Divorce 1982		2.01 (0.77, 4.87)				2.13 (0.77, 5.51)
Divorce 1997		2.86* (0.92, 9.49)				3.08* (0.94, 10.84)
Years Married		1.00 (0.95, 1.05)				1.01 (0.96, 1.06)
Number of Daughters		1.03 (0.64, 1.58)				1.05 (0.62, 1.68)
Number of Sons		0.96 (0.59, 1.51)				1.04 (0.61, 1.69)
Wealthy to Poor 73-82			4.22*** (1.58, 10.09)			4.67*** (1.62, 12.41)
Poor to Wealthy 73-82			0.16 (0.003, 1.95)			0.13 (0.001, 2.37)
Wealthy to Poor 82-97			11.44 (0.31, 423.65)			17.43 (0.30, 1,075.99)
Poor to Wealthy 82-97			0.46* (0.20, 1.00)			0.69 (0.27, 1.75)
Move to South				0.65 (0.04, 3.22)		0.68 (0.04, 3.73)
Move out of South				4.25** (0.94, 13.83)		5.28** (1.07, 19.94)
Military Service by 1973				0.52 (0.23, 1.16)		0.47 (0.18, 1.23)
College by 1973				0.50 (0.19, 1.27)		0.48 (0.17, 1.30)
Self-Confidence					0.96 (0.77, 1.20)	1.03 (0.82, 1.30)
Opinion Strength					1.12 (0.89, 1.43)	1.07 (0.84, 1.37)
Personal Trust					1.00 (0.84, 1.19)	1.02 (0.85, 1.24)
Political Trust					1.08 (0.79, 1.45)	1.10 (0.78, 1.53)
Internal Efficacy					1.07 (0.61, 1.86)	1.04 (0.56, 1.91)
External Efficacy					0.95 (0.59, 1.54)	0.91 (0.55, 1.51)
Political Knowledge					0.95 (0.15, 5.93)	1.56 (0.19, 12.75)
Constant	0.03*** (0.01, 0.09)	0.02*** (0.003, 0.08)	0.03*** (0.01, 0.10)	0.04*** (0.01, 0.12)	0.02*** (0.002, 0.14)	0.01*** (0.001, 0.08)
Observations	867	867	867	867	867	867
Log Likelihood	−125.11	−120.28	−118.46	−121.47	−124.61	−110.02
Akaike Inf. Crit.	262.21	256.56	250.92	256.93	269.23	272.04

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

In addition to these inertial forces, both the number of sons a person has (OR = 1.27, 95% CI (0.99, 1.61), $p < .10$) and internal political efficacy (OR = 1.35, 95% CI (1.00, 1.83), $p < .10$) also acted in ways that made people more conservative about minority assistance. I would be interested to see the reason why the number of sons a person has would make them more likely to move in a conservative direction on this issue. It might be possible that sons act to increase levels of authoritarianism or social dominance which in turn are more predictive of increasing conservatism on the issue of minority assistance. The finding regarding sons holds up in the full model but is weakened relative to the reduced role acquisition model. I would imagine there is another set of variables, again like authoritarianism or social dominance orientation, that mediate or moderate this relationship.

I already discussed the liberalizing effect of moving out of the South, but being divorced in 1997 (OR = 2.86, 95% CI (0.92, 9.49), $p < .10$) and downward social mobility (OR = 4.22, 95% CI (1.58, 10.09), $p < .01$) were also associated with liberalizing attitudes about minority assistance. The financial stress associated with divorce may make people more tolerant towards governmental assistance. Similarly, as I expected downward social mobility should predict attitudes which are more tolerant towards governmental assistance. Here I show this expectation applies to the issue of minority assistance. The inverse, upward social mobility, also had an expected effect (OR = 0.46, 95% CI (0.20, 1.00), $p < .10$) in that it negatively predicted the likelihood of being in the Move Liberal category for minority assistance.

In the final sets of analyses, I examined the stability and direction of attitudes pertaining to women's role in society. The models predicting the stability and direction of

these attitudes can be found in Tables 5.11, 5.12, and 5.13. In Table 5.11 I present the results examining the stability of attitudes about women's role in society. There were effects found in four of the first five models. However, this issue seems to be an issue which was not well predicted by forces of inertia, as, much like minority assistance, the stability of this issue does not seem to be predicated on the stability of other issues. The lack of effects for the other forces of inertia suggests that change and stability on this particular issue was not constrained much by political forces. Given the more social nature of this issue, these findings may not be all that surprising.

In the other four models, effects were found for the number of daughters (OR = 0.67, 95% CI (0.54, 0.84), $p < .01$), the number of sons (OR = 0.63, 95% CI (0.51, 0.79), $p < .01$), downward social mobility between 1973 and 1982 (OR = 2.67, 95% CI (1.07, 8.96), $p < .10$), upward social mobility between the years 1982 and 1997 (OR = 1.79, 95% CI (1.21, 2.67), $p < .01$), military service (OR = 2.74, 95% CI (1.86, 4.05), $p < .01$), self-confidence (OR = 1.12, 95% CI (1.00, 1.25), $p < .05$), opinion strength (OR = 1.18, 95% CI (1.05, 1.32), $p < .01$), and political trust (OR = 0.85, 95% CI (0.72, 0.99), $p < .05$). Of these effects, which I will discuss further, the biggest surprises are those of the downward status mobility predicting increased levels of stability and political trust predicting patterns of instability. I expected downward mobility to lead to overall levels of instability across all issue attitudes, and I expected trust to predict levels of stability across all attitudes. However, it is likely these effects which were found in their respective reduced models were mediated by other variables as neither variable is a significant predictor of stability patterns in the full model.

Table 5.11: Predicting Stability of Women's Role Attiudes

	Dependent variable:					
	Stable Identification					
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Ideology	1.28 (0.87, 1.88)					1.00 (0.66, 1.50)
Party ID	1.04 (0.67, 1.58)					1.01 (0.63, 1.59)
Minority Assistance	1.37 (0.89, 2.08)					1.16 (0.72, 1.84)
Divorce 1982		1.53 (0.82, 3.03)				1.74 (0.90, 3.57)
Divorce 1997		1.24 (0.62, 2.55)				1.33 (0.65, 2.81)
Years Married		1.01 (0.99, 1.03)				1.01 (0.99, 1.03)
Number of Daughters		0.67*** (0.54, 0.84)				0.75** (0.59, 0.95)
Number of Sons		0.63*** (0.51, 0.79)				0.73*** (0.57, 0.92)
Wealthy to Poor 73-82			2.67* (1.07, 8.96)			2.08 (0.79, 7.21)
Poor to Wealthy 73-82			2.16 (0.76, 8.41)			1.53 (0.48, 6.77)
Wealthy to Poor 82-97			1.46 (0.20, 29.80)			1.26 (0.14, 28.04)
Poor to Wealthy 82-97			1.79*** (1.21, 2.67)			1.69** (1.08, 2.65)
Move to South				0.63 (0.33, 1.29)		0.57 (0.28, 1.22)
Move out of South				3.60 (0.74, 64.85)		6.18* (1.16, 115.53)
Military Service by 1973				2.74*** (1.86, 4.05)		1.51* (0.95, 2.39)
College by 1973				0.75 (0.41, 1.33)		0.69 (0.37, 1.25)
Self-Confidence					1.12** (1.00, 1.25)	1.07 (0.95, 1.21)
Opinion Strength					1.18*** (1.05, 1.32)	1.19*** (1.05, 1.34)
Personal Trust					1.04 (0.95, 1.13)	1.04 (0.95, 1.14)
Political Trust					0.85** (0.72, 0.99)	0.89 (0.75, 1.05)
Internal Efficacy					0.89 (0.67, 1.19)	0.78 (0.57, 1.05)
External Efficacy					1.10 (0.87, 1.41)	1.05 (0.82, 1.36)
Political Knowledge					11.20*** (4.21, 30.90)	6.48*** (2.28, 18.99)
Constant	4.34*** (1.89, 10.88)	12.31*** (5.32, 31.43)	5.29*** (2.71, 11.62)	4.03*** (2.01, 8.98)	1.11 (0.37, 3.45)	1.65 (0.42, 6.77)
Observations	899	899	899	899	899	899
Log Likelihood	−365.14	−353.80	−360.15	−351.19	−341.05	−322.72
Akaike Inf. Crit.	742.27	723.61	734.29	716.38	702.09	697.45

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

Table 5.12: Predicting Conservative Change to Women's Role Attiudes

	Dependent variable:					
	Move Conservative Identification					
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Ideology	0.72 (0.30, 1.56)					0.70 (0.28, 1.56)
Party ID	1.51 (0.72, 2.97)					1.43 (0.65, 2.95)
Minority Assistance	2.22** (1.10, 4.20)					2.15** (1.02, 4.29)
Divorce 1982		0.84 (0.30, 1.96)				0.91 (0.32, 2.26)
Divorce 1997		0.25** (0.05, 0.80)				0.23** (0.05, 0.77)
Years Married		0.98 (0.95, 1.01)				0.99 (0.96, 1.02)
Number of Daughters		1.39** (1.00, 1.89)				1.26 (0.89, 1.77)
Number of Sons		1.71*** (1.26, 2.31)				1.51** (1.08, 2.11)
Wealthy to Poor 73-82			0.00 (0.00, 0.00)			0.00 (0.00, 0.00)
Poor to Wealthy 73-82			0.31 (0.02, 1.52)			0.34 (0.02, 1.85)
Wealthy to Poor 82-97			0.00 (0.001, 0.00)			0.00 (0.00, 0.00)
Poor to Wealthy 82-97			0.46** (0.25, 0.83)			0.42*** (0.22, 0.80)
Move to South				1.11 (0.32, 2.90)		1.05 (0.29, 2.95)
Move out of South				0.80 (0.04, 4.02)		0.45 (0.02, 2.56)
Military Service by 1973				0.35*** (0.20, 0.62)		0.54* (0.27, 1.08)
College by 1973				1.35 (0.55, 3.52)		1.39 (0.55, 3.70)
Self-Confidence					1.01 (0.86, 1.19)	1.08 (0.91, 1.30)
Opinion Strength					0.95 (0.81, 1.12)	0.96 (0.81, 1.13)
Personal Trust					1.04 (0.92, 1.19)	1.04 (0.91, 1.20)
Political Trust					1.07 (0.85, 1.34)	0.99 (0.78, 1.25)
Internal Efficacy					1.13 (0.74, 1.70)	1.30 (0.84, 2.01)
External Efficacy					0.91 (0.64, 1.28)	0.94 (0.66, 1.36)
Political Knowledge					0.09*** (0.02, 0.36)	0.26* (0.05, 1.20)
Constant	0.03*** (0.005, 0.10)	0.02*** (0.004, 0.10)	0.04*** (0.01, 0.14)	0.05*** (0.01, 0.17)	0.07*** (0.01, 0.42)	0.04*** (0.003, 0.27)
Observations	899	899	899	899	899	899
Log Likelihood	−201.26	−195.78	−195.60	−197.41	−196.83	−176.84
Akaike Inf. Crit.	414.52	407.57	405.21	408.82	413.67	405.68

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

Table 5.13: Predicting Liberal Change on Women's Role Attitudes

	Dependent variable:					
	Move Liberal Identification					
	Inertia	Role Acquisition	Status Mobility	Peer Influences	Psychological	Full
	(1)	(2)	(3)	(4)	(5)	(6)
Ideology	1.58 (0.37, 4.78)					1.86 (0.41, 6.13)
Party ID	0.58 (0.09, 1.99)					0.63 (0.10, 2.30)
Minority Assistance	1.49 (0.35, 4.43)					1.85 (0.39, 6.31)
Divorce 1982		0.58 (0.23, 1.29)				0.44* (0.17, 1.03)
Divorce 1997		1.64 (0.69, 3.83)				1.67 (0.67, 4.10)
Years Married		1.00 (0.97, 1.03)				1.00 (0.98, 1.03)
Number of Daughters		1.47*** (1.12, 1.92)				1.33* (0.98, 1.80)
Number of Sons		1.38** (1.04, 1.81)				1.19 (0.87, 1.61)
Wealthy to Poor 73-82			0.73 (0.22, 1.85)			1.01 (0.28, 2.79)
Poor to Wealthy 73-82			0.66 (0.12, 2.24)			1.16 (0.18, 4.59)
Wealthy to Poor 82-97			1.16 (0.05, 10.36)			1.20 (0.05, 15.05)
Poor to Wealthy 82-97			0.70 (0.42, 1.15)			0.87 (0.49, 1.55)
Move to South				1.86 (0.78, 3.94)		2.15* (0.86, 4.85)
Move out of South				0.00 (0.00, 0.00)		0.00 (0.00, 0.00)
Military Service by 1973				0.43*** (0.26, 0.71)		0.86 (0.48, 1.55)
College by 1973				1.28 (0.64, 2.66)		1.43 (0.69, 3.06)
Self-Confidence					0.83*** (0.73, 0.96)	0.85** (0.73, 0.98)
Opinion Strength					0.80*** (0.69, 0.93)	0.79*** (0.67, 0.91)
Personal Trust					0.91 (0.82, 1.02)	0.91 (0.81, 1.02)
Political Trust					1.25** (1.02, 1.54)	1.25** (1.00, 1.56)
Internal Efficacy					1.11 (0.77, 1.60)	1.17 (0.79, 1.71)
External Efficacy					0.92 (0.68, 1.26)	0.95 (0.69, 1.32)
Political Knowledge					0.12*** (0.03, 0.43)	0.14*** (0.04, 0.53)
Constant	0.11*** (0.04, 0.22)	0.05*** (0.01, 0.12)	0.12*** (0.05, 0.26)	0.16*** (0.06, 0.35)	0.87 (0.23, 3.15)	0.45 (0.09, 2.09)
Observations	899	899	899	899	899	899
Log Likelihood	−252.42	−245.64	−251.86	−244.01	−232.11	−221.20
Akaike Inf. Crit.	516.83	507.28	517.71	502.03	484.22	494.41

Note: *p<0.1; **p<0.05; ***p<0.01
All Models Control for Race and Gender

The findings regarding the role of children were expected. Of the attitudes examined in this chapter, this attitude would be the strongest candidate for demonstrating significant familial effects influencing its patterns of stability. It seems as though parenthood works to redefine gender roles in the family as having sons and daughters leads to more instability with attitudes regarding the role of women in society. The effect of upward social mobility was neither expected nor unexpected, but it is interesting to see it have the stabilizing effect that it does. If this is an effect of more homes having dual incomes during the years of 1982 and 1997 thus more families remaining comfortable with the idea of women working outside of the home, remains to be seen. The strong effect of political knowledge is also interesting, as it is more predictive here than anywhere else.

Predicting the direction of attitudinal shifts (results in Tables 5.12 and 5.13) regarding women's role in society came up with many interesting predictors. Starting with people who moved in a conservative on the issue of women's role in society there are some interesting relationships pertaining to how changing family roles increase or decrease the likelihood of moving in a conservative on this issue. Divorced people in 1997 were significantly less likely to be in the Move Conservative category for this issue (OR = 0.25, 95% CI (0.05, 0.80), $p < .05$) while the number of sons (OR = 1.71, 95% CI (1.26, 2.31), $p < .01$) and daughters (OR = 1.39, 95% CI (1.00, 1.89), $p < .05$) were positive predictors for increased conservatism.

These findings buttress and further the claims of Healy and Malhotra (2013). There seems to be some gendered process within families which leads to more socially conservative issue attitudes over time. There is also a significant effect for the direction

of change associated with minority assistance (OR = 2.22, 95% CI (1.10, 4.20), $p < .05$). Coupled with the results of analyzing the likelihood of becoming more conservative on minority assistance, these findings are of particular interest and importance. Recall, the number of sons also positively predicted the likelihood of becoming more conservative towards minority assistance. Just as with minority assistance, increasing levels of authoritarianism or SDO could also be predicting increased conservatism regarding the role of women in society.

Conversely, an examination of the factors leading to increased liberalism towards the role of women shows that the number of sons (OR = 1.39, 95% CI (1.00, 1.89), $p < .05$) and daughters (OR = 1.39, 95% CI (1.00, 1.89), $p < .05$) also increase the likelihood of being in the Move Liberal category relative to any other category. So, there is a tale of two cities going on here, and it is indisputable that children change gender expectations in interesting ways. I will discuss these results further in the conclusion, the reasoning behind these seemingly contradictory results likely lie in moderating or mediating relationships which will remain analytically unexplored here.

In addition to a potential liberalizing effect of children, there were a number of psychological factors which influenced the likelihood of liberalization. Political trust increased the likelihood of liberalizing attitudes (OR = 1.25, 95% CI (1.00, 1.56), $p < .05$) while self-confidence (OR = 0.85, 95% CI (0.73, 0.98), $p < .05$), opinion strength (OR = 0.79, 95% CI (0.67, 0.91), $p < .01$), and political knowledge (OR = 0.14, 95% CI (0.04, 0.53), $p < .01$) all negatively predicted the likelihood of liberalizing change. These results are not very expected, but the simplest explanation is that extreme liberal stability marked the issue of women's roles, in fact it is the only attitude without a Stay

Conservative category, and this extreme liberal stability is really what is being predicted by these variables. As I already demonstrated, these factors are not predictive of conservative change but are very much associated with stability.

5.7 Discussion and Conclusion

In the theory section of this chapter I outlined six possible sources of attitudinal stability as they were laid out by Dinas (2013). These six sources—inertia, role acquisition, changing peer influences, social mobility, stratification of experience, and identity diffusion—have been used in the past to understand how and why people stick with their prior attitudes and move on to new ones. I added psychological dispositions as a seventh possible source. In prior studies, attitudinal stability had been measured through correlations across time with panel data or as a continuous variable in cross-sectional designs. Here I was able to use discrete categories based on observed patterns of change in order to uniquely identify the sources of stability and the direction of change when lability occurs. This method allowed me to examine the degree to which the seven possible sources of attitudinal stability stack up with each other to predict differing patterns of stability. So, how did they stack with each other?

Inertia Predicts Some but Not All

I had expected inertia would play a significant role in the shaping of political attitudes. Specifically, I argued the trajectory of one attitude would predict the trajectory of other attitudes. Stable attitudes would predict other stable attitudes, and labile attitudes would predict the direction of other labile attitudes. The results for this influence and were strongest when I examined the degree to which ideology and party identification constrain each other. Interestingly, patterns of stability for party identification and ideology did not do much to constrain the policy specific question of minority assistance

or the social value specific question of women's role in society. The only such constraints I found were an effect for conservative ideological change which predicted conservative change towards minority assistance and the reverse effect for predicting conservative movement for the ideology item. Outside of these two constraints there are no inertial constraints of party identification and ideology on the stability of minority assistance and women's role attitudes, nor are there constraints predicting liberal movement on these items. Conservative change on women's role and minority assistance did constrain each other, however, suggest a role for social conservatism which goes on outside of party and ideology.

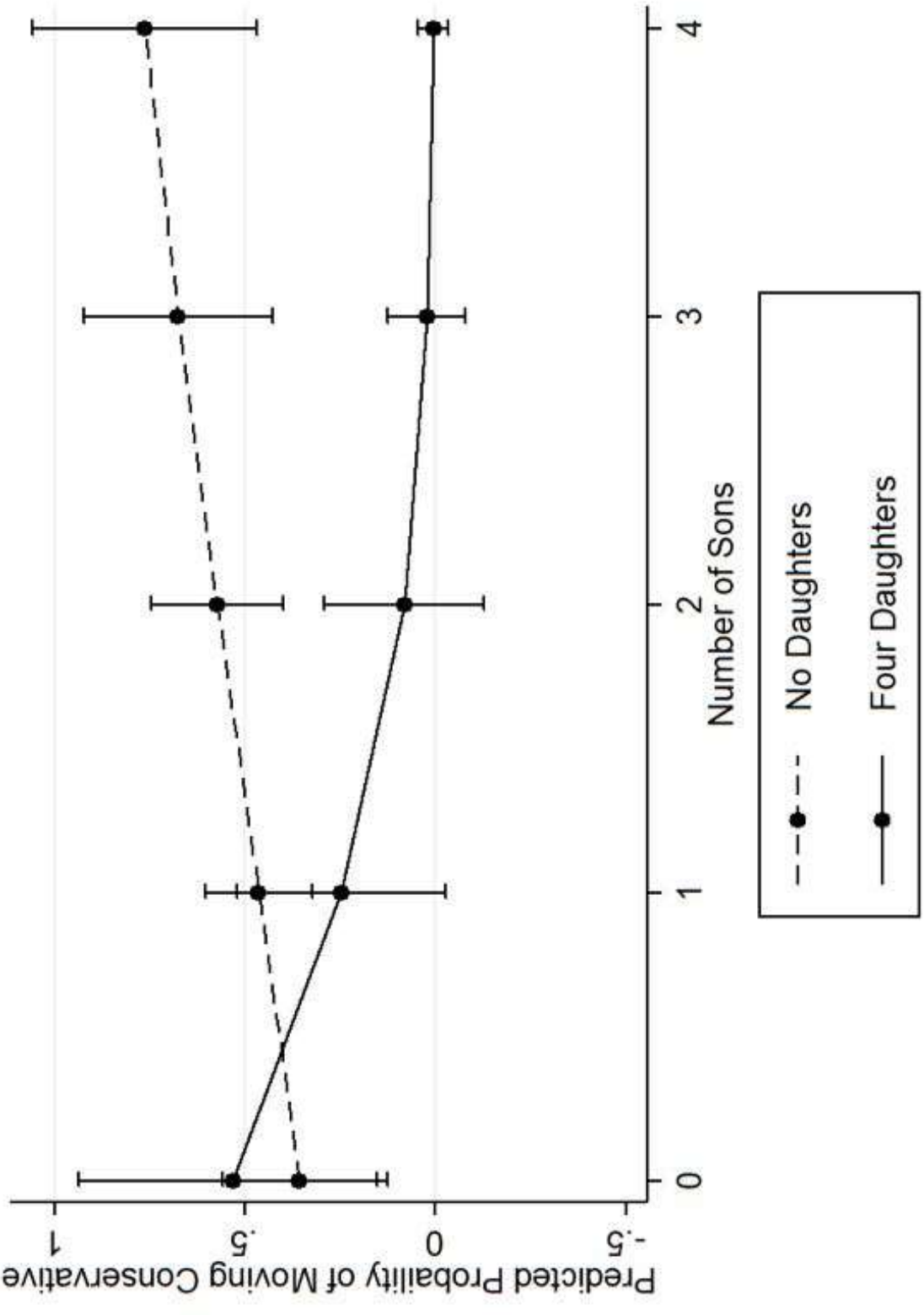
Family Makes Us Conservative (But Maybe Also Liberal)

Through the first two attitudes—party identification and ideology—familial role acquisition did not predict much in terms of stability patterns. Divorce in 1997 did positively predict movement in a liberal direction for ideology, but outside of this sole effect, family does not seem to shape identification with party or ideology. However, when it came to the minority assistance and women's role attitudes, these changing family role variables became significantly more predictive of stability patterns. Although there were some effects of divorce here, the number of sons and daughters were predictive of attitudinal lability for these attitudes. The more interesting findings come when examining the degree to which the number of sons and daughters influenced the direction of change. Sons made people more conservative vis-à-vis both issues while the number of daughters only predicted more conservative attitudes towards women's role in society.

However, the issue of women's role in society drives a wrench into the idea that these are solely conservatizing processes, as the number of sons and daughters are also positively associated with the likelihood of moving in a liberal direction toward these issues. Earlier I discussed how these disparate results could simply be indicative of children leading to change writ large, and these effects are due to comparing these change variables with stable attitudes. In fact, a further reduced model examining only the differences between those who moved liberal versus those who moved conservative showed children did not predict movement for one over the other. However, the question becomes why do children cause some people to become liberal and other people to become conservative? One possible explanation is the existence of mediation from some other variable. In preliminary analyses examining the differences between those who moved liberal versus those who moved conservative on the issue of women's role I found an interesting interaction between the number of sons and daughters.

I plotted this interaction in Figure 5.1. Here I show how the number of sons interacts with the number of daughters to predict differing probabilities of moving in a conservative direction towards women's rights issues. In a family with no daughters each successive son predicts increased conservatism, but in a family with four daughters each successive son predicts a lower likelihood of moving in a conservative direction. There could be a variety of processes at work here. It could simply be that large families with many sons and daughters require a more equal distribution of familial obligations between husband and wife, or it could mean that male dominated households engender socially conservative values through authoritarianism or SDO.

Figure 5.1: Predicted Probabilities of Moving Conservative on Women's Role Attitudes



Status Mobility and Changing Peer Influences

Outside of stability for women's role and minority assistance attitudes status mobility and changing peer influences did not predict the stability of attitudes as I expected. However, when people did change, these variables tended to have a larger role predicting the direction of attitudinal change. Of these variables moving out of the South seemed to have biggest effect across issues, as it predicted both instability and the direction of change for some attitudes. People who moved out the south were more likely to move to the Republican Party, less stable regarding minority assistance, and more likely to become more liberal towards minority assistance. These findings paint an interesting picture of how changing environments lead to different political outcomes in complex ways.

The Psychology of it All

Political knowledge, trust, and internal efficacy were all regularly associated with patterns of attitudinal stability, but they were not regularly associated with stability itself, as I expected. Political knowledge, for instance, positively predicted the stability of attitudes about women's role in society, but I had expected in to positively predict stability throughout. Political knowledge also decreased the likelihood of moving in liberal or conservative directions for this issue. Much like the influence of children on women's role attitudes, these findings are likely a result of the strong effect political knowledge had on the likelihood of stability for this particular issue. The ways in which these variables affect patterns of stability likely move beyond the bounds of the main effects presented here. The degree to which these traits interact with changing social environments ought to be examined more in the future.

Moving Forward

The results of this chapter and the last make a compelling argument for the inclusion of both psychological and sociological factors in future work examining patterns of attitudinal stability. Attitudinal instability is not the defining pattern across the lifespan, but it is a fairly common occurrence which some people seem particularly disposed towards. I have demonstrated how some psychological dispositions and some sociological life events shape our patterns of attitudinal stability. The next natural step in this process is to examine the interactions between these two forces. These interactions likely exist, and understanding these interactions will be vital for moving our understanding of attitudinal stability further.

Chapter 6: Planting the Seeds of Change

6.1 What Happens to Our Dinosaur?

I began this dissertation with an illustration of a man who in his younger years wanted to be a dinosaur. He set aside this desire and maintained a traditional, conservative lifestyle, but when he saw his son and step-son do the same, he reminded them to never lose their dinosaur. The scene is reminiscent of the speech George Babbitt gives to his son at the end of Sinclair Lewis' *Babbitt.* These tales reflect our intuitive notion of how the aging process works. Age is supposed to make us more conventional and more conservative. Among some populations, liberal, left-wing politics are akin to a child's desire to be a dinosaur. That is, liberal, left-wing politics are something people are supposed to abandon once they mature and acquire more responsibilities. This process is seen as a natural progression through adulthood. Yet, there is not much evidence that people truly lose their dinosaur. Political attitudes in young adulthood are still predictive of political attitudes in later years. When attitudinal change does occur, there is a tendency towards conservatism, but liberal change, while not at a rate similar to conservative change, occurs as well.

These patterns of change require a new understanding of how attitudes change throughout the lifespan. Preexisting theories of attitudinal change did not account for the direction of attitudinal change, and they did not account for individual differences in stability patterns. In the preceding chapters, I made the case that models of attitudinal change need to factor in both these concerns as they work to explain the phenomena. The simple story is the same as it has ever been. People, aside for a period between the ages of 18 and 26, are remarkably stable in their political outlooks, and even in that period of young adulthood marked more instability, people are still largely stable. The complex

story, however, is not as clean cut. People are more likely to shift their attitudes between the ages of 18 and 26, but people who are higher in openness to new experiences are even more likely to shift. Then, this higher likelihood of change for people higher in openness begins to decrease to the point where openness predicts attitudinal intransigence after the age of 26. This example is one of many which need to be accounted for as existed models of attitudinal stability are revised to account for these kinds of dispositional factors which influence the likelihood of change.

6.2 Patterns of Stability and Instability

In the second chapter, I used the Michigan Youth-Parent Socialization study to find out if there were discernable latent classes defined by patterns of stability over the lifespan. Across various political identities, issues, and feeling thermometers five latent classes emerged. People stayed liberal, conservative, or moderate or they moved in liberal or conservative directions. The MSS is a venerable public panel dataset, and to my knowledge, I was the first to apply this particular method with this dataset. Further, I am also the first (again to my knowledge) to examine patterns of political attitude stability in such a way with any dataset. The method I employ is an ideal way to examine and describe basic patterns of change across time, as it allows for the easy classification of these patterns and the people who display those patterns. The findings here allowed us for the first time to treat patterns of stability as an individual difference which can help to classify groups of people.

Patterns demarcated by attitudinal stasis defined the vast majority of latent classes, and this conclusion was the central finding of the second chapter. Beyond these predominant patterns of stability, there were also discernable latent classes defined by their patterns of attitudinal lability. Of these latent classes, the biggest tendency was

towards conservatism, but, again, a not insubstantial minority moved in a more liberal direction. Some attitudes, in a finding suggesting the domain specificity of attitudes matters for these kinds of questions, saw the reverse pattern, as more people moved in a liberal direction as opposed to a conservative direction. In particular, this pattern was found when I examined the attitudes towards women's role in society and feelings towards black people.

The effect of attitudinal domain specificity is one I did not pay much attention to in this dissertation, but it is something which should be examined further. Earlier I discussed how the literature surrounding the direction of attitudinal change is mixed with some arguing age makes people more conservative (Cornelis et al. 2009; Franssen, Dhont, and Van Hiel 2012; Kossowska, Jasko, and Bar-Tal 2012; Tilley and Evans 2014; Van Hiel and Brebels 2011; Wilson 1973) while others claim the opposite and argue age makes people more liberal (Dangelis, Hardy, and Cutler 2007; Glenn 1974; Schwadel and Garneau 2014). My findings are the first step in perhaps reconciling this disconnect in the literature, as it appears as though people become more conservative over time in regards to many issues but people also become more liberal over time in regards to others. Time and data availability constraints limited my ability to push this question further, but there certainly is some evidence to back it up.

These differing patterns of attitudinal stability are important for the overall understanding of attitudinal change throughout the lifespan, as they suggest a one-size-fits-all approach to these questions is inadequate. Further, it suggested there are perhaps factors beyond age which shape our overall likelihood to change attitudinally throughout our lives. I took on this last question in the next three chapters of the dissertation, as I

examined the heritability of stability patterns, the psychological correlates of stability patterns, and the sociological correlates of stability patterns. I found all three of these factors work to sway our patterns of attitudinal stability. Although it has been long known that forces of socialization can drive attitudinal change in one direction or another, relatively little work—I could find only one article (Bakker, Hopmann, and Persson 2015)—had been done exploring the biological and psychological roots of attitudinal stability.

The heritability of some facets of attitudinal stability suggests there may be a small genetic predisposition towards stability, and I argued this predisposition might be ingrained through forces of personality. A larger twin dataset would have let me test this proposition directly, but power issues precluded my ability to push forward with these analyses. Data issues aside, I was able to show the ways in which personality traits constrained patterns of attitudinal stability. Traits such as openness, conscientiousness, and social sensitivity all predicted the relative likelihood of a person being attitudinally labile. Again, relating these findings to the issue of context dependence and domain specificity, these personality traits did not influence the stability of all attitude types equally. These traits also interacted with age in ways that suggested some young adults are more impressionable than others during their impressionable years, but this impressionable nature gives way to inflexibility later in life.

This age by personality interaction was strongest for the trait of openness. This finding is particularly interesting given the current political climate. People high in openness tend to be politically liberal (Mondak 2010). A common refrain from the Right decries the rise of the so-called “Intolerant Left”. This complaint stems from the typical

left-wing calls for more tolerance vis-à-vis the rights of women, minority groups, and others who are societally oppressed, but when it comes to arguments against said tolerance, those on the left are perceived to be more intolerant of opposing viewpoints. These findings suggest there may be something to these popular perceptions. If openness does lead people to become entrenched in their political attitudes as they grow older, then it should follow that tolerance of opposing political views would subsequently increase. The existence of a main effect and the lack of an age by personality effect for conscientiousness suggests conservatives should be no better at tolerating opposing viewpoints.

Data availability again limited my ability to examine how personality interacts with forces of socialization as they work to shape attitudinal stability. I was still able to examine how life events work to influence patterns of stability over time. These findings in the preceding chapter pointed to how the effects of family, friends, and social status make people more or less stable in regards to their political attitudes. Of these, the numbers of sons and daughters a person had made them less stable in regards to the issues of minority assistance and the role of women in society. I tried to uncover the underlying source of this finding, but I imagine more work would need to be done to see how the number of children a person has shapes their worldview.

In the end, there was support for the four main theoretical expectations I set for this dissertation. The typical pattern of stability over the lifespan was stasis. I found some people were predisposed to patterns of stability while others were predisposed towards patterns of lability. The likelihood of attitudinal stability did change because of psychological predispositions, major life events, and as a byproduct of the aging process.

Finally, attitudinal change was predictable and display signs indicating its patterns were context dependent. Moving forward in this concluding chapter, I will discuss how these results can help us to understand the political world and where this line of research should head in the future.

6.3 Generational Implications

Attitudes are stable throughout the lifespan with some slight movement to be expected. How does this finding help us to understand the political world? For one, it tells us we need to pay close attention to the attitudes people hold in early adulthood, as these are the attitudes they can expect to hold for the rest of their lives. Currently, the last of the Millennials, the generation born to the Baby Boomers between the years of 1980 and 1994, are in this stage of development, as the youngest Millennials are currently 23-years-old. The political preferences of this generation have been marked by high levels of support for liberal political causes and with tolerance towards outgroups. For instance, Millennial Democrats were also the strongest supporters of Bernie Sanders' 2016 bid for the presidency.

Some looking at the support for Bernie Sanders among younger liberals might think this increased interest in politics rooted in democratic socialism might abate as these young liberals age. To be sure, there likely will be a moderation of some of these political desires, but the central tenets of Sanders' message such as a living wage and single-payer healthcare might not be readily abandoned by this generation. Attitudes which are generally favorably to government intervention in the economy and government absence from issues like LGBTQ+ Rights will likely continue in this generation. The outlook for more conservative Millennials is murkier. The ascendency of our unnaturally orange-colored president led nearly a quarter of Millennial Republicans

to abandon their political party.[14] This movement away from the Republican Party could potentially damage its prospects for future success if quick changes are not made to lure formerly Republican Millennials back to the party.

Millennials, while currently the generation *du jour* and the focus of thousands of online think-pieces, are slowly on the way out of interest. Coming up behind them is Generation Z, the generation born 1995 and after. Generation Z is just now starting to enter young adulthood, and their outlook on life differs from the older Millennials. Unlike Millennials, this new generation entering adulthood has never known a world without reliable, high-speed internet or a world prior to the 9/11 terrorist attacks. This generation is also more fiscally conservative than Millennials.[15] They are also more socially moderate than Millennials (Hope 2016). Much has been written about how younger voters are rejecting the divisive politics of our small-handed president, but these effects could be due to the fact that Millennials still comprise the bulk of young voters. This new generation, however, was actually more likely to support our current president over Hillary Clinton.[16]

Some have argued alt-right figures dominate the political landscape of YouTube, and the YouTuber who currently has the most subscribers is a nominally nonpolitical videogame and lifestyle blogger who nonetheless is openly embraced by the neo-Nazi community for his brand of anti-Semitic and misogynistic humor.[17] The members of

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[14] http://www.people-press.org/2017/05/17/partisan-identification-is-sticky-but-about-10-switched-parties-over-the-past-year/

[15]http://www.businessinsider.com/goldman-sachs-chart-of-the-generations-and-gen-z-2015-12?r=UK&IR=T

[16]http://hispanicheritage.org/50000-generation-z-high-school-students-identify-republican/

[17] https://www.vice.com/en_us/article/why-the-right-is-dominating-youtube

Generation Z have been raised on YouTube content (Hope 2016). The socialization brought on by YouTube may be leading this younger generation towards far-right politics or at the very least far-right tolerant politics. Whether this shift is due to the elite-level failures which led to economic disaster, or if there are genuine feelings of outgroup animosity among this generation, remains to be seen. Regardless, there seems to be a general understanding that younger generations will always be more liberal than older generations, but as I have shown in my analyses here and with current observations of Generation Z, this pattern does not always exist. In fact, there are historic examples of this fact. Adolf Hitler, for instance, found his most vocal and active electoral support from younger Germans who were voting for the first time (Evans 2005). By no means am I trying to say this new generation will help to bring on fascist rule in the United States, but it simply goes to show that the attitudes of this newer generation should be listened to, as these attitudes, if crystalized in the next decade or so, will shape Generation Z's outlooks for decades to come.

If, as some suggest, authoritarian attitudes among the left and right are on the rise, then this development is troubling. Authoritarian attitudes, which can be as seemingly benign as not valuing political compromise and as severe as advocating political violence, could be taking a foothold among the youth of America. The generations born after 1980 have always known an increasingly hyper-partisan political environment. The oldest of these generations can count the partisanship-drive Bill Clinton impeachment as one of their earliest political memories. Knowing nothing else but partisan rancor, it becomes difficult to find common cause with those on the opposite side of the political spectrum thus leading to further animosity. In light of recent events, such as the recent

incident involving a gunman attempting to murder Republican members of Congress while they practiced baseball, there is a growing perception that acts of political violence are on the rise. Some in the media have attributed these kinds of events to a growing feeling that traditional democratic processes are no longer effective due to partisan forces. If these events become more common or, Heaven forbid, more accepted, then it becomes difficult, given the findings I presented, for us to find ways to counteract these dangerous attitudes.

The nature of changing attitudes across the lifespan suggests the attitudes of Millennials and Generation Z are likely to remain similar throughout their lives. Yet, now is the time when we should see the attitudes of these groups being most labile. The Republican Party might fret because a quarter of millennial conservatives left the party, but there was also similar movement away from the Republican Party following Watergate during these impressionable years in the MSS data, but this movement was short-lived and support returned to the Republican Party. Furthermore, there will also be some in these generations who will continue to undergo attitudinal change well past young adulthood. Political operatives who would like to change the demographic fortunes of their parties should heed this knowledge. Identifying those who are most likely to change attitudinally, a process made relatively easy in our age of Big Data, can help target messaging to voters in more efficient ways.

6.4 Why a Conservative Shift?

Throughout this dissertation, my claim has been that attitudes are remarkably stable throughout the lifespan. Yet, when attitudes do change, there is a decidedly conservative shift even though there are significant numbers of people who change in a liberal direction. There are two possible explanations which would require more data to

answer. The first possibility is that the observed conservative shift is a product of the times. In the second chapter I found the strongest evidence for this conservative shift while using the MSS data, and I did not examine the question with the Australian data. The Reagan Revolution took place during the time period covered by the MSS. Reagan's presidency led to the demonization of the liberal label, and it is possible this specific event led to the observed conservative shift. If this possibility is the correct proposition, then there is nothing inherent to the aging process that would lead people to be more likely to shift in a conservative direction. Adding credence to this idea are the findings in Chapter 5. When I examined the personality correlates associated with the direction of attitudinal change, I did not find any factors positively associated with change in a conservative direction. In fact, these traits were more likely to predict change in a liberal direction.

There is a second possibility, however, as the conservative shift could be rooted in some kind of internal development process. Across both samples, which were separated by time, age, and country, men were more likely than women to display patterns of attitudinal lability, and this lability was marked by a conservative shift. It is possible the folk wisdom suggesting a conservatizing effect of age is truer for men than it is for women. This finding suggests the conservatizing effect of age is somewhat rooted in developmental differences between men and women. During the period of time these changes are most likely to occur, the brain is still in a period of development. This development leads people to become less likely to engage in risky or novelty seeking behaviors (Johnson, Blum, and Giedd 2009). As people become more routinized as a result of the developmental processes, it is possible they are led to a more conventional

and conservative lifestyle. However, it is also possible that these neurodevelopmental processes simply act as a force of attitudinal crystallization and lead people to stay as they were following a brief period of instability.

In all, much as the results pointed, I imagine the muted yet observed conservative shift over the lifespan is a product of biological and environmental factors. The process of attitudinal crystallization while certainly influenced by external forces is almost certainly the product of biological forces. This fact is evidenced by the high degree of attitudinal immutability after crystallization takes place. If attitudes were purely influenced by environmental factors, then they would likely be more susceptible to change. However, attitudes can still change as people grow older, and these changes are attributable to environmental influences which are typically major changes to one's life. I imagine both these forces work in concert to lead to the slight conservative shift. The events that lead to attitudinal shifts, such as becoming a parent, push people towards increased desires for security which in turn could lead people toward a more conservative outlook. The neurological changes, such as a decline of risky and/or novelty seeking behaviors, may also work in such a way. If this conservative shift holds across time and space, more work needs to be done to work out the mechanisms of this process.

6.5 Future Directions

Following the last section, the next steps in this research agenda are to work towards building a new understanding of attitudes throughout the lifespan. From here, I will first work to replicate some of the more interesting findings of this dissertation. The finding regarding the age by openness interaction is particularly interesting. The relative openness in young adulthood followed by immutable attitudes later in life is intriguing. More panel data from other countries would be ideal for furthering the examination of

this finding. I am especially curious to see how patterns of those higher in openness and lower in conscientiousness compare with those who are lower in openness and higher in conscientiousness. At a certain point, we would expect both to become very stable in regards to their political attitudes, but the comparison of relative stability strength between these two groups would be fascinating.

The stronger relationship between the Reading the Mind in the Eyes task and attitudinal stability is another finding deserving of more examination. In particular, I theorized the RME had this relationship on attitudinal stability because of its relationship with prosocial behaviors. This theory poses an empirical question that could be answered with a new round of data collection. I am proposing a panel study which tracks the RME, prosocial behaviors, and political attitudes. This design would allow me to see if the relationship between the RME and attitudinal stability replicates, and it would also allow me to see if the relationship between the RME and attitudinal stability is mediated by prosocial behaviors more broadly.

Although I was able to complete some heritability analyses, I was limited in my ability to run all of the analyses I was hoping to run. Specifically, my assumption of a shared genetic pathway between personality traits and patterns of attitudinal stability still needs to be tested with genetically relevant data. In order to run the analyses required for testing my assumption, a longitudinal twin dataset with both attitudinal data and personality data with at least 1,000 twin pairs would be needed. To my knowledge there is at least one dataset which fulfills these requirements, but alas I did not have access to this data during the dissertation writing process. Regardless, I was still able to show

robust linkages between personality and patterns of stability without this data. Shared genetic pathway, or not, these relationships exist.

Finally, in a more fantastical request, there is plenty of evidence here which shows the need for a new large-scale longitudinal dataset. This dataset would ideally cover at least three generations (related or unrelated) starting at various points in their lives. One generation should be preteenagers. Another generation should be 18-year-olds, and the other generation should be a group between 35 and 50 years of age. The data collected should cover the gamut of items discussed in here plus more. Deeper understandings of how personality and other psychological traits interact with the environment to shape political attitudes and general outlooks toward life will help to advance our knowledge of the human development process. The processes shaping our attitudes are more dynamic than our existing data allow for. Without a new dataset, similar to the one I described above, it is hard to see how our knowledge of these processes can move forward. There are a number of research questions and possibilities that can be derived from the findings I presented. Again, this dissertation is the first step in a long process of working to development a clearer understanding of attitudinal development which is more rooted in the cognitive sciences and social psychology.

6.6 Conclusion

In my dissertation, I laid the groundwork for helping us to understand the process of attitudinal development as a facet of biological, psychological, and sociological forces. There is ample support for the inclusion of biologically and psychologically informed variables throughout my analyses. These mechanisms are as important as age and sociological factors to our understanding of attitudinal stability throughout the lifespan. People do not readily abandon their attitudes, but some people are more stable than

others. The increase and decrease in attitudinal stability is predicted by numerous elements, and to ignore one set of elements in favor of another set, does a disservice to our understanding of the human condition. To further this understanding, social scientists from all disciplines should band together as a cross-disciplinary unit. Figuring out these phenomena can help political science understand political attitudes, but it can also help sociologists, psychologists, economists, and others answer questions pertinent to their field.

The full examination of these phenomena must be cross-disciplinary because it is clear the antecedents of these phenomena come from every direction. Microeconomic effects, of importance to economists, shape economic policies. Prosocial behaviors, of interest to social psychologists and clinical psychologists studying things like Autism Spectrum Disorder, make people less likely to shift their attitudes. Familial role acquisition, of interest to sociologists and family researchers, shapes social issue attitudes. In all, there is much to be gained by working together on a new large-scale endeavor to answer all of the questions I have laid out here and more.

Works Cited

Achen, Christopher H. 1992. "Social Psychology, Demographic Variables, and Linear Regression: Breaking the Iron Triangle in Voting Research." *Political Behavior* 14(3): 195-211.

Adams, Thomas G., Patrick A. Stewart, and John C. Blanchar. 2014. "Disgust and The Politics of Sex: Exposure to A Disgusting Odorant Increases Politically Conservative Views on Sex and Decreases Support for Gay Marriage." *PLOS One* 9(5): E95572.

Alford, John R., Carolyn L. Funk, and John R. Hibbing. 2005. "Are Political Orientations Genetically Transmitted?" *American Political Science Review* 99(02): 153-167.

Alwin, Duane F., Ronald L. Cohen, and Theodore M. Newcomb. 1991. *Political Attitudes Over the Lifespan*. Madison, WI: The University of Wisconsin Press.

Alwin, Duane F., and Jon A. Krosnick. 1991. "Aging, Cohorts, and the Stability of Sociopolitical Orientations Over the Life Span." *American Journal of Sociology* 97(1): 169.

Armenta, Brian E., George P. Knight, Gustavo Carlo, and Ryan P. Jacobson. 2011. "The Relation Between Ethnic Group Attachment and Prosocial Tendencies: The Mediating Role of Cultural Values." *European Journal of Social Psychology* 41(1): 107-115.

Bailey, Phoebe E., Julie D. Henry, and William Von Hippel. 2008. "Empathy and Social Functioning in Late Adulthood." *Aging and Mental Health* 12(4): 499-503.

Bakker, Bert N. 2016. "Personality Traits, Income, and Economic Ideology." *Political Psychology*.

Bakker, Bert N., David Nicolas Hopmann, and Mikael Persson. 2015. "Personality Traits and Party Identification Over Time." *European Journal of Political Research* 54(2): 197-215.

Balzer, Amanda, and Carly M. Jacobs. 2011. "Gender and Physiological Effects in Connecting Disgust to Political Preferences." *Social Science Quarterly* 92(5): 1297-1313.

Baron-Cohen, Simon, and Sally Wheelwright. 2004. "The Empathy Quotient: An Investigation of Adults with Asperger Syndrome or High Functioning Autism, and Normal Sex Differences." *Journal of Autism and Developmental Disorders* 34(2): 163-175.

Baron-Cohen, Simon, Sally Wheelwright, Jacqueline Hill, Yogini Raste, and Ian Plumb. 2001. "The "Reading the Mind in The Eyes" Test Revised Version: A Study with Normal Adults, and Adults with Asperger Syndrome or High-Functioning Autism." *Journal of Child Psychology and Psychiatry* 42(2): 241-251.

Benjamin, Daniel J., David Cesarini, Matthijs JHM Van Der Loos, Christopher T. Dawes, Philipp D. Koellinger, Patrik KE Magnusson, Christopher F. Chabris et al. 2012. "The Genetic Architecture of Economic and Political Preferences." *Proceedings of The National Academy of Sciences* 109(21): 8026-8031.

Brandt, Mark J., and Geoffrey A. Wetherell. 2012. "What Attitudes are Moral Attitudes? The Case of Attitude Heritability." *Social Psychological and Personality Science* 3(2): 172-179.

Brenner, Corinne J., and Yoel Inbar. 2015. "Disgust Sensitivity Predicts Political Ideology and Policy Attitudes in The Netherlands." *European Journal of Social Psychology* 45(1): 27-38.

Campbell, Angus, Philip E Converse, Warren E Miller, and Donald E Stokes. 1960. *The American Voter*. New York: J. Wiley & Sons.

Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." *Critical Review* 18(1-3): 1-74.

Cornelis, Ilse, Alain Van Hiel, Arne Roets, and Malgorzata Kossowska. 2009. "Age Differences in Conservatism: Evidence on The Mediating Effects of Personality and Cognitive Style." *Journal of Personality* 77(1): 51–88.

Danigelis, N. L., M. Hardy, and S. J. Cutler. 2007. "Population Aging, Intracohort Aging, and Sociopolitical Attitudes." *American Sociological Review* 72(5): 812–30.

De Bellis, Michael D., Matcheri S. Keshavan, Sue R. Beers, Julie Hall, Karin Frustaci, Azadeh Masalehdan, Jessica Noll, and Amy M. Boring. 2001. "Sex Differences in Brain Maturation during Childhood and Adolescence." *Cerebral cortex* 11(6): 552-557.

Deppe, Kristen Diane, Scott F. Stoltenberg, Kevin B. Smith, and John R. Hibbing. 2013. "Candidate Genes and Voter Turnout: Further Evidence on The Role Of 5-HTTLPR." *American Political Science Review* 107(2): 375-381.

Dinas, Elias. 2013. "Opening 'Openness to Change': Political Events and The Increased Sensitivity of Young Adults." *Political Research Quarterly* 66(4): 868–82.

Dodd, Michael D., Amanda Balzer, Carly M. Jacobs, Michael W. Gruszczynski, Kevin B. Smith, and John R. Hibbing. 2012. "The Political Left Rolls with The Good and The Political Right Confronts the Bad: Connecting Physiology and Cognition to

Preferences." *Philosophical Transactions of The Royal Society B: Biological Sciences* 367(1589): 640-649.

Erikson, Robert S., and Laura Stoker. 2011. "Caught in The Draft: The Effects of Vietnam Draft Lottery Status on Political Attitudes." *American Political Science Review* 105(2): 221-237.

Evans, Richard J. 2005. *The Coming of The Third Reich*. New York: Penguin.

Fiorina, Morris P. 1981. Retrospective Voting in American Elections. New Haven: Yale University Press.

Friesen, Amanda, and Aleksander Ksiazkiewicz. 2015. "Do Political Attitudes and Religiosity Share a Genetic Path?" *Political Behavior* 37(4): 791-818.

Fowler, James H., Laura A. Baker, and Christopher T. Dawes. 2008. "Genetic Variation in Political Participation." *American Political Science Review* 102(2): 233-248.

Fowler, James H., and Christopher T. Dawes. 2008. "Two Genes Predict Voter Turnout." *The Journal of Politics* 70(3): 579-594.

Fowler, James H., and Christopher T. Dawes. 2013. "In Defense of Genopolitics." *American Political Science Review* 107(2): 362-374.

Franklin, Charles H. 1984. "Issue Preferences, and the Evolution of Party Identification." *American Journal of Political Science* 28(3): 459–78.

Franklin, Charles H, and John E Jackson. 1983. "The Dynamics of Party Identification." *The American Political Science Review* 77(4): 957–73.

Franssen, Vicky, Kristof Dhont, and Alain Van Hiel. 2013. "Age-Related Differences in Ethnic Prejudice: Evidence of The Mediating Effect of Right-Wing Attitudes." *Journal of Community and Applied Social Psychology* 23(3): 252–57.

Funk, Carolyn L., Kevin B. Smith, John R. Alford, Matthew V. Hibbing, Nicholas R. Eaton, Robert F. Krueger, Lindon J. Eaves, and John R. Hibbing. 2013. "Genetic and Environmental Transmission of Political Orientations." *Political Psychology* 34(6): 805-819.

Gerber, Alan, and Donald P. Green. 1998. "Rational Learning and Partisan Attitudes." *American Journal of Political Science*: 794-818.

Gerber, Alan S., Gregory A. Huber, David Doherty, Conor M. Dowling, and Shang E. Ha. 2010. "Personality and Political Attitudes: Relationships Across Issue Domains and Political Contexts." *American Political Science Review* 104(1): 111-133.

Glenn, Norvall D. 1974. “Aging and Conservatism.” *The Annals of The American Academy of Political and Social Science* 415(1): 176–86.

Green, Donald, Bradley Palmquist, and Eric Schickler. 2002. "Partisan Hearts and Minds: Political Parties and the Social Identity of Voters." New Haven, CT: Yale University Press.

Hatemi, Peter K. 2013. "The Influence of Major Life Events on Economic Attitudes in A World of Gene-Environment Interplay." *American Journal of Political Science* 57(4): 987-1007.

Hatemi, Peter K., John R. Alford, John R. Hibbing, Nicholas G. Martin, and Lindon J. Eaves. 2009. "Is There A “Party” In Your Genes?" *Political Research Quarterly* 62(3): 584-600.

Hatemi, Peter K., Carolyn L. Funk, Sarah E. Medland, Hermine M. Maes, Judy L. Silberg, Nicholas G. Martin, and Lindon J. Eaves. 2009. "Genetic and Environmental Transmission of Political Attitudes Over a Life Time." *The Journal of Politics* 71 (3): 1141-1156.

Hatemi, Peter K., Nathan A. Gillespie, Lindon J. Eaves, Brion S. Maher, Bradley T. Webb, Andrew C. Heath, Sarah E. Medland et al. 2011. "A Genome-Wide Analysis of Liberal and Conservative Political Attitudes." *The Journal of Politics* 73(1): 271-285.

Hatemi, Peter K., Sarah E. Medland, and Lindon J. Eaves. 2009. "Do Genes Contribute to the “Gender Gap”?" *The Journal of Politics* 71(1): 262-276.

Hatemi, Peter K., Sarah E. Medland, Robert Klemmensen, Sven Oskarsson, Levente Littvay, Christopher T. Dawes, Brad Verhulst et al. 2014. "Genetic Influences on Political Ideologies: Twin Analyses Of 19 Measures of Political Ideologies from Five Democracies and Genome-Wide Findings from Three Populations." *Behavior Genetics* 44(3): 282-294.

Hatemi, Peter K., Sarah E. Medland, Katherine I. Morley, Andrew C. Heath, and Nicholas G. Martin. 2007. "The Genetics of Voting: An Australian Twin Study." *Behavior Genetics* 37(3): 435.

Hatemi, Peter K., Kevin Smith, John R. Alford, Nicholas G. Martin, and John R. Hibbing. 2015. "The Genetic and Environmental Foundations of Political, Psychological, Social, and Economic Behaviors: A Panel Study of Twins and Families." *Twin Research and Human Genetics* 18(3): 243-255.

Henson, Ravenna, Constance Jones, and Virginia SY Kwan. 2002. "Personality Change Over 40 Years of Adulthood: Hierarchical Linear Modeling Analyses of Two Longitudinal Samples." *Journal of Personality and Social Psychology* 83(3): 752.

Healy, Andrew, and Neil Malhotra. 2013. "Childhood Socialization and Political Attitudes: Evidence from A Natural Experiment." *The Journal of Politics* 75(4): 1023-1037.

Hibbing, John R., Kevin B. Smith, and John R. Alford. 2014. "Differences in Negativity Bias Underlie Variations in Political Ideology." *Behavioral and Brain Sciences* 37(3): 297-307.

Hope, Joan. 2016. "Get Your Campus Ready for Generation Z." *Student Affairs Today* 19(7): 1-7.

Jennings, M. Kent. 1996. "Political Knowledge Over Time and Across Generations." *Public Opinion Quarterly* 60(2): 228–52.

Jennings, M Kent, and Gregory B Markus. 1984. "Partisan Orientations Over the Long Haul: Results from The Three-Wave Political Socialization Panel Study." *American Political Science Review* 78(4): 1000–1018.

Jennings, M. Kent, Gregory B. Markus, Richard G. Niemi, and Laura Stoker. 2005. "Youth-Parent Socialization Panel Study, 1965–1997: Four Waves Combined. ICPSR04037-V1." *Ann Arbor, MI: Inter-University Consortium for Political and Social Research [Distributor]*:11-04.

Jennings, M. Kent, and Richard G. Niemi. 1981. *Generations and Politics: A Panel Study of Young Adults and Their Parents*. Princeton, NJ: Princeton University Press.

John, Oliver P., and Sanjay Srivastava. 1999. "The Big Five Trait Taxonomy: History, Measurement, and Theoretical Perspectives." *Handbook of Personality: Theory and Research* 2: 102-138.

Johnson, Sara B., Robert W. Blum, and Jay N. Giedd. 2009. "Adolescent Maturity and the Brain: The Promise and Pitfalls of Neuroscience Research in Adolescent Health Policy." *Journal of Adolescent Health* 45(3): 216-221.

Jost, John T., Jack Glaser, Arie W. Kruglanski, and Frank J. Sulloway. 2003. "Political Conservatism as Motivated Social Cognition." *Psychological Bulletin* 129(3): 339-375.

Klemmensen, Robert, Peter K. Hatemi, Sara B. Hobolt, Axel Skytthe, and Asbjørn S. Nørgaard. 2012. "Heritability in Political Interest and Efficacy Across Cultures: Denmark and the United States." *Twin Research and Human Genetics* 15(1): 15-20.

Kolassa, Iris-Tatjana, and Thomas Elbert. 2007. "Structural and Functional Neuroplasticity in Relation to Traumatic Stress." *Current Directions in Psychological Science* 16(6): 321-325.

Kossowska, Małgorzata, Katarzyna Jaśko, and Yoram Bar-Tal. 2012. "Need for Closure and Cognitive Structuring Among Younger and Older Adults." *Polish Psychological Bulletin* 43(1): 40–49.

Langton, Kenneth P. 1967. "Peer Group and School and The Political Socialization Process." *American Political Science Review* 61(3): 751-758.

Lewis, Sinclair. 2002. *Babbitt*. New York: Random House Digital, Inc.

Loewen, Peter John, and Christopher T. Dawes. 2012. "The Heritability of Duty and Voter Turnout." *Political Psychology* 33(3): 363-373.

Mannheim, Karl. 1952 [1970]. "The Problem of Generations." *Psychoanalytic Review* 57(3): 378.

Margalit, Yotam. 2013. "Explaining Social Policy Preferences: Evidence from The Great Recession." *American Political Science Review* 107(1): 80-103.

Markiewicz, Dorothy, Anna Beth Doyle, and Mara Brendgen. 2001. "The Quality of Adolescents' Friendships: Associations with Mothers' Interpersonal Relationships, Attachments to Parents and Friends, and Prosocial Behaviors." *Journal of Adolescence* 24(4): 429-445.

Markus, Gregory B. 1979. "The Political Environment and The Dynamics of Public Attitudes: A Panel Study." *American Journal of Political Science* 23(2): 338–59.

McAdams, Dan P., and Bradley D. Olson. 2010. "Personality Development: Continuity and Change Over the Life Course." *Annual Review of Psychology* 61: 517-542.

McCrae, Robert R., and Paul T. Costa. 1987. "Validation of The Five-Factor Model of Personality Across Instruments and Observers." *Journal of Personality and Social Psychology* 52(1): 81.

Mondak, Jeffery J. 2010. *Personality and The Foundations of Political Behavior*. Cambridge, UK: Cambridge University Press.

Muthén, Linda K. and Muthén, Bengt O. 1998-2017. *Mplus User's Guide Eighth Edition*. Los Angeles, CA: Muthén & Muthén.

Neale, Michael C., Michael D. Hunter, Joshua N. Pritikin, Mahsa Zahery, Timothy R. Brick, Robert M. Kirkpatrick, Ryne Estabrook, Timothy C. Bates, Hermine H. Maes, and Steven M. Boker. 2016. "Openmx 2.0: Extended Structural Equation and Statistical Modeling." *Psychometrika* 81(2): 535-549.

Newcomb, Theodore M. 1943. *Personality and Social Change: Attitude Formation in A Student Community*. New York: Dryden.

Newcomb, Theodore M., Katheryne Koenig, Richard Flacks, and Donald P. Warwick. 1967. *Persistence and Change: Bennington College and Its Students After Twenty-Five Years*. New York: John Wiliey & Sons.

Newton, Isaac. 1687. *Philosophiae Naturalis Principia Mathematica.* London: Jussu Societatis Regiae Ac Typis Josephi Streater.

Niemi, Richard G., and M. Kent Jennings. 1991. "Issues and Inheritance in The Formation of Party Identification." *American Journal of Political Science* 35(4): 970–88.

O'Reilly, Charles A., and Jennifer Chatman. 1986. "Organizational Commitment and Psychological Attachment: The Effects of Compliance, Identification, and Internalization on Prosocial Behavior." *Journal of Applied Psychology* 71(3): 492.

Oxley, Douglas R., Kevin B. Smith, John R. Alford, Matthew V. Hibbing, Jennifer L. Miller, Mario Scalora, Peter K. Hatemi, and John R. Hibbing. 2008. "Political Attitudes Vary with Physiological Traits." *Science* 321(5896): 1667-1670.

Pabayo, Roman, Ichiro Kawachi, and Peter Muennig. 2015. "Political Party Affiliation, Political Ideology and Mortality." *Journal of Epidemiology and Community Health*: Jech-2014.

Peterson, Johnathan C., Kevin B. Smith, and John R. Hibbing. 2016. "Physiology and Political Beliefs: A Response to Knoll, O'Daniel, and Cusato." *Research & Politics* 3(3): 2053168016662892.

Plomin, Robert, and Avshalom Caspi. 1990. "Behavioral Genetics and Personality." *Handbook of Personality: Theory and Research* 2: 251-276.

Pratto, Felicia, Jim Sidanius, Lisa M. Stallworth, and Bertram F. Malle. 1994. "Social Dominance Orientation: A Personality Variable Predicting Social and Political Attitudes." *Journal of Personality and Social Psychology* 67(4): 741.

Ram, Nilam, and Kevin J. Grimm. 2009. "Methods and Measures: Growth Mixture Modeling: A Method for Identifying Differences in Longitudinal Change Among Unobserved Groups." *International Journal of Behavioral Development* 33(6): 565-576.

Redlawsk, David P., Andrew JW Civettini, and Karen M. Emmerson. 2010. "The Affective Tipping Point: Do Motivated Reasoners Ever "Get It"?" *Political Psychology* 31(4): 563-593.

Roberts, Brent W., Kate E. Walton, and Wolfgang Viechtbauer. 2006. "Patterns of Mean-Level Change in Personality Traits Across the Life Course: A Meta-Analysis of Longitudinal Studies." *Psychological Bulletin* 132(1): 1.

Schwadel, Philip, and Christopher R. H. Garneau. 2014. "An Age-Period-Cohort Analysis of Political Tolerance in The United States." *The Sociological Quarterly* 55: 421–52.

Sears, David O., and Carolyn L. Funk. 1999. "Evidence of The Long-Term Persistence of Adults' Political Predispositions." *The Journal of Politics* 61(01): 1–28.

Sears, David O., and Nicholas A. Valentino. 1997. "Politics Matters: Political Events as Catalysts for Preadult Socialization." *American Political Science Review* 91(1): 45-65.

Settle, Jaime E., Christopher T. Dawes, Nicholas A. Christakis, and James H. Fowler. 2010. "Friendships Moderate an Association Between a Dopamine Gene Variant and Political Ideology." *The Journal of Politics* 72(4): 1189-1198.

Settle, Jaime E., Christopher T. Dawes, and James H. Fowler. 2009. "The Heritability of Partisan Attachment." *Political Research Quarterly* 62(3): 601-613.

Smith, Kevin B., Douglas Oxley, Matthew V. Hibbing, John R. Alford, and John R. Hibbing. 2011. "Disgust Sensitivity and The Neurophysiology of Left-Right Political Orientations." *PLOS One* 6(10): E25552.

Soroka, Stuart, and Stephen Mcadams. 2015. "News, Politics, and Negativity." *Political Communication* 32(1): 1-22.

Step Brothers. 2008. Dir. Adam McKay. Perf. Will Ferrell, John C. Reilly, and Richard Jenkins. Sony Pictures.

Subramanian, S.V., Tsuyoshi Hamano, Jessica M. Perkins, Akio Koyabu, & Yoshikazu Fujisawa. 2010. "Political Ideology and Health in Japan: A Disaggregated Analysis." *Journal of Epidemiology and Community Health* 64(9): 838–40.

Subramanian, S. V., Tim Huijts, and Jessica M. Perkins. 2009. "Association Between Political Ideology and Health in Europe." *European Journal of Public Health* 19(5): 455–57.

Tilley, James, and Geoffrey Evans. 2014. "Ageing and Generational Effects on Vote Choice: Combining Cross-Sectional and Panel Data to Estimate APC Effects." *Electoral Studies* 33: 19–27.

Van Hiel, Alain, and Lieven Brebels. 2011. "Conservatism Is Good for You: Cultural Conservatism Protects Self-Esteem in Older Adults." *Personality and Individual Differences* 50(1): 120-123.

Verhulst, Brad, Lindon J. Eaves, and Peter K. Hatemi. 2012. "Correlation Not Causation: The Relationship Between Personality Traits and Political Ideologies." *American Journal of Political Science* 56(1): 34-51.

Wilson, Glenn D. 1973. *The Psychology of Conservatism*. New York: Academic Press.

Wilson, Glenn D., and John R. Patterson. 1968. "A New Measure of Conservatism. *"British Journal of Social and Clinical Psychology* 7(4): 264-269.

Wood, Stacey, and Michael A. Kisley. 2006. "The Negativity Bias Is Eliminated in Older Adults: Age-Related Reduction in Event-Related Brain Potentials Associated with Evaluative Categorization." *Psychology and Aging* 21(4): 815

Endnotes

[i] Items included in the Total Wilson-Patterson Change scale are: Global Warming, X-Rated Movies, Medicare, Legalize Marijuana, Legalized Abortion, Subsidized Abortion, Gay Marriage, Nuclear Power Plants, Iraq War, Aboriginal Land Rights, Stem Cell Research, Premarital Cohabitation, Women in Combat, Unions, Reclaimed Water, Evolution, Euthanasia, Stricter Immigration, Education Spending, Aboriginal Intervention, Military Spending, Foreign Trained Doctors, and War in Afghanistan.
Items included in the Social Wilson-Patterson Change scale are: X-Rated Movies, Legalize Marijuana, Subsidized Abortion, Gay Marriage, Stem Cell Research, Premarital Cohabitation, Women in Combat, Evolution, and Euthanasia.
Items included in the Economic Wilson-Patterson Change scale are: Global Warming, Medicare, Nuclear Power Plants, Unions, Reclaimed Water, Education Spending, Military Spending.

[ii] Ten items were used to measure openness ($\alpha = .77$, $M = 27.38$, $SD = 4.89$): I see myself as someone who is original, comes up with new ideas; I see myself as someone who is curious about many different things; I see myself as someone who is ingenious, a deep thinker; I see myself as someone who has an active imagination; I see myself as someone who is inventive; I see myself as someone who values artistic, aesthetic experiences; I see myself as someone who prefers work that is routine (reverse-coded); I see myself as someone who likes to reflect and play with ideas; I see myself as someone who has few artistic interests (reverse-coded).
Nine items were used to measure conscientiousness: ($\alpha = .81$, $M = 32.81$, $SD = 4.32$): I see myself as someone who does a thorough job; I see myself as someone who can be somewhat careless (reverse-coded); I see myself as someone who is a reliable worker; I see myself as someone who tends to be disorganized; I see myself as someone who tends to be lazy (reverse-coded); I see myself as someone who perseveres until the task is finished; I see myself as someone who does things efficiently; I see myself as someone who makes plans and follows through with them; I see myself as someone who is easily distracted (reverse-coded).
Eight items were used to measure extraversion ($\alpha = .85$, $M = 26.78$, $SD = 4.42$): I see myself as someone who is talkative; I see myself as someone who is reserved (reverse-coded); I see myself as someone who is full of energy; I see myself as someone who generates a lot of enthusiasm; I see myself as someone who tends to be quiet (reverse-coded); I see myself as someone who has an assertive personality; I see myself as someone who is sometimes shy, inhibited (reverse-coded); I see myself as someone who is outgoing and sociable.
Nine items were used to measure agreeableness ($\alpha = .83$, $M = 23.95$, $SD = 4.61$): I see myself as someone who finds faults in others (reverse-coded); I see myself as someone who is helpful and unselfish with others; I see myself as someone who starts quarrels with others (reverse-coded); I see myself as someone who has a forgiving nature; I see myself as someone who is generally trusting; I see myself as someone who can be cold an aloof (reverse-coded); I see myself as someone who is considerate and kind to almost

everyone; I see myself as someone who is sometimes rude to others (reverse-coded); I see myself as someone who likes to cooperate with others.

Eight items were used to measure emotional stability (α = .78, *M* = 33.96, *SD* = 3.97): I see myself as someone who is depressed, blue (reverse-coded); I see myself as someone who is relaxed, handles stress well; I see myself as someone who can be tense (reverse-coded); I see myself as someone who worries a lot (reverse-coded); I see myself as someone who is emotionally stable, not easily upset; I see myself as someone who can be moody (reverse-coded); I see myself as someone who remains calm in tense situations; I see myself as someone who gets nervous easily.

[iii]

[iii] The eighteen EQ items (α = .80, *M* = 66.55, *SD* = 8.12): I can easily tell if someone else wants to enter a conversation; I find it hard to know what to do in a social situation (reverse coded); Friendships and relationships are just too difficult, so I tend not to bother with them (reverse coded); I often find it difficult to judge if something is rude or polite (reverse coded); In a conversation, I tend to focus on my own thoughts rather than on what my listener might be thinking (reverse coded); I can pick up quickly if someone says one thing but means another; It is hard for me to see why some things upset people so much(reverse coded); I find it easy to put myself in some else's shoes; I am good at predicting how someone else will feel; I am quick to spot when someone in a group is feeling awkward or uncomfortable; If I say something that someone else is offended by, I think that's their problem, not mine (reverse coded); I can't always see why someone should have felt offended by a remark (reverse coded); Seeing people cry doesn't really upset me (reverse coded); I don't tend to find social situations confusing; Other people tell me I am good at understanding how they are feeling and what they are thinking; If I see a stranger in a group, I think that it is up to them to make an effort to join in (reverse coded); I can tune into how someone else feels rapidly and intuitively; I don't consciously work out the rules of social situations.

Appendix

Key: MC=Move Conservative; ML=Move Liberal; SC=Stay Conservative; SL=Stay Liberal; SM = Stay Moderate

A1: Classification Probabilities for Most Likely Latent Class Membership (Row) by Latent Class (Column): Ideology

	SC	SL	MC	ML	SM
SC	**0.811**	0.000	0.165	0.000	0.024
SL	0.000	**0.819**	0.000	0.019	0.162
MC	0.173	0.000	**0.791**	0.000	0.036
ML	0.000	0.122	0.000	**0.716**	0.162
SM	0.096	0.074	0.068	0.013	**0.750**

Note: Highest classification probabilities highlighted.

A2: Classification Probabilities for Most Likely Latent Class Membership (Row) by Latent Class (Column): Party Identification

	ML	SC	SL	MC
ML	**0.740**	0.024	0.236	0.000
SC	0.002	**0.916**	0.017	0.066
SL	0.011	0.028	**0.959**	0.003
MC	0.000	0.119	0.008	**0.873**

Note: Highest classification probabilities highlighted.

A3: Classification Probabilities for Most Likely Latent Class Membership (Row) by Latent Class (Column): Guaranteed Jobs

	SC	ML
SC	**0.950**	0.050
ML	0.314	**0.686**

Note: Highest classification probabilities highlighted

A4: Classification Probabilities for Most Likely Latent Class Membership (Row) by Latent Class (Column): Marijuana Legalization

	MC	SL	SM	SC
MC	**0.643**	0.304	0.053	0.000
SL	0.064	**0.924**	0.012	0.000
SM	0.001	0.002	**0.996**	0.001
SC	0.000	0.000	0.016	**0.984**

Note: Highest classification probabilities highlighted

A5: Classification Probabilities for Most Likely Latent Class Membership (Row) by Latent Class (Column): Minority Assistance

	ML	SC	SC	SL
ML	**0.515**	0.340	0.000	0.144
SC	0.010	**0.869**	0.059	0.062
SL	0.000	0.363	**0.520**	0.117
MC	0.020	0.233	0.032	**0.715**

Note: Highest classification probabilities highlighted

A6: Classification Probabilities for Most Likely Latent Class Membership (Row) by Latent Class (Column): Rights of the Accused

	SL	MC	ML	SC
SL	**0.787**	0.169	0.043	0.001
MC	0.039	**0.871**	0.016	0.074
ML	0.106	0.219	**0.574**	0.101
SC	0.000	0.248	0.018	**0.734**

Note: Highest classification probabilities highlighted

A7: Classification Probabilities for Most Likely Latent Class Membership (Row) by Latent Class (Column): Women's Role in Society

	SM	ML	SL	MC
SM	**0.984**	0.000	0.003	0.014
ML	0.007	**0.652**	0.340	0.000
SL	0.001	0.024	**0.975**	0.000
MC	0.006	0.000	0.000	**0.994**

Note: Highest classification probabilities highlighted

Key: MI=Move Intolerant; MT=Move Tolerant; SI=Stay Intolerant; ST=Stay Tolerant; SA=Stay Ambivalent

A8: Classification Probabilities for Most Likely Latent Class Membership (Row) by Latent Class (Column): African-American Feeling Thermometer

	MI	MT	SA	ST	SI
MI	**0.939**	0.000	0.061	0.000	0.000
MT	0.000	**0.554**	0.265	0.175	0.005
SA	0.000	0.011	**0.958**	0.030	0.001
ST	0.000	0.044	0.135	**0.821**	0.000
SI	0.003	0.080	0.233	0.000	**0.684**

Note: Highest classification probabilities highlighted

A9: Classification Probabilities for Most Likely Latent Class Membership (Row) by Latent Class (Column): White-American Feeling Thermometer

	MI	ST	SA	MT
MI	**0.874**	0.083	0.043	0.000
ST	0.040	**0.927**	0.014	0.018
SA	0.031	0.020	**0.911**	0.038
MT	0.000	0.083	0.134	**0.783**

Note: Highest classification probabilities highlighted

A10: Classification Probabilities for Most Likely Latent Class Membership (Row) by Latent Class (Column): Labor Unions Feeling Thermometer

	SA	ST	SI	MI
SA	**0.896**	0.038	0.065	0.02
ST	0.265	**0.735**	0.000	0.000
SI	0.244	0.000	**0.734**	0.022
MI	0.111	0.000	0.300	**0.589**

Note: Highest classification probabilities highlighted

A11: Classification Probabilities for Most Likely Latent Class Membership (Row) by Latent Class (Column): Big Business Feeling Thermometer

	ST	SA
ST	**0.716**	0.284
SA	0.162	**0.838**

Note: Highest classification probabilities highlighted