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The Impact of Ideology and Attorneys On Precedent Usage: An Analysis of State High Courts

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THE IMPACT OF IDEOLOGY AND ATTORNEYS ON PRECEDENT USAGE: AN ANALYSIS OF STATE HIGH COURTS

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DEDICATION

I dedicate this dissertation to all of those who have helped me along the way.

Thank you very much for your help with this process!

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ABSTRACT

This dissertation focuses on an important question in the judicial politics literature: what types of influences encourage opinion-writers to cite and use precedents in particular patterns. I address this question by using a series of innovative frameworks from social psychology, specifically systematic information processing frameworks using a theory of motivated reasoning. This theory postulates that the interplay (and shifts) between *attitudinal accessibility* and *fear of invalidation/illegitimacy* will encourage judges to cite and/or treat precedents using behavior that is consistent with top-down or bottom-up forms of motivated reasoning. Specifically, when attitudinal accessibility is high and fear of invalidation is low, precedent citation and treatment patterns should be consistent with top-down forms of motivated reasoning. In contrast, cases that have low attitudinal accessibility and a high fear of invalidation, precedent citation and treatment patterns should be broadly consistent with bottom-up forms of motivated reasoning, with the other two cells occupying mixed (or intermediate) forms of motivated reasoning.

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CHAPTER ONE

INTRODUCTION: COURT OPINIONS AND THE CITATION AND TREATMENT OF PRECEDENT

In the United States, the main role of state judiciaries is to interpret statutory law from state legislatures and to rule whether state laws violate state constitutions and/or the U.S. Constitution. While not explicitly stated in the U.S. Constitution, as part of the job of being a judge in the United States, there are several elements to judging that are especially important (Posner 2008). The job of a judge includes both deciding a concrete dispute between litigants and creating precedent that defines and interprets the law relevant to the dispute at hand. The precedent created includes a description of what the legal rationale is, what the precedent means as public policy (e.g., its meaning in ideological terms), and a description of the new status quo point in the particular area of policy. These include both what the decision is (ideologically), as well as what the legal rationale is and what the new *status quo* point is on in area of policy. In particular, the role of the opinion, which defines this policy, in the judicial process is particularly important and understudied compared with our knowledge of the decisional outcome itself.

Court opinions are especially important for determining policy because they shape the depth and nature of the final policy; for instance, even though a case may be conservative in terms of the raw outcome, it may actually move elements of related

policy in a decidedly liberal direction through acceptance of precedent in a court opinion (*Ison v. State,* 800 So.2d 511 (Alabama Supreme Court, 1967)*).* In the case of *Ison v. State*, the Supreme Court of Alabama ruled in favor of conviction in this manslaughter case, determining that Ison was in fact guilty of manslaughter. However, the Alabama Supreme Court opinion ruled, for the first time, that *Miranda v. Arizona* (384 U.S. 436 (1966)) bound Alabama courts and that all future confessions would be subject to the requirements set forth in *Miranda*. As a part of this process, the Alabama Supreme Court chose to favorably treat *Miranda*, ruling that *Miranda* was explicitly good law and that all future criminal prosecutions in Alabama were subject to *Miranda*. Consequently, even though the Alabama Supreme Court reached a decision that was conservative to the individual petitioner, it opened the door for future petitioners to argue that they were not properly given their *Miranda* rights in the state of Alabama.

As some of the judicial literature discusses (Baum 1997, 2006; but see Segal and Spaeth 1994, 2002), judges (and especially, opinion-writers) may potentially have multiple goals that they need to reconcile in the process of engaging in judicial behavior. These goals affect multiple aspects of the judicial process, including potentially the judicial vote (in terms of petitioner versus respondent), as well as how opinion-writers will write particular aspects of the court opinion. Baum suggests that in order to fully understand judicial behavior in a maximally nuanced manner, one needs to account for the fact that judges may have competing interests as they engage in behavior. Unfortunately, much of the current theoretical work within judicial politics explicitly (or sometimes implicitly) assumes that judges primarily work to maximize policy outputs,

unless there is perhaps an overwhelming reason to not do so (Segal and Spaeth 1996; but see Brenner and Stier 1996; Brisbin 1996; Songer and Lindquist 1996.)

My dissertation focuses on understanding one aspect of this assumption more fully, notably by examining how state high court opinion-writers craft opinions with respect to attitudinal versus non-attitudinal goals and examining what the empirical implications of these differences might be. Because of the inherent difficulty in using preexisting theories in judicial politics to understand conditions of when state high court opinion-writers might act with respect to competing goals, I use motivated reasoning theory from social psychology to derive testable hypotheses that examine how (and when) attitudinal behavior structures patterns of precedent citation and treatment on state high courts. Using a variety

It is important to keep in mind a cautionary note, however: I am not implying that traditional models of judicial decision-making are wrong at explaining judicial behavior generally, but rather, that traditional theories of judicial decision-making and precedent citation and treatment fail to adequately theorize how judges may select among competing goals when writing opinions and what the empirical implications of these competing goals might be. This issue becomes particularly problematic when trying to theoretically explain what might cause the absence (or reduction) of attitudinal behavior on state high court precedent citation and treatment patterns.

For the dissertation, I rely on several theoretical frameworks from cognitive and social psychology, with a primary focus on systematic theories of information processing, such as motivated reasoning, as articulated by Kunda (1990) and Chaiken and Wood (1981). Systematic information processing is a general framework for one aspect of how

individuals synthesize new information. Systematic information processing assumes that individuals engage in detailed analyses of particular stimuli, such as party briefs, lower court opinions, or *amicus curiae* briefs. Regardless of the type of systematic information processing (either attitudinal-based or accuracy-based), psychological theories dictate that in this general framework, there will be a heavy level of cognitive thought that goes into analyzing informational sources. In contrast, the primary psychological framework in opposition to systematic information processing is heuristic cue processing. Heuristic cue theories argue that individuals are likely to rely on informational shortcuts when examining new sources of information rather than spending the time necessary to engage in highly systematic processes for obtaining information. Chaiken (1981, 1990) notes that heuristic cue processing is especially likely when the stakes for a decision are relatively low and/or it is highly difficult for individuals to obtain more detailed forms of information. One of the advantages of psychological frameworks of information processing is that these theories are extraordinarily generalizable to many contexts within political science and allow for integrated theories that examine other aspects of elite or mass political behavior with respect to informational-processing.

Given the previous discussion about the utility of psychological frameworks of information processing, I continue to address the "so what" question more generally with respect to precedent citation and treatment, as well as why it is important to understand opinion-writing processes on the judiciary. Specifically, in the next section, I make a claim for why precedent citation and treatment patterns are important to understand when examining attitudinal behavior in the judiciary.

1.1: The Role of the Judiciary in Making Policy

Judges have made policy in the United States since before the ratification of the U.S. Constitution. Even though there may not have been a formal sense of "judicial review" prior to *Marbury v. Madison* in 1803, other forms of judicial review still existed.[1] Prior to the ratification of the U.S. Constitution, judges in British colonies (since the 15th century) had the ability to engage in interpretation of statutes, which was, and still is, an important form of policy-making. In particular, the tradition of English common law was an important part of 18th century political/legal thought and there was a general assumption by the signers of the Declaration of Independence that a tradition of common law courts would continue even after formal secession from England.

The key point to take from this brief discussion is that immediately on independence, even before state legislatures passed a single statute, a system of common law existed in each state with respect to criminal law and tort law. As a consequence, even before state legislatures formally met to create statutory law and/or state constitutional law, judges in these states had the ability to create policy and law through the nature of "common law" itself. Specifically, the notion of binding and persuasive precedent that legal scholars frequently discuss existed well before the states within the United States declared their independence. I use a hypothetical example of 17th century common law to illustrate the preceding point.

[1] In particular, the self-declared power of "judicial review" focuses on the ability for the U.S. Supreme Court (and to some any degree, any Article III-based court) to declare a law unconstitutional. There was little dispute that the U.S. Supreme Court had the ability to interpret statutes and nullify conflicting statutes prior to *Marbury v. Madison*.

One example of this hypothetical would be a case where an individual may throw a firecracker onto a main road in a small town in Virginia. If the firecracker "went off" and startled a horse pulling a carriage, causing the carriage to overturn, the passengers in the carriage could potentially sue for negligence and collect economic damages to compensate the passengers for their injuries, even without the Virginia state legislature passing a statute. The passengers could hypothetically sue because a judge in a small town outside of London ruled that a reckless action that spooked a horse and caused passengers to be injured was a tort. A judge in Virginia could engage in policy-making if there was a unique fact to the case, such as a defective wheel spoke, which would allow the judge to rule whether the precedent from England applied in the instant case. Given this example, it seems plausible that judges could engage in policy-making even before the ratification of the U.S. Constitution or before state legislatures passed a single statute.

Opinions are additionally important because they are one aspect of how all courts, including state high courts, establish legitimacy. Political science literature on state high courts unequivocally shows that legitimacy is an important concern in their decision-making, both with respect to other state institutional actors such as state legislatures, but also the public (examples include Langer 2002; Savchak and Barghothi 2007; Stricko-Neubauer 2007). Considering that the electorate in many states chooses/retains state high court justices, individual justices may feel a need to increase their legitimacy by crafting opinions and making decisions that are in line with the public's desires (Caldarone Canes-Wrone and Clark 2009; Savchak and Barghothi 2007).

State high courts occupy a unique position in the hierarchy of courts in the United States, given that for state law, they are a "court of last resort", but with respect to

interpretation of federal law, are roughly equivalent to a lower federal court. This gives state high courts the unique ability to potentially use independent state grounds to avoid U.S. Supreme Court review, but if a state high court interprets federal law as part of an opinion, the U.S. Supreme Court has the ability to review a state high court opinion.[2] Compared with lower federal courts, most state high courts have several important differences that perhaps give the court greater ability to engage in top-down forms of motivated reasoning.

Unlike U.S. Circuit courts, many state high courts have the ability to select their own docket, which means they may choose to hear more difficult and contentious cases on average compared with the federal courts of appeals. Similarly, there are differences in whether these judges have life tenure; in most state courts, justices do not whereas for all Article III judges, judges have lifetime tenure, which theoretically insulates them from the will of the people.[3] Finally, states themselves have varying institutional structures, which may place additional restrictions, or may give them additional latitude, on state courts compared with federal appellate courts, which operate under a unitary federal

[2] In practice, this distinction may be more academic than practical. On the basis of *Michigan v. Long* (463 U.S. 1032), if a "clear" distinction between the state law and federal law does not exist, the U.S. Supreme Court need not accept the state high court claim of "independent state grounds." Given that it seems difficult in many issue areas for state high courts to distinctly separate these factors out, in effect, the U.S. Supreme Court has much ability to review these cases. In practice, they seldom do so however, with the U.S. Supreme Court accepting roughly 15 cases per year from state courts out of a total of approximately 5,000 cases per year, giving an average likelihood of review of a particular case at less than 1%.

[3] Article III judges are all judges who are appointed and confirmed as U.S. Supreme Court justices, federal Courts of Appeals judges, and federal District Court judges.

structure.[4] Because of these varying characteristics of state courts and their unique position in the hierarchy of the United States judiciaries, they make a particularly useful venue to study how attitudinal behavior may shape judicial opinions, particularly with respect to the usage and treatment of precedent, as they have several characteristics that are similar to the U.S. Supreme Court, while also exhibiting variation among states in terms of the types of cases that they accept and hear.

Scope of the Dissertation

For the dissertation, I examine precedent citation and treatment patterns for six states from the years 2000-2005.[5] I focus on private torts cases for the scope of my dissertation, as they are generally among the largest areas of state high court dockets, only behind criminal cases in terms of the number of private torts cases on these dockets. Furthermore, private torts cases may be salient to both political elites and to the public, as people generally have reasonably well-formed views about the role that the judiciary should have in certain types of cases, especially medical malpractice. Finally, private torts cases may allow for a strong test of my theory, as they encompass cases that are both salient and non-salient, as well as likely having a reasonable quantity of cases that where the law as clear and also having cases where the law is not necessarily clear

[4] It is also conceivable that these institutional structures may give state courts additional latitude.

[5] The six states are Florida, Kentucky, Montana, North Carolina, North Dakota, and Wisconsin. I choose these states for analysis and study because of the public availability of briefs on the Internet for these states. For future work, I intend to expand the scope of the data with new data on approximately 20 states since 2008 that now have state high court litigant briefs online.

1.2: Plan of the Dissertation

Chapter Two begins with an articulation of several psychological approaches to decision-making, including motivated reasoning theory, heuristic cue theory, and the heuristic-systematic theory of information-processing. Ultimately, while my theory focuses on motivated reasoning, to fully understand motivated reasoning, it is also helpful to be familiar with competing theories from the social psychology literature. By outlining these approaches, it will be easier to understand the theoretical contribution of my dissertation the literature at large.

Chapter Three introduces my theoretical model and how I use the motivated reasoning framework to derive testable hypotheses for later chapters. I describe how the various types of motivated reasoning frameworks are relevant. After explaining how I attempt to address each of these points, I discuss several concepts that allow me to create testable hypotheses, which I then describe at the end of Chapter Three.

Chapter Four presents my first test of portions of the theory. In this chapter, I analyze how implications of the motivated reasoning theory modify precedent citation patterns by state high courts. I utilize several types of statistical analysis to gain maximal leverage with respect to this research question in an effort to determine what causes state high court majority opinions to cite particular precedents in the opinion itself.

Chapter Five focuses on the treatment of precedent rather than merely the citation of precedent. In this chapter, I examine what causes a state high court majority opinion to treat a precedent in a particular fashion (positively, negatively, or neutrally). Similarly to the last analysis, I use several statistical models on an analysis of six state high courts to

gain maximal leverage. Finally, I discuss these results, both in terms of how they fit in my theoretical approach, as well as where the results fit with respect to previous research on state judiciaries.

Chapter Six focuses on other conceptualizations with respect to patterns of precedent citation and treatment. Given that Chapters Four and Five find ambiguous results with respect to both top-down and bottom-up forms of motivated reasoning, I argue that it is perhaps useful to examine other theories and other conceptualizations of precedent citation and treatment. In this chapter, I pool the data and examine influences of precedent citation and treatment patterns using other theories and discuss the data in terms of descriptive findings and explore other ways of advancing theory about motivated reasoning.

Chapter Seven is the concluding chapter. It contains a summary of the results, the findings, and places the results and theory within the literature at large. Finally, I explain how I intend to expand on the dissertation in the future and where others can address some of the concerns and further questions that are outside of the scope of my dissertation

CHAPTER 2:

MOTIVATED REASONING: WHAT IS IT? HOW DOES IT INFORM PRECEDENT CITATION AND TREATMENT?

"*To avoid an arbitrary discretion in the courts, it is indispensable that they should bound down by strict rules and precedents which serve to define and point out their duty in every particular case that comes before them."*

-The Federalist No. 78, at 141 (Hamilton)

The quotation above by Alexander Hamilton illustrates one prevailing normative view of judiciaries: simply put, this view of judiciaries is one where precedent binds judges and forces judges to act in a predictable manner, regardless of their personal beliefs. While this normative view of how judges should operate is widespread in society, evidence by political scientists suggests that judges (at least on the U.S. Supreme Court) do not generally follow precedent in this mechanistic manner (e.g., Hansford and Spriggs 2006; Segal and Spaeth 1996; Spriggs and Hansford 2000, 2002). Rather, evidence suggests that judges may manipulate precedent as a way to reach particular policy goals, based on evidence with respect to judicial decision-making, as well as evidence on precedent citation and treatment patterns. This chapter lays out an alternative approach for understanding why we see particular patterns and for explaining how court opinion-writers may manipulate precedent.

Previous research on judicial decision-making and precedent usage generally uses one of several modeling frameworks. These paradigms include the attitudinal model

(Segal and Spaeth 1994, 2002), legal model, and strategic approach (e.g., Epstein and Knight 1998). These models show several important findings and elucidate various conditions where judges may vote in particular ways. Specifically, in the case of state high courts, the literature shows that, at least for the most salient issues, judges tend to vote moderately attitudinally, but also perhaps in a strategic manner under particular circumstances, when it might be especially important for judges to hide their ideological predispositions (Brace and Hall 1995; Brace, Langer, and Hall 2000; Hall 1987; Hall and Brace 1992, 1997). In contrast, for state high courts, fewer tests of the legal model exist, partially due to differences in case law among various states that make it difficult to directly compare how multiple states interpret the law. Just as importantly, each of the preceding modeling frameworks has several implicit assumptions that if taken to their extremes, do not match up with how judges describe the judicial process. Motivated reasoning theories help to address this concern by creating direct theoretical links between how individuals think and under what conditions individuals will likely engage in attitudinal-based reasoning versus accuracy-based reasoning, as well as theoretical links for when individuals should engage in systematic forms of information-processing versus relying on heuristic cues.

The primary theoretical contribution of my dissertation is to explore the contributions of psychological theories about how individuals make decisions, with a specific focus on the theory of motivated reasoning and heuristic cue theories. From these theories, I then use several psychological frameworks to further explore how state high court opinion-writers choose to cite and treat precedents from a choice set of precedents, namely, precedents that are included in the briefs of the direct parties for a particular

case. I primarily rely on the cognitive psychology theory of motivated reasoning to generate theoretical hypotheses of interest and to explain how attitudinal behavior with respect to precedent citation and treatment is conditional on other hypothesized variables of interest, such as issue salience and the "easiness" of a case (see Bartels 2010; Fazio 1990; Kunda 1990; Schuette and Fazio 1995). Particularly, one of the deficiencies of existing theory is the lack of a comprehensive theoretical account that can explain under what conditions individuals are likely to engage in attitudinal behavior from the bench. I believe that cognitive theories of judicial decision-making can help resolve this theoretical issue, as well as the related questions that I address: do state high court justices engage in attitudinal behavior with respect to precedent citation and treatment pattern and under what conditions do attitudinal influences have a major impact (and by extension, do not). Because the literature is not well known among political scientists, in an effort to be comprehensive with respect to my theory, I include a literature review that explains the types of questions motivated reasoning (and other theories from cognitive psychology) that can be used to add additional nuance for our theories about political behavior and the role of institutions in shaping that behavior.

The map for the remainder of this chapter is as follows. I begin with a discussion of the psychological literature about motivated reasoning as well as its primary competitor, heuristic cue theory, with a particular focus on the informational assumptions of each family of theories and how political scientists have used each of these theories, both in the study of the judiciary and in other contexts. I then continue to discuss how other researchers examine the question of precedent citation and treatment patterns and

argue that motivated reasoning is an appropriate theoretical tool to understand how attitudinal propensities may affect patterns of precedent citation and treatment.

2.1: What is Motivated Reasoning?

Motivated reasoning theory is an individual-level theoretical paradigm that social psychology uses as a framework to understand the "why" and "how" of individual behavior, rather than simply observing what individuals do. Motivated reasoning, in its purest form, is a type of confirmation bias where individuals follow "false" beliefs despite strong empirical evidence against an individual's beliefs (Kunda 1990). This form of reasoning attempts to explain how individuals search for information from a psychological approach. Rather than searching for unbiased sources of information, individuals who engage in motivated reasoning (specifically "top-down" forms of motivated reasoning) may search primarily for information that confirms their existing beliefs or may reduce the weight of evidence that opposes their viewpoint. Even though individuals may believe that they are engaging in unbiased behavior, in fact, in their minds, they ignore evidence that goes against their ideological beliefs, and therefore they can be said to be engaging in *top-down motivated reasoning*.

Cognitive psychologists originally used this theory to explain why individuals might believe that their actions did not show bias, but were in fact engaging in biased behavior. Kunda (1990) creates a theoretical refinement to the motivated reasoning literature by introducing the concept of "top-down" and "bottom-up" forms of motivated reasoning, which is fundamental for my theory, as it defines when individuals (such as opinion-writers) are likely to engage in biased behavior. In her theory of accuracy-driven

(or "bottom-up") form of motivated reasoning, for an individual to engage in accuracy-driven motivated reasoning, she must be capable of engaging in this type of reasoning, she must regard an accuracy-driven form of motivated reasoning as superior to heuristic cues or an ideologically-driven form of motivated reasoning, and she must be capable of using it at will (1990). While earlier works focused primarily on how motivated reasoning biases an individual's ability to examine information, Kunda introduces a significant modification to this paradigm by noting the theoretical concept of an accuracy-based or "bottom-up" form of motivated reasoning. In Kunda's account of motivated reasoning, it is entirely plausible (and in fact expected!) that individuals who are engaging in top-down motivated reasoning may truly believe that they are being objective and may not believe that their attitudinal predispositions affect their views in any way (Kunda 1990; Pyszczynski and Greenberg, 1987). Still more recent evidence suggests that top-down motivated reasoning can be quite insidious, with motivated reasoning processes not necessarily dictating an outcome, but rather shaping "the rules of the game" (see Pronin 2008). Consequently, in terms of motivation, motivated reasoning theoretical assumptions and implications are potentially quite different from that of rational choice models, which assume that judges actively work to create policy (and does not theorize about conscious or unconscious behaviors as having any particular bearing on causality).

Rather, what motivated reasoning theorizes is that individuals, such as opinion-writers on appellate courts, have two competing sets of goals: one set of goals based on having accurate knowledge about some type of complex process, compared with another set of goals that is more ideological in nature (Kunda 1990; Taber and Lodge 2006;

Taber, Lodge, and Glathar 2001). What primarily drives the motivated reasoning framework is to what extent the accuracy/attitudinal goal overrides the other goal (either attitudinal or accuracy-based goals). Fazio's seminal account (1990) of motivated reasoning theory discusses several bases for determining under what conditions individuals will likely engage in reasoning that presupposes accuracy-based goals or attitudinal-based goals.[6]

According to Fazio's theory (1990), if an individual is aware of her own attitudinal biases and she has an overriding reason to try and reduce the amount of bias in how he reads information, she can engage in mixed forms of motivated reasoning. Mixed forms of motivated reasoning should occupy an intermediate level of motivated reasoning, where attitudinal patterns of behavior are discernible, but where attitudinal behavior has a relatively weak influence on how one processes information and uses that information in decisional contexts. Nevertheless, in mixed motivated reasoning processes, evidence of attitudinal behavior should still be visible to some degree.

One of the fundamental differences between pure top-down motivated reasoning and mixed motivated reasoning is the awareness that one has of her own attitudinal biases and/or the inclination for that individual to suppress her own attitudinal behavior. Hence, motivated reasoning theory implies that, at least in some circumstances, attitudinal biases

[6] From this point on in the text, I refer to attitudinal-based goals as *top down motivated reasoning* and I refer to the engagement of accuracy-based goals as *bottom-up motivated reasoning*. These theoretical frameworks are not replacements or substitutes for the more conventional attitudinal and legal models, but rather these theories help to derive additional implications about the influence of attitudinal and non-attitudinal influences on precedent citation and treatment patterns.

may be quite subtle and may not presume that an individual is consciously thinking about creating policies *per se*. One of the key elements of the motivated reasoning paradigm is that when "top-down" motivated reasoning occurs, it is not necessarily a conscious decision, which is a different assumption from the attitudinal model, which assumes indifference about whether attitudes are conscious or not (Segal and Spaeth 2002). Consequently, it might be possible for political actors to engage in motivated reasoning processes (including top-down motivated reasoning) without the intent to do so. The attitudinal model (Rohde and Spaeth 1976; Segal and Spaeth 1993, 2002) does not specify any psychological reason for why individuals use ideological influences and is indifferent to this approach, although the rational actor approach that underlines the attitudinal model assumes that policy goals are conscious (i.e., that an actor is intentional in attempting to reach a policy goal). In contrast, the motivated reasoning framework makes no assumption of intention and allows for the idea that any attitudinal biases may indeed be unintentional, which fits in more adequately given our understanding of qualitative interviews with judges. Consequently, the motivated reasoning framework allows for the possibility that the regularities of voting behavior we find that are consistent with attitudinal theories might be occurring without intent on the part of the judges.

2.2: Top-Down versus Bottom-Up Forms of Motivated Reasoning

> In top-down reasoning, the judge or other legal analyst invents or adopts a theory about an area of law-perhaps about all law-and uses it to organized, criticize, accept or reject, explain or explain away, distinguish or amplify the original decisions to make them conform to the theory…In bottom-up reasoning, which encompasses such familiar lawyers' techniques as "plain meaning" and "reasoning by analogy," one starts with the words of a statute or other enactment…and moves from there-but doesn't move

far…The top-downer and the bottom-upper do not meet.-Richard A. Posner (1992)

This quotation from Richard Posner shows one conceptual difference between top-down and bottom-up forms of reasoning generally. In Posner's account (1992), top down motivated reasoning uses a preexisting theory to place new information within the context of that existing theory. This parallels top-down motivated reasoning theory, where individuals view particular stimuli according to an ideological lens. In contrast, bottom-up motivated reasoning involves looking at legal reasoning very carefully and using legal reasoning to guide one towards a legal decision or helps one to determine whether to cite and how to treat a precedent.

As previously mentioned, Kunda's main theoretical advance (1990) with respect to motivated reasoning is the conceptualization of top-down versus bottom-up forms of motivated reasoning. Compared with previous works that assume that motivated reasoning is essentially equivalent to attitudinal behavior in the rational choice context, she writes that individuals also engage in motivated reasoning when they are motivated to be accurate and do not have any strong ideological biases that might condition their responses to stimuli. Kunda refers to this form of motivated reasoning as *bottom-up motivated reasoning*. In bottom-up motivated reasoning, individuals carefully consider informational sources in a way where there is minimal ideological bias and where individuals weigh information based purely on the facts that vary according to a series of stimuli (in fact, one can think of an extreme case of bottom-up motivated reasoning as

similar to early versions of the legal model, which assume that precedents acts mechanistically).

In contrast, top-down motivated reasoning should occur when individuals have a vested interest in the policy outcome of a particular case and intend to use that case as a vehicle to create larger policy. In terms of the operating causal mechanisms, in *top-down motivated reasoning*, individuals already reach a predetermined outcome and/or examine evidence in a manner that corresponds with their ideological beliefs. For instance, if a judge examines *amicus curiae* briefs in a way that suggests weighing of evidence that is different from briefs that are ideologically congruent with a judge's ideological predisposition compared with briefs that are not ideologically congruent, that judge is operating in *top-down motivated reasoning* (Collins and Martinek 2011).

The idea of top-down versus bottom-up forms of motivated reasoning are a major part of my theoretical framework, with respect to the concepts of motivation and opportunity (see Fazio 1990; Fazio and Towles-Schwen 1999). In particular, Fazio's MODE framework theorizes that the combination of motivation and opportunity should serve as primary determinants of what form of motivated reasoning dominates: top-down, bottom-up, or mixed. The MODE framework is critical for understanding how motivated reasoning applies to the judiciary because it posits two conditions that are required for ideologically-based behavior (Fazio 1990). If judges do not have the motivation to behave attitudinally and if judges do not have the opportunity to behave attitudinally, they should engage in behavior that is consistent with a bottom-up motivated reasoning framework. In contrast, if judges do have a reason to behave attitudinally and believe that they have the opportunity to do so, according to Fazio's MODE framework, the

possibility is strong for the presence of top-down motivated reasoning I borrow heavily from Fazio's psychological MODE framework and elaborate on this framework to derive implications for how and why state high court opinions cite precedents and whether state high court precedent treatments are consistent with a top-down motivated reasoning framework.

Bartels (2010) extends this research by noting that if motivation is low and opportunity, mediated through attitudinal views, is high, we should see evidence of top-down judicial behavior by justices. In contrast, if motivation to think in an "unbiased" manner is high and one's attitudinal views on an issue are limited, we should see evidence of bottom-up judicial behavior, or a successful attenuation of attitudes. According to Bartels (2010), one should also expect to see that, when justices engage in bottom-up forms of motivated reasoning, those justices should yield to strong arguments, even if they countervail an individual's ideology (Kunda 1990; Petty and Cacioppo 1986). This empirical finding is important for my theory because it helps to establish that if the opinion-writer (and the majority of a court) utilizes bottom-up motivated reasoning, one should see evidence of greater influence by legal-related variables.

Of particular import for judicial decision-making is a study by Schuette and Fazio (1995), which finds that individuals mostly engage in a mixed, intermediate-level processes rather than simply top-down or bottom-up forms of motivated reasoning. In fact, a large portion of my theory predicts that a mixed, intermediate level process exists under a large array of conditions, at least with respect to precedent treatment. Furthermore, with manipulations of levels of attitude accessibility and motivation, the research finds that individuals can strongly suppress their ideological dispositions if they

perceive a need to do so. The implication of this study is that if judges need to think in a bottom-up form of motivated reasoning, they should be able to do so. This finding is also consistent with the idea that judges are more likely to engage in top-down motivated reasoning in politically salient cases, based on levels of motivation and accessibility.

In the political science literature, several important examples of the application motivated reasoning theory exist. Most of the literature relates to individual behavior, with respect to public opinion or understanding why individuals have particular beliefs regarding public policies, although other works contribute to judicial decision-making using the motivated reasoning theoretical framework. Looking at the public opinion literature, I discuss multiple works that are relevant to my dissertation. First is a work by Nelson and Garst (2005) that focuses on the issue of how persuasive value-based political messages are. They find that individuals are most likely to pay attention to persuasive messages if the values of the message are comparable to the values of the individual who hears the message. As a counterbalance, even if the values are similar between the message and the recipient, if the message source is from an opposing political party, individuals are less likely to be persuaded by a message, even after controlling for ideological distance. The joint effect of these two is also considerably stronger than either of these covariates in isolation. Even though this work is quite important, other articles in political science also utilize this motivated reasoning framework.

A second example of this type of research is a paper by Taber, Cann, and Kucsova (2009), which examines how disconfirmation bias may mediate the usage of motivated reasoning versus heuristic cues. For their study, they examine eight issue areas of various levels of salience and modify the presentational format of the policy

arguments. They find that individuals cannot ignore their previous beliefs when examining new arguments. They also find that argument type does not matter with respect to different styles of persuasion. However, political sophistication and a reduced strength of prior attitude moderate the level of disconfirmation bias.

Finally, research does exist that shows that motivated reasoning can affect aggregate political behavior, at least within the subfield of public opinion. Lebo and Cassino (2007) find that motivated reasoning aggregated to the partisan group level does impact how the partisan groups approve of presidents from the opposite party. In other words, motivated reasoning among partisan groups does occur with respect to how these partisan groups view presidents from the opposing party and does shape aggregate political behavior.

The law and courts literature also has several examples of works that rely on motivated reasoning, which helps to inform my theoretical perspective (Braman 2006; Braman and Nelson 2007). The findings are interesting and perhaps in line with what one might expect; for threshold issues (that are low-salience), it is possible for individuals to remove influences of ideology from legal decision-making[7]. However, for salient issues, such as abortion and free speech, individuals are unable to completely remove ideological influences from their decision-making (Braman 2006).

Additional work using the motivated reasoning work examines the question of *analogical reasoning*. Analogical reasoning is a process that judges use to determine

[7] A threshold issue specifically relates to requirements for a petitioner to have standing, as well as whether a case is sufficiently ripe for legal review or whether a case is rendered moot for legal review.

precedents that apply to an instant case and is critical for understanding how judges may cite and treat precedent in the larger context of a court opinion. While direct research on analogical reasoning is quite difficult to conduct (due to the need to engage in potentially unrealistic experiments), experimental research has uncovered several useful insights. In particular, Braman and Nelson (2007) find that individuals have ideological biases when engaging in analogical reasoning. Also important to note from their experiment is that this ideological bias primarily occurs with cases that are moderately similar to a case that the individuals examine in an experiment. When cases are extremely similar to or different from one another, individuals generally reach the same conclusion about the relatedness of a precedent regardless of that individual's personal ideology. These findings suggest that judicial discretion for interpreting precedents is greatest with precedents that are moderately similar to a particular instant case.

Both top-down and bottom-up forms of motivated reasoning seem potentially descriptive for theoretically understanding my research question of interest: how do state high courts decide what precedents to cite and rely on in state high court opinions? As I briefly described in the previous section, the process of writing a state high court opinion is a lengthy one, with many steps in the process of creating an opinion. Although motivated reasoning theory perhaps seems to be a strong fit for understanding precedent citation and treatment patterns, it is also important to discuss competing theories, such as heuristic cue theory, which may have a major influence on the citation of precedent, if not the treatment of precedent.

2.3: Heuristic Cue Theory

A second possible framework for describing precedent citation and treatment also comes from the cognitive psychology literature, in particular, heuristic cue theory. This literature defines a heuristic as a simple rule that individuals use, based on life's experiences, as a substitute for a more complex evaluation of information. Examples of heuristic cues include individual voters gaining information about a candidate from an "attack ad." Still other potential examples from the judiciary might be when a merit brief discusses a technical precedent or uses the fact that both the petitioner and respondent's briefs both mention a precedent as a cue that the precedent is quite important. While heuristics generally work well, according to the psychology literature, because they are shortcuts to more complex processes, the shortcuts cause individuals to make mistakes at times based on both a random stochastic element as well as the possibility of more systematic forms of error, creating non-random error in an individual's decisions. The key feature of heuristic cues, however, is that they are quite simple and do not require individuals to use much time processing or interpreting these cues.

The key element of heuristic cue theory that is relevant for this theoretical discussion is the informational-gathering element. In particular, heuristic theories assume that an individual has little inclination to obtain detailed information and, consequently, relies on an informational shortcut to obtain a rough proxy of the information a detailed analysis would provide. Many examples of heuristic cue theory exist in the political science literature, especially in public opinion, although other examples occur in legal decision-making as well (e.g., Collins and Martinek 2011; Dhami 2003; Englich Mussweiler and Strack 2005; Kang 2002; Lupia 1994; Mondak 1993). Each of these

works utilizes heuristic cue theory in a different, yet complimentary, way. Collins and Martinek (2011) find that conservative judges on the U.S. Courts of Appeals show evidence of heuristic cue decision-making based on the number of *amicus curiae* briefs that a liberal or conservative party files, although liberal judges do not demonstrate a similar pattern. The Dhami (2003) and Englich, Mussweiler, and Strack (2005) articles both find that judges tend to rely on particular cues when determining sentences for criminals, with a particular reliance on whatever punishment the prosecution recommends as the baseline and negotiating downward from that point, with a very small amount of influence from defense attorneys. More directly relevant for my examination, other research finds similar results with respect to tort cases, with a particular focus on product liability cases and personal injury cases.

Still other types of research exist with respect to heuristic cues within the political science literature. Lupia (1994) focuses on the issue of encyclopedic (i.e., having detailed knowledge about specific policies) versus heuristic knowledge and finds that voters who rely on heuristic cues are nearly as informed as those who have encyclopedic information.[8]

In the political science literature, findings are mixed at best with respect to the utility and reasonableness of heuristic cue theory. While heuristic cue theory seems to work well for understanding individual behavior among the mass public and among floor

[8] There is a significant caveat to this finding. This result can only occur under very specific types of conditions, such as the cue type and the issue area (this analysis focuses on five insurance reform ballot initiatives).

votes in Congress, it does not seem to work effectively at committee or subcommittee-level voting behavior. This finding is so because there is less opportunity cost for members of a committee to obtain detailed information about potential statutes compared with floor members, who are already serving on several other committees and who have less of an interest in a particular policy area (such as agriculture). The members of Congress (MC's) who are not serving on a particular committee have severe substantive and political disadvantages compared to MC's who are serving on a committee and have more (and potentially better) sources of information, as well as more time to devote to a particular issue appearing before the committee (Clausen 1973; Workman, Jones, and Jochim, 2009). The literature shows that heuristics are particularly common for individuals who have little knowledge and/or little personal interest in a particular policy/election (Matthews and Stimson 1970, 1975; Stimson 1975; Sullivan et al. 1993).

Similarly, the judicial literature shows mixed findings as to the applicability of heuristic cue theory with respect to judicial behavior. One use of heuristic cue theory in the judicial literature is the literature's understanding of the U.S. Supreme Court *certiorari* process. Tanenhaus et al. (1963) proposed that U.S. Supreme Court justices rely on heuristic cues for deciding which cases to accept for *certiorari.*, They posited several cues, with lower court conflict being the most important cue based on information in the *certiorari* petition (see also Cameron Segal and Songer 2000; Caldeira and Wright 1988; Songer 1979; Ulmer 1984). While recent evidence does show that lower court conflict impacts the likelihood of *certiorari* by the U.S. Supreme Court (see Bowie and Songer 2009), Tannenhaus' account of the *certiorari* petition had a major flaw. One of the key (erroneous) assumptions in Tanenhaus' theory was that the justices themselves

used much time to make the *certiorari* decision, when it was primarily individual justice's clerks who examined the *certiorari* files. The implication of this empirical finding is that in fact clerks frequently engage in more complicated processes rather than primarily relying on heuristic cues. While heuristic cue theory is a seemingly reasonable theory for understanding the *certiorari* process, as political scientists learn more about *certiorari* as an extended process (Perry 1991), the utility of heuristic cue theory seems weaker based on new knowledge of the process itself (Armstrong and Johnson 1982; Teger and Kosinski 1980; Ulmer 1984).[9] Teger and Kosinski note, that while some evidence for cue theory exists, it is not very useful for predicting *certiorari* votes, because of the fact that the justices' clerks were, in fact, reading the *certiorari* petitions quite carefully.

Similarly, I believe it is unlikely that heuristic cue theory seems reasonable for understanding how appellate courts (including state high courts) engage in decision-making or in the opinion-writing process, due to the nature of the process itself. Prior to oral arguments, the justices each read the merit briefs from each side as well as any *amicus curiae* briefs for a case and the lower court opinion to better understand the previous decision, with additional research memos that the clerks write. After oral

[9] We now know that the *certiorari* process comprises several parts, including at least one clerk from the *certiorari* pool who reads a particular petition in great detail and has the ability and time to read it more intensely than a heuristic cue theory would suggest. The clerks summarize their views to the justices in a detailed manner, where the justices can then take a final vote on those that were not screened out by the *certiorari* pool. The key point to note, however, is that the justices themselves have help for the vast majority of these *certiorari* decisions.

argument, the justices engage in detailed conference discussion as well as have clerks engage in the initial drafting of opinions. After a clerk writes an opinion, the justice the clerk works for reviews the draft in a detailed manner (Bowie et al. 2013; Songer 2008). Several other justices review the opinion; after this point, the justice and/or clerk writes several drafts of the court opinion (also see Posner 2008). This long process suggests that heuristic cue theory does not seem particularly appropriate for understanding the opinion-writing process on state high courts, including the citation and treatment of precedents (Armstrong and Johnson 1992; Brenner and Palmer 1990; Teger and Kosinski 1980).

Thus far in the chapter, I focus on the differences between motivated reasoning and heuristic cue frameworks, with the key theoretical difference being the way that individuals analyze information in their daily lives and using the heuristic-systematic model of information processing to determine conditions. I also argue that motivated reasoning is a useful framework for understanding precedent citation and treatment patterns. At this point in the chapter, I continue with discussion of the judicial opinion-writing process and how this process is consistent with systematic forms of psychological processing, such as motivated reasoning.

What does the writing of appellate opinions entail? Fortunately, interviews with judges and a portion of the political science and legal literatures provide much information into the inner workings of the decision-making, and by extension, opinion-writing processes. Given that judges have relatively few members of staff (both federal appellate and state appellate judges), much of the work of reading supporting documents is forced directly onto the judges themselves (Bowie et al. n.d.). Several aspects of the

opinion-writing process might be surprising and tend to additionally favor the idea that the opinion-writing process is primarily that of systematic information processing.

First, judges are heavily invested in reading legal briefs in a very detailed fashion. Interviews with appellate judges in multiple contexts almost always elucidate the fact that judges painstakingly read through the merit briefs (which are often quite long-they reach a maximum of 80 pages in my data for one brief), paying particular attention to those precedents that are listed as critical in either the petitioner (and/or respondent's) brief. After consultation with their clerks (some state high courts use a professional staff, but it is still relatively small), a judge and her clerk(s) reach agreement as to the critical precedents and relevant legal documents to examine for the purposes of reaching a judicial decision and formulating an opinion. There is also an intense examination of the lower court opinion as a starting basis for the actual court opinion, as well.

After this point, judges engage in oral argument, which is relatively well known likely because it is one of the few venues for public access to state high courts (as well as to federal appellate courts). Oral arguments are typically relatively short on state high courts (20-30 minutes per side), although it is always possible that the court agrees to give each side more time for particularly important cases. Unlike the English Supreme Court, the emphasis on oral arguments is somewhat muted, in that they are not generally the primary determinant of a judicial opinion, but rather are used as a way to help clarify areas of confusion in merit briefs and to help the judges succinctly understand each side's argument.

Once the court concludes oral arguments and an initial conference vote, interviews of judges among various courts illustrate several commonalities among common law courts that indicate a high likelihood of motivated reasoning. Interviews largely support the idea that judges spend the bulk of their time focusing on crafting opinions, with multiple drafts being distributed both among the justice and their staffers, as well as among the other justices. While the norm of consensus on federal appellate courts is quite strong, the strength of this norm varies significantly among states (Ohio had the smallest proportion of unanimous decisions at 40% from 1995-1998, whereas New Hampshire had the highest at 83% during the same time period). Nevertheless, even a 40% unanimity rate is fairly high and few of the non-unanimous cases are decided with a one-vote margin, even among state high courts that are inherently more divisive.

Given the preceding discussion of the differences between systematic information processes such as motivated reasoning and heuristic information processes such as "cue-taking", the evidence seems quite strong that for most aspects of judicial decision-making and opinion-writing, systematic information processing is the predominant method to analyze information, cognitively. Using the analogy about Congress previously, the role of appellate court judges seems to be much more similar to that of members of a congressional subcommittee, who engage in detailed reading of documents and a lengthy process of obtaining information and drafting legislation, rather than voting on the House floor, where heuristic cues tend to reign supreme, and where changes to drafted legislation are relatively rare and where detailed discussion of policy is limited by comparison (Clausen 1973; Workman, Jones, and Jochim, 2009).

At this point, it is necessary to go beyond the psychological information processing literature and to discuss briefly the political science literature on precedent citation and treatment. In this section, I focus on empirical findings and theories about why judges cite how they treat particular precedents in several contexts. In particular, I focus on an important work by Hansford and Spriggs (2006), which outlines a theory of U.S. Supreme Court patterns of precedent citation and treatment and how these patterns affect judicial behavior by the U.S. Supreme Court, as well as lower federal courts.

2.4: Conceptions of Precedent Citation and Treatment

Perhaps the most recent seminal work on precedent citation and treatment is Hansford and Spriggs' 2006 book, *The Politics of Precedent*. This volume focuses primarily on the impact of how the U.S. Supreme Court uses precedents, with a particular emphasis on the interactive relationship between the ideological distance between the U.S. Supreme Court when enacting a precedent and the Supreme Court's ideology in the future, and the precedent's vitality (i.e., how the U.S. Supreme Court treated the precedent in the past). In particular, Hansford and Spriggs (2006) theorize and find, at least for the U.S. Supreme Court, that certain areas of "the law" and ideology interact to create certain patterns of behavior. Thus, while the U.S. Supreme Court can manipulate precedent at times, at the same time, aspects of the Court's decision-making show evidence of constraint via precedent, as well. While Hansford and Spriggs' findings are quite important, one potential concern with their findings is whether they are generalizable to courts beyond the U.S. Supreme Court.

Still other recent works examine the role of the strength of precedent ("precedent vitality") or include it as a variable as part of their theoretical construct. These include works by Corley (2009), Kassow, Songer, and Fix (2012), as well as Wedeking (2012). These works show that extremely controversial decisions or those decisions that a court does not treat positively tend to create issues with compliance by lower courts (Corley 2009; Kassow Songer and Fix 2012). Specifically, cases that are plurality decisions have a .2 lower probability of positive treatment by the U.S. Courts of Appeals for a given treatment, compared with cases that are not plurality decisions (Corley 2009). Similarly, state high court compliance is lower with some U.S. Supreme Court decisions when the winning coalition is smaller and when the U.S. Supreme Court considers a case less "vital."[10]

[10] One question with both of these studies is the potential for selection bias in that cases that are simply not treated do not appear in the data. Because it might be theoretically possible that cases that are "not treated" would cause bias, in that it reduces the amount of variation on the dependent variable, some discussion of selection bias is necessary. In the case of the Corley (2009) article, Corley shows, based on Benesh and Reddick's seminal article (2002), that there are no systematic instances of circuits on the U.S. Courts of Appeals attempting to evade use of a U.S. Supreme Court precedent. In the case of Kassow, Songer, and Fix (2012), we use a theoretical argument that if a state high court fails to address a relevant federal precedent, there is a strong likelihood that the losing party would petition the U.S. Supreme Court and would likely obtain a summary decision (most likely a grant, vacate, and remand order) that would mandate that the state high court revise its opinion and include discussion of the federal precedent. Nevertheless, some recent evidence suggests that the possibility of selection bias might remain if trying to generalize these findings.

Still another area of research that discusses the importance of legal citations and treatments is the legal literature, with a focus on articles in law reviews. Ironically, given the focus of changes in the law as an aspect of legal research, there is relatively little research, either empirical or theoretically based, on how courts in the United States cite and/or treat cases. A key work with respect to citation, however, notes that citation and treatment of precedent is still somewhat unclear as to what the practical significance is; nevertheless, this work argues that the use of citations is important to study (Cross et al. 2010). This article, along with others (Cross and Lindquist 2005; Epstein 1990), argue that precedent may serve as a weak constraint, but nevertheless, helps to guide legal reasoning and policies even at the U.S. Supreme Court level. As a result, even if precedent does not structure the decision-making process in a significant way, it does still impact what the final policy output looks like.

While the motivated reasoning literature is important with respect to my theory, it is also important to note the findings that extant political science research finds with respect to precedent citation and treatment. There are several reasons why courts interpret precedents from a political perspective. First, one should note that judges on courts interpret precedent as a way to influence legal policy. When a state high court interprets precedent, the court effectively creates legal policy, which should affect how other decision-makers view the legal rule (Brenner and Spaeth 1995; Epstein and Kobylka 1992; Johnson 1979, 1986; McGuire and MacKuen 2001; Wahlbeck 1997). While court opinions provide additional explanations and justifications of policy, these explanations may (or may not be) what Segal and Spaeth refer to as "rationalization" (2002).

Unfortunately, given the interest of this topic on the U.S. Supreme Court, there is very little parallel research that examines state high courts. This lack of research is especially problematic given that state high courts occupy an important spot in the judicial hierarchy in the United States, where they occupy a spot as a *de* facto and as a *de jure* court of last resort for the overwhelming majority of cases on state high courts' dockets. In particular, for state law, their position is comparable to that of the U.S. Supreme Court, where they have the **final** word of interpretation with respect to state law, state common law, as well as the constitution within that state/commonwealth. While state high courts will interpret federal law and/or the U.S. Constitution at times, in practice, this is not particularly common[11].

With respect to state high court decision-making, most judicial scholars divide determinants of state high court decision-making into two basic factors: institutional factors versus non-institutional factors. While institutional factors focus on the particularities of state high court institutions, such as the type of judicial election, whether a state has intermediate appellate courts, and the time until elections, non-institutional factors focus on concepts such as the ideology of judges on the court, as well as more legally oriented concepts such as case facts. One of the major issues in the contemporary state high courts literature is a lack of a theoretical framework that

[11] While there are 52 state high courts within the United States (Oklahoma and Texas have separate state high courts for criminal and civil appeals), the U.S. Supreme Court only accepts 70-80 plenary cases *per annum*. Of these 70-80 cases, roughly 75-80% originate from federal courts of appeals. The implication of this empirical fact is that the likelihood of review of a state high court decision by the U.S. Supreme Court is extremely low (averaging once every two years for a state high court).

generally explains when we would expect each of these factors to be dominant, either with respect to judicial decision-making or with respect to precedent citation and usage in court opinions. I hypothesize that one of the key elements for understanding this question is salience, or what Fazio describes as "motivation" (1990).

One of the key elements with respect to understanding state high court decision-making is the issue of salience. While researchers have not studied salience on state high courts in much detail (at least in more than several narrow issue area), the limited evidence that does exists shows that salience influences the decision calculus for state high court justices. While the research finds evidence of attitudinal-based voting across all areas of issue salience, strategic based voting is only evident in areas that are highly salient issues, such as cases about elections (Langer 2002). Similarly, evidence for strategic voting is also apparent in other highly salient issues, such as death penalty cases and abortion cases (Brace and Hall 1994; Caldarone Canes-Wrone and Clark 2009; Hall and Brace 1992, 1995, 1997; Langer 2002). In contrast, limited evidence exists that for lower salience cases (e.g., search and seizure cases), attitudinal and strategic factors become less important for state high court decision-making (Benesh and Martinek 2002). Yet, the literature has not adequately examined the issues of salience and attitude accessibility with respect to state high courts in a larger context than a particular (small) issue area.

While understanding the role of state high courts is essential for determining how my general theory of precedent citation and usage applies to state high courts, without a full understanding of the existing works on precedent citation and treatment patterns (on which I ground a large portion of my theory), it is impossible to understand all of the

potential connections between and among state high courts, precedent treatment, and the theory of motivated reasoning. Consequently, I continue with a discussion of the political role of precedent citation and treatment, as well as a theoretical discussion of why precedent matters, both in the American legal system generally and, specifically, for state high courts.

CHAPTER THREE:

TOP-DOWN AND BOTTOM-UP MOTIVATED REASONING: THEORETICAL EXPECTATIONS FOR STATE HIGH COURT PRECEDENT CITATION AND TREATMENT PATTERNS

At this point of the manuscript, I focus on the application of the motivated reasoning framework to the study of precedent citation and treatment. I start with discussion of the general theory and how attitudinal accessibility (and salience) will likely map onto precedent citation and treatment patterns. Based on two conditions, notably issue salience and the perceived legal easiness of a case, I argue that particular types of judicial behavior will change (in what motivated reasoning theory calls "top-down" or "bottom-up" forms of motivated reasoning). Specifically, my articulation of motivated reasoning theory focuses on how issue salience and legal easiness condition the influence of ideological agreement between a citation of (or a positive treatment of precedent) and several associated legal variables that should influence the probability of precedent citation and treatment type (positive versus negative.) Depending on how issue salience and the easiness of a case vary, one should see differences in the nature of motivated reasoning, which succinctly maps onto a table later in the chapter.

I organize the remainder of the theoretical chapter as follows. First, I discuss the assumptions that are necessary for motivated reasoning theory to operate and discuss how motivated reasoning theory can be expected to operate on judges, with a particular focus

on types of motivated reasoning. Interspersed within this section, I use motivated reasoning theory to derive testable hypotheses that relate to patterns of individual precedent citation and treatment, as well as under what conditions one should expect to see different patterns of precedent citation and treatment.

3.1 Justice Assumptions for Motivated Reasoning Theory

To implement a motivated reasoning framework theoretically, one needs to be aware of several assumptions that the motivated reasoning literature makes with respect to cognitive information-processes. These two assumptions for state high courts are that judges have some level of interest in creating policy and that state high court opinion-writers always have a need to couch their decisions via an opinion that is written using legal terms and concepts (by doing so, this presents a floor for the *fear of invalidation* concept that one finds in motivated reasoning theory).

From understanding the motivated reasoning literature, one of the key aspects that are relevant for my theory is the idea that individual judges and potential opinion-writers may engage in differing psychological processes when faced with the same case. What might elicit these processes? I begin with the assumption that all state high court justices have some degree of interest in creating political and/or legal policy, and creating legal policy serves as a form of motivation for state high court justices. This assumption is not particularly controversial, as most works that examine state high court decision-making take advantage of this assumption to explain either why state high court justices might vote sincerely or strategically (Brace and Hall 1992, 1995, 1997; Langer 2002). Also important to note is that my articulation of motivated reasoning theory does not assume

that the only goal of justices is to create legal policy, but that under particular circumstances, justices may simply want to follow "the law".

The second assumption in my theoretical articulation of motivated reasoning is that most state high court justices have a need to couch their decisions and opinions in legal terms. The primary implication of this assumption is that legal variables may always have an influence, regardless of the level of salience or whether a case is easy or not. In fact, the literature is fairly unequivocal that justices, in general, need to ground their legal opinions in such a way that their opinions will be accepted and relied upon by other courts and other actors in the legal system, such as potential future litigants (Hansford and Spriggs 2006; Spriggs and Hansford 2001, 2002.)

There are at least two reasons why this assumption is realistic for understanding how state high courts cite and treat precedents. First, as part of the legal socialization process, all potential attorneys must attend law school, where there is a strong cultural and institutional norm that law students must engage in understanding the relevance of precedents and legal decision-making in the *stare decisis* framework.[12] This socialization process influences judges to think in terms of "legal persuasion," and state high court justices are no exception to this process. The second reason is the concern for legitimacy by other judicial actors, such as lower state courts, judges in other jurisdictions (both federal and state), as well as other legal actors, such as potential future petitioners and law professors. Even if justices behaved purely in top-down attitudinal approaches where

[12] This framework does not imply mechanistic treatment of legal precedents; there is a role for judicial dissent in this framework.

they "allow" their ideological influence to shade how they examine evidence, there is still a need to legitimate any ideological beliefs that the court opinion-writer may have.[13]

As a result, even for justices that frequently engage in top-down motivated reasoning (i.e., attitudinal behavior); there still may be a proclivity for justices to act in ways that are consistent with legal reasoning, perhaps including responding to particular patterns of precedent (see Kritzer and Richards 2002; Lindquist and Klein 2006; Wahlbeck 1997.) Consequently, it seems potentially problematic to assume that even in top-down motivated reasoning, that the law will have NO influence on state high court citation and treatment patterns. Rather, in top-down motivated reasoning, the impact of the law may empirically be observed in different patterns compared to conditions of bottom-up motivated reasoning. Mixed motivated reasoning should theoretically share some characteristics of both top-down and bottom-up forms of motivated reasoning, perhaps with different results on differing variables. Section 3.2 describes the fundamental theory of motivated reasoning as applied to precedent citation and treatments in more detail.

3.2: The Fundamental Theory

As I mention in the preceding two chapters, one of the fundamental questions in judicial behavior studies is to what degree do judges (and individual court decisions) rely on

[13] There are other ways that courts can maximize the legitimacy of opinions beyond relying on *stare decisis* norms. These include minimizing the use of *sua sponte* decisions (where the court creates a new rule based on claims that the litigants did not address), as well as attempts to engage in consensual decisions (Epstein, Segal, and Spaeth 2001; Songer and Siripurapu 2009). I do not address these further in this project.

ideology when engaging in judicial voting or in other aspects of the judicial process. In particular, while we know that ideological behavior matters for state high court decision-making, we do not yet have a comprehensive theoretical explanation for under what conditions attitudinal behavior will be more likely and under what conditions we should not expect to see behavior consistent with attitudinalism on state high courts.

As Braman notes (2004, 2006), motivated reasoning and other theories of systematic information processing contribute to the literature by describing several potential causal mechanisms that will partially determine when individuals engage in behavior that is consistent with attitudinal explanations in a new manner, by focusing both on the role of salience and *fear of invalidity*, which can be conceptualized differently for various research projects. Contemporary motivated reasoning theories postulate that two primary factors contribute to whether individuals engage in attitudinally biased reasoning ("top-down motivated reasoning") or whether individuals engage in systematic information-processing that is relatively free of ideological bias and is driven by concerns of accuracy ("bottom-up motivated reasoning"). These two factors are fear of invalidation, also known as "opportunity" and attitudinal accessibility, also known as "motivation", in Fazio's MODE framework (see Bartels 2010; Fazio 1994).

According to motivated reasoning theory, one of the two primary determinants of whether one engages in top-down motivated reasoning versus bottom-up motivated reasoning is the degree to which a fear of invalidity, or lack of opportunity, exists to engage in attitudinal behavior.[14] I define fear of invalidity for the purposes of the dissertation as focusing on the issue of legitimacy of a decision among other judges, rather than based on strategic concerns with respect to the U.S. Supreme Court, the regional circuit court, or the state legislature. In the case of the U.S. Supreme Court, review of state high court decisions is quite rare, with only 15 cases per year originating from state courts, of which 70-80% are criminal cases (Spaeth Supreme Court Database, 2012.) Therefore, from a theoretical perspective, it seems a bit strange for state high courts to be overly concerned about the U.S. Supreme Court in terms of strategic behavior, at least for private torts cases. In the case of federal circuit courts, federal court decisions are never binding on state high courts, even with respect to interpretation of federal law. Finally, while evidence exists that state high courts sometimes react strategically to state legislatures, in private torts cases, this strategic reaction should be blunted since private torts law is relatively free from statutory influence and is primarily based on common law (Langer 2002.)

[14] The particular *fear of invalidity* term was first defined theoretically by Brandon Bartels (2010) in a book chapter that describes how motivated reasoning theory might apply to U.S. Supreme Court decision-making. However, the concept of *fear of invalidity* is not well-defined operationally, nor does he test any of the claims that he makes with respect to motivated reasoning. Hence, my dissertation partially serves as an empirical test of motivated reasoning theory on judiciaries.

I argue that there should never be an instance where fear of invalidity for state high court justices is nonexistent because of a need to preserve legitimacy through the opinion-writing process among political elites and among other judges in the judicial system (Lindquist and Klein 2006.) Compared with the U.S. Supreme Court, there is likely to be less of an inherent acceptance of state high court decisions, due to less knowledge about state high courts among the population within a state (Gibson 2008, 2009). As students of the judiciary know, court opinions must be couched in such a way that even if the associated decision is based on ideologically-based reasoning, the opinion-writer must discuss law in an intelligent manner and in a way that creates/encourages legitimacy by the public and by other political actors in order for the court's desired policy to be successful. This requirement will sharply limit, but not completely eliminate, conditions where top-down motivated reasoning dominates. True forms of top-down motivated reasoning should be restricted to conditions that occupy a relatively small subset of cases among state high courts (namely where attitudinal accessibility is high and where fear of invalidity is fairly low).

Concerns about legitimacy will likely vary among cases based on several attributes. These attributes likely include various aspects of the case itself, such as the salience of a particular case, the complexity of the associated law, and perhaps most importantly, the clarity of the relevant law in an instant case on a state high court docket. A major implication of the fear of invalidation prong of motivated reasoning theory is that for cases where the law is quite clear, according to my conceptualization of "fear of invalidity", the propensity for top-down motivated reasoning should be relatively low. If the fear of invalidation is high (based on law that is extremely clear), there is likely a

consensual understanding among the legal community, regardless of attitudinal beliefs among particular judges, which would tend to promote bottom-up forms of motivated reasoning . In contrast to the scenario where the law is quite clear, in a scenario where the law is extremely unclear, judges will have a greater degree of freedom to treat precedent ideologically and will be more willing to engage in top-down forms of motivated reasoning. From a theoretical perspective, situations where the law is moderately clear, should results in some combination of top-down and bottom-up forms of motivated reasoning with respect to patterns of precedent treatment.

The second primary causal mechanism behind motivated reasoning theory is that of attitudinal accessibility. Attitudinal accessibility, simply put, relates to how much a judge would likely have a vested interest in a case or issue, in ideological terms (Fazio and Towles-Schwen 1999.) Hypothetically, a judge might have high levels of attitudinal accessibility for cases that involve capital punishment or that involve First Amendment rights, but extremely low levels of attitudinal accessibility for corporate law conflict or for most cases involving contracts.[15] According to motivated reasoning theory as applied to judiciaries in the United States (Bartels 2010), increases in attitudinal accessibility, defined as how strong an attitude an individual judge may have (which can vary among particular cases), will encourage judges to engage in behavior that is consistent with top-

[15] I do not intend for this sentence to be interpreted as saying that these areas of the law are unimportant. In a contemporary democratic society, in fact, continuity of the law and legal norms are critical for the socioeconomic development of a nation or state.

down motivated reasoning. In contrast, when attitudinal accessibility is low, there should be a very weak propensity to engage in pure top-down forms of motivated reasoning.

So what empirical factors might help to explain attitudinal accessibility? I posit that one factor is especially important for understanding attitudinal accessibility: issue salience. Previous research analyzing the impact of salience on state high court decision-making finds that judges tend to act more strategically for highly salient issues, although this effect is contingent on the method of judicial retention, ostensibly due to a fear of either losing office or having their desired policy overturned by a state legislature (Langer 1997, 2002; Stricko-Neubauer 2007, 2008). While the two scholars' definitions of salience are quite different in that Stricko-Neubauer uses a much wider range of impressionistic-based issue salience, they both find results that are consistent with strategic behavior to either the state legislature and/or to the general electorate.[16]

[16] Their conception of salience is somewhat different from my conception of salience. Because I am only looking at private torts cases, there is less likely to be a strong arousal of passions among the populace. In particular, Stricko-Neubauer's analyses (2006, 2007) use abortion and death penalty cases as highly salient issues. These cases would have both high levels of attitudinal accessibility, as well as high levels of fear of invalidity from a political perspective (which might work against top-down motivated reasoning), at least in specific circumstances. The issue areas that I select mostly have low to moderate levels of fear of invalidity from a political perspective, which might reduce the likelihood of strategic behavior. From a legal perspective, however, these cases might have a high level of fear of invalidity, as there may be a general consensus as to what the law looks like in these areas, which should attenuate ideologically-based uses of precedent.

Table 3.1 illustrates many of the issue areas that I examine and what level of salience I believe them to have. In particular, I argue that personal injury cases among individuals, automobile accidents, and defamation cases will not elicit high levels of attitudinal accessibility. These cases are generally "run-of-the-mill" and do not feature any especially large or important political issues, in most cases. As a result, I would expect that attitudinal accessibility is low for cases in these individual issue areas, which should mean that one does not see pure top-down motivated reasoning, but rather that one should see evidence of either mixed forms of motivated reasoning (attributes of both top-down and bottom-up forms of motivated reasoning) or bottom-up forms of motivated reasoning, depending on how great the fear of invalidity is for a given case.

In contrast with issue areas that have low levels of salience, other issues within the realm of private tort cases, such as product liability, toxic torts, medical malpractice, and insurance "bad faith" cases, may elicit higher levels of attitudinal accessibility, by virtue of judges likely having more knowledge of the issues in these cases and the cases having a larger impact on the law (see Langer 2002.) Furthermore, the monetary stakes in these cases tend to be extremely high and these cases frequently have direct consequences for people beyond the instant case outcome. In the issue areas that I label as low salience, only the individual litigants in each case are typically affected by the outcome, whereas in high salience cases, classes or groups of litigants and potential litigants are potentially affected, which makes the stakes of an individual decision and patterns of corresponding precedent citation and treatment, qualitatively more important. Cases in these particular issue areas also have a higher probability of appeal from a trial court compared with more mundane torts, such as automobile accidents (Ostrom et al.

1992.) Additionally, most cases that are appealed from trial courts tend to involve relatively large verdicts ($250,000+.)

For cases within these issue areas, we should expect to see evidence of mixed forms of motivated reasoning or top-down based forms of motivated reasoning, based primarily on how large the "fear of invalidity" is for a particular case. One should almost never see pure bottom-up motivated reasoning in these issue areas, because of the relatively high issue salience levels. If a case is politically charged, yet the law is clear, one should expect to see mixed forms of motivated reasoning to perhaps dominate. In contrast, if the law is unclear (from a legal perspective), one should expect to see top-down forms of motivated reasoning have the greatest amount of impact. Evidence exists that shows areas that I highlight as possessing high levels of attitudinal accessibility (i.e., are highly salient issues) have higher median awards compared with several areas that I argue do not possess high levels of attitudinal accessibility (Daniels and Martin 1987.)[17]

An important and reasonable question that people may ask is why state high courts would ever take cases that are particularly easy to decide. There are two potential reasons why state high courts would take easy cases. The first possible reason is that in some states they have no choice. In states that lack intermediate appellate courts

[17] This descriptive article highlights the fact that most of the "tort reform" movement focuses on issues that have significantly higher median tort awards compared with most areas of tort law at the trial level. Specifically, the authors find evidence that suggests in Chicago, that the average award for a vehicular accident between 1981 and 1985 was $5,698, whereas the median tort award for a product liability case was $278,570 and the median tort award for a medical malpractice case in Chicago from 1981-1985 was $215,000.

(approximately ten states do not have intermediate appellate courts), as long as a case meets threshold requirements, is not moot, and the petitioner has legal standing to bring a case to a state high court, state high courts in these states must hear these low-salience, easy cases (Brace and Boyea 2008; Brace and Hall 2000; Hall and Brace 1997).[18] It is also worth noting that even in states with intermediate appellate courts, state high courts rarely have the degree of docket control that the U.S. Supreme Court has; state high courts must take certain types of cases, varying among states to some degree. The second potential reason that a state high court might take an "easy case" relates to the role of a state high court as a policy-making institution. Because a state high court is the only judicial institution within a state that has the ability to interpret law for the entire state, in some cases, a state high court may feel a need to affirm an existing precedent to strengthen that precedent or ensure that the precedent is applied statewide rather than just among individual regions within a state, similarly to how the U.S. Supreme Court can do the same for federal circuit decisions (Hansford and Spriggs 2006; Hansford Spriggs and Stenger n.d.; Spriggs and Hansford 2000, 2002). Furthermore, evidence from interviews suggests that judges frequently do not know that a case will be easy simply by reading *certiorari* petitions, but rather after reading the briefs and relevant precedents in a case in great detail (presumably using a bottom-up form of motivated reasoning), the judges realize that an outcome is essentially predetermined by clear law that unequivocally

[18] Because I only examine six states in this analysis, I do not include a variable for the presence of an intermediate appellate court, because the findings would be based only on two states in my analysis that do not have intermediate appellate courts and would potentially not be generalizable to states having (or lacking) intermediate appellate courts.

supports one side (Bowie et al. 2013). Thus, this interview provides a little bit of additional evidence that supports the notion that motivated reasoning processes may be a useful paradigm for understanding appellate court opinion-writing processes, such as on state high courts.

Empirically, many implications from motivated reasoning theory exist, some of which are equivalent to conventional political science frameworks, with others that vary from these frameworks. One implication is with respect to sincere patterns of precedent citation and treatment (e.g., does ideology of a precedent impact whether a liberal (or conservative) opinion-writer is more likely to treat a precedent consistent with ideological expectations).[19] If a state high court case invokes a strong fear of invalidity and is not attitudinally accessible, one should not see any impact of congruence between a precedent and a state high court opinion-writer on whether the opinion author positively treats a precedent that is of a similar ideological persuasion to the opinion-writer. The ideological distance between a precedent and a state high court opinion-writer should also have no bearing in a bottom-up regime as to whether a state high court opinion-writer is likely to cite or positively treat a particular precedent. Additionally, legal variables should have an effect on all precedents in a bottom-up regime (Cell 1 later in this chapter), regardless of whether a positive treatment of a precedent supports the ideological

[19] This type of dependent variable is similar in nature to that used by Randazzo 2008 and Randazzo et al. 2006, 2011, which analyzes whether increasingly lengthy statutes reduce the magnitude of ideological voting (and whether statutes can effectively constrain attitudinal behavior by judges in the United States). While I do not use this dependent variable for my main analyses, I do use a variant of this type of variable for zero-order analyses, which are located in Chapters Four and Five.

tendencies of a state high court opinion-writer. I believe that legal variables should matter on both the baseline and interactive terms in this case because of the fear of invalidity aspect of motivated reasoning theory (Bartels 2010), as well as the lack of strong interest in terms of top-down motivated reasoning behavior. Again, in a bottom-up regime,

In contrast, if a state high court case does not invoke a strong fear of validity (or is not "easy") and if a case invokes strong ideological preferences (see Cell 4 later in this chapter), the impact of top-down motivated reasoning should be evident and have an extremely strong impact with this "sincere" behavior. In a pure top-down motivated reasoning regime, ideological congruence between a positive treatment of precedent and the ideology of the opinion writer (i.e., if a positive treatment of precedent is compatible with the ideological direction of a state high court opinion-writer), should condition the influence of the effect of legal variables on positive treatment. In a top-down regime, legal variables should only influence the probability of citation and positive treatment of precedent for precedents where a positive treatment (or citation) supports the ideological direction/beliefs of a state high court opinion-writer. In the dissertation, I define ideological distance as the difference in ideology between a state high court opinion-writer and a precedent included in a merit brief to the state high court. In the other two combinations of fear of validity and attitudinal accessibility, behavior will likely take some intermediate form between the two extremes of top-down motivated reasoning and bottom-up motivated reasoning.

Given that the dissertation focuses both on the act of precedent citation and treatment by state high courts, it is important to briefly discuss what precedent citation and treatment signify, as well as the types of theoretical differences that one might expect

between precedent citation and treatment. Because precedent citation is more of a mechanistic action that naturally is less ideologically driven than precedent treatment (where justices are explicitly making policy), I expect that most of the empirical analyses will show results that are more consistent with bottom-up forms of motivated reasoning or mixed forms of motivated reasoning than of pure top-down forms of motivated reasoning.

Precedent citation, as applied to state high courts, occurs when a state high court mentions a precedent in a court opinion, irrespective of how much detailed discussion the state high court actually gives to the precedent (Corley 2009; Hansford and Spriggs 2006; Kassow Songer and Fix 2012; Spriggs and Hansford 2002). A citation simply signifies that a precedent is important enough for a state high court to mention the precedent. A precedent citation, in and of itself, should not be interpreted as a court making any type of alteration or necessarily engaging in legal policymaking. While citation is arguably not legal policymaking *per se*, it is still an important aspect of judicial behavior that is necessary to understand in order to maximize our knowledge about the policymaking aspect of mentioning precedents.

In particular, when examining the act of citation in the motivated reasoning framework, I expect to see several differences compared with the applicability of motivated reasoning to the act of precedent treatment. From a theoretical perspective, the largest difference is that top-down motivated reasoning should be less prevalent in the act of citation compared with the act of precedent treatment. Because precedent citation patterns are primarily about understanding what precedents are potentially relevant case law rather than making a substantive treatment of a precedent and given the discussion of

the judicial process earlier in the chapter (Cross et al. 2010; Hinkle 2013), it seems highly likely that precedent citation is primarily a bottom-up driven process in that attitudes should not matter that much, regardless of what regime one is in. Ideological variables should be most likely to be increase the chance of citing precedent when there is a low level of invalidity AND an issue is attitudinally accessible (or among ideologically extreme justices), but given the intense nature of reading briefs and understanding which precedents are relevant to a case, I expect that citation will be dominated by bottom-up (and mixed) forms of motivated reasoning and that evidence consistent with top-down forms of motivated reasoning should be rare.

Contrasting with the judicial act of citation, when a state high court treats a precedent, the court is engaging in legal policymaking. According to *Shepards' Citations*, there are many types of precedential treatments that can be neatly summarized into three basic categories (Hansford and Spriggs 2006; also see Kassow, Songer and Fix 2012.) A positive treatment of precedent is one type of treatment. When a court treats a precedent positively, the court is essentially stating that a precedent is important and the court explicitly relies on that precedent (or several precedents) to reach a judicial decision in an instant case. Negative treatments are treatments of precedents by courts that harm the credibility of a precedent, perhaps via criticizing a precedent, limiting it, or ruling that a precedent is not applicable in an instant case.[20] Finally, neutral treatments are instances

[20] Political scientists and legal scholars commonly refer to this as distinguishing a precedent, based on *Shepards' Citation* definitions of precedent treatments. Distinguishing a precedent is technically a heterogeneous process (Hansford and Spriggs 2006), as there are many degrees of distinguishing a precedent. However, due to a relative paucity of the other types of negative treatments and the fact that all

where a court makes substantive statements about a precedent, but neither relies on a precedent nor attacks or limits the validity of a precedent in a court opinion.

The theory listed earlier mentions the summary of findings one might expect for precedent treatment. For cases that have a low level of invalidity and where an issue is attitudinally accessible, one should expect variables associated with top-down motivated reasoning to increase the likelihood of positive treatment, as well as for ideological congruence to have an interactive effect with legal variables. For cases that have a high level of invalidity and where an issue is attitudinally inaccessible, one should expect bottom-up forms of motivated reasoning to dominate and the conditional relationship between ideological congruence and the legal variables should dissipate.

In contrast, for precedent treatment that have the two other possible combinations of attitudinal accessibility and invalidity (low level of invalidity and attitudinally inaccessible and high level of invalidity and attitudinally accessible), one should expect a mixed process, where both top-down and bottom-up variables associated with motivated reasoning will impact the likelihood of top-down motivated reasoning occurring. Tables 3.1-3.3 illustrate the specific relationships that I propose theoretically, based on motivated reasoning theory and its expected application to precedent citation and treatment patterns.

H 3.1a: **With respect to precedent citation, under the conditions of a high level of fear of invalidity with low attitudinal accessibility, one should see patterns consistent with bottom-up forms of motivated reasoning.**

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distinguished treatments do reduce the applicability and/or "strength" of a precedent in some way, I treat distinguished precedents as identical to negative treatments throughout the dissertation.

H 3.1b: With respect to precedent treatment, under the conditions of a high level of fear of invalidity with low attitudinal accessibility, one should see patterns generally consistent with bottom-up forms of motivated reasoning.

H 3.2a: With respect to precedent citation, under the conditions of a high level of fear of invalidity with high attitudinal accessibility, one should see patterns generally consistent with bottom-up forms of motivated reasoning

H 3.2b: With respect to precedent treatment, under the conditions of a high level of fear of invalidity with high attitudinal accessibility and/or a low level of fear of invalidity and low attitudinal accessibility, one should see patterns of mixed motivated reasoning.

H 3.3a: With respect to precedent citation, under the condition of, a low level of fear of invalidity and high attitudinal accessibility, one should see patterns of mixed motivated reasoning

H 3.3b: With respect to precedent treatment, under the condition of, a low level of fear of invalidity and high attitudinal accessibility, one should see patterns of top-down motivated reasoning.

The next section describes how motivated reasoning regimes (top-down, bottom-up, or mixed) should alter patterns of precedent citation and treatment in predictable ways for precedent citation and precedent treatment. The greatest emphasis in the next section is understanding under what conditions ideological distance should matter with respect to precedent citation and treatment patterns, as well as understanding how the conditional relationship between ideological congruence and variables signifying impacts of "the law," depending on the particular cell that one is in.

Table 3.1: Salience/Attitudinal Accessibility of Several Areas of Tort Law

Issue Area Within Private Torts	**Hypothesized Level of Salience Within Torts Cases**
Toxic Torts	High
Product Liability	High
Medical Malpractice	High
Personal Injury (Individual v. Corporation)	High
Insurance Bad Faith	High
Economic Torts	Low
Automobile Accidents	Low
Personal Injury (individual v. individual)	Low
Defamation	Low

Table 3.2: Case Easiness/Fear of Invalidation by Other Judicial Actors

Categories for Case Easiness/Fear of Invalidation	**Hypothesized Level of Fear of Invalidation**
Unanimous affirmance of a unanimous lower court decision	High Fear of Invalidation
All other cases	Low Fear of Invalidation

Table 3.3: Relationship between Salience, Easiness, and Type of Motivated Reasoning

	Low Salience	**High Salience**
Easy Case/High Fear of Invalidation	**Cell 1:** Treatment: Bottom-up motivated reasoning dominates. Citation: Bottom-up motivated reasoning dominates.	**Cell 2:** Treatment: Reduced influence of bottom-up motivated reasoning. Citation: Bottom-up motivated reasoning dominates.
Difficult Case/Low Fear of Invalidation	**Cell 3:** Treatment: Reduced influence of bottom-up motivated reasoning. Citation: Bottom-up motivated reasoning dominates.	**Cell 4:** Treatment: Top down motivated reasoning dominates Citation: Reduced influence of bottom-up motivated reasoning.

3.3: Top-Down Motivated Factors: What Does Ideology Have to Do with It? When Does Ideology Matter?

One of the major influences on state high court decision-making is the ideology of individual justices' and of the court as a whole. The literature overwhelmingly shows that ideology affects many areas with respect to state high court decision-making (e.g., Bonneau and Rice 2009; Brace and Hall 1995; Comparato and McClurg 2007; Glick 1991; Hall 1987; Hall and Brace 1992, 1997, 2000, 2001.) While the findings from these studies are not directly applicable to understanding how state high courts cite and treat precedent as the act of precedent citation and treatment is not identical to that of decision-making, the literature does show that on other courts in the United States, including both federal circuit courts and the U.S. Supreme Court, that ideology does matter with respect

to precedent citation and treatment patterns (Benesh and Reddick 2002; Cross and Spriggs 2010; Lindquist and Cross 2005; Law and Zaring 2010; Lupu and Fowler 2011; Spriggs and Hansford 2002).[21] If one is looking for evidence of top-down motivated reasoning in patterns of precedent citation and treatment, it will likely be through variations in the impact of variables such as ideological distance, as well as differences in conditional relationships among precedent congruence and other legal variables.

Ideological distance should have an overall influence on state high court citation and treatment if top-down forms of motivated reasoning are evident; thus, ideological distance should have a statistically significant effect. As a result, when top-down motivated reasoning is likely, the biases that an opinion-writer may cause disconfirmation bias, reducing the impact of precedents that may be ideologically in opposition to what the opinion writer and/or court majority believes.[22] The ideology of the precedent, in fact, is the ideology of the median member of the court that created the precedent. The comparison for creating the measure of ideological distance is to the ideology of the opinion-writer. I expect that as ideological distance between the court and a precedent in a brief increases, there should be a reduced likelihood of citation and positive treatment of a precedent, given the increase in likelihood of disconfirmation bias. In other words,

[21] Unfortunately, none of these works study how state high courts cite and/or treat precedents, but all of these studies note that for the U.S. Courts of Appeals and/or the U.S. Supreme Court ideology has at least some level of influence on the citation and/or treatment patterns of precedent in court opinions.

[22] Disconfirmation bias occurs when an individual is highly reluctant to believe in something that is contrary to his/her personal beliefs. In top-down motivated reasoning, one should see evidence of disconfirmation bias.

when attitudinal accessibility is high and fear of invalidation is low, one should expect to find that as ideological distance between a precedent and a state high court increases, there should be a greater probability of a negative treatment of precedent and a reduced probability of precedent citation, *ceteris paribus*.

At the same time, given the varying levels of salience in my analysis, I expect that the impact of ideological distance should be greater as a case belongs to a more salient category (see Cell 4), because salient cases will increase attitude accessibility according to motivated reasoning theory (McAtee and McGuire 2007). This is so because attitudinal accessibility is one of the two requirements for top-down motivated reasoning to occur in the motivated reasoning framework (Bartels 2010; Kunda 1990.)

Ideological congruence, or ideological agreement between a precedent and a state high court opinion-writer, should also have differing impacts depending on the salience of an issue is and/or on the easiness of a particular case, which I define as a unanimous affirmance of a unanimous lower court decision (see Braman 2004; Braman and Nelson 2007.) In particular, in a top-down motivated reasoning regime such as what we see in Cell 4, because of the high level of salience and low fear of invalidity in these particular cases, one should expect to see evidence that state high court opinion-writers will be more likely to cite and/or positively treat precedents that allow them to reach the outcome that they desire (in a liberal or conservative sense) compared with precedents where a positive treatment of precedent would lead to an outcome that a state high court opinion-writer should ideologically oppose, which would possibly force a state high court opinion-writer to moderate the breadth of an opinion (or even to change outcomes, if the judge was truly "following the law".)

Empirically, if following motivated reasoning theory to its extreme, ideological congruence should conditionally affect how state high court opinion-writers use variables associated with legal reasoning, such as the strength of precedent and the persuasiveness of precedent (Hansford and Spriggs 2006.) In fact, judges who are thinking in terms of top-down motivated reasoning may still have somewhat of a vested interest in ensuring that their court opinions do follow some modicum of the law (Segal and Spaeth 1994, 2002.) Consequently, all else being equal, even in top-down motivated reasoning scenarios, such as Cell 4, as I mention in the beginning of this chapter, there may still be an impact of "the law" in some instances, most notably when a positive treatment (or citation) of a precedent (or multiple precedents) may lead to an outcome that a judge thinking in top-down motivated reasoning terms.

H 3.4: For cases in Cell 4, increases in ideological distance between a precedent and a state high court opinion-writer will reduce the likelihood of a positive treatment compared with the likelihood of a negative treatment of precedent.

H 3.5: Precedents that are ideologically congruent with a state high court opinion-writer should have a greater baseline probability of citation and positive treatment compared with precedents where a positive treatment/citation is not ideologically congruent with a state high-court opinion writer's ideological preferences.

3.4: What Do Legal Factors Have to Do with It?

The primary manifestation of the implications of bottom-up forms of motivated reasoning should be the reliance on precedent, even if the precedent may disagree with a judge's ideological predispositions. The literature compellingly argues that precedent has an important role in the judicial process (Epstein and Knight 1996; Gerhardt 2008; Knight and Epstein 1998,) that judges frequently discuss precedent in court opinions, and that courts frequently treat precedents as a part of creating a legal decision and opinion, regardless of a judge's personal ideology and personal values (Corley 2009; Fowler and

Jeon 2008; Fowler and Lupu 2010). As Hansford and Spriggs note (2006), even if a court majority (on the U.S. Supreme Court) wants to decide solely a case based on ideological factors, that court is unable to do so due to concerns about the public and other political actors losing legitimacy in the court. As courts have neither "power of the purse nor sword," courts are reliant on other political actors for implementation of judicial decisions. Thusly, courts must maintain legitimacy with other political (and legal) actors to ensure compliance with their decisions.

At the same time, I do not assume that precedents are equal in their ability to influence judicial decisions-bottom-up reasoning will give greater weight to precedents that are "strong". "Strong" precedents have attributes in my theoretical framework such as originating from an especially persuasive (or binding) court, as well as having been treated positively by the state high court in the past.

Assuming that the need for legitimacy is at least as great for state high courts as it is for the U.S. Supreme Court (Hansford and Spriggs 2006), how might precedent strength (also known as "precedent vitality") impact precedent citation and usage patterns? The major impact that precedent vitality should have is that state high courts should be more likely to cite and positively treat precedents that have higher levels of vitality. Again, precedent vitality may have some form of impact in all of the cells that I discuss, but the exact nature of the impact may vary, depending on what cell one is in. Especially under conditions where one would expect bottom-up motivated reasoning to dominate (Cell 1), judges may perceive a need to cite precedents that they may not personally agree with, as an attempt to decide a case and make decisions about precedents that is consistent with a bottom-up form (or accuracy-based) of motivated

reasoning (Hansford and Spriggs 2006; Kassow Songer and Fix 2012). As a result, in a regime that predicts bottom-up forms of motivated reasoning, such as Cell 1, because of this perceived need to prevent an opinion from being seen as invalid (which is most likely to occur in an easy case) and harming a judge's legitimacy "in the eyes of" other legal actors, such as other judges and potential attorneys, in a bottom-up regime, judges should cite (and positively treat) precedents that they disagree with if the vitality/persuasiveness of the precedent is strong, even if citation or positive treatment does not support a judge's ideological goals. Restated, in Cell 1, the presence (or absence of) ideological congruence should not modify the basic hypothesis that precedents that have greater levels of precedent vitality should have a higher likelihood of citation or positive treatment.

H 3.6: For cases that are in Cell 1, increases in precedent vitality should increase the probability of citation and positive treatment (relative to negative treatment) by state high court opinion-writers regardless of whether a precedent is ideologically congruent.

In contrast to Cell 1, in other cells, the manner that precedent vitality operates in might differ substantially. As I argue in the preceding section, simply the presence/significance of legal-based variables is necessary, but perhaps not fully adequate, to test top down versus bottom-up forms of motivated reasoning. Rather, the conditional relationship between ideological convergence and legal variables such as precedent vitality should dictate as to whether one is in a regime of top-down motivated reasoning, bottom-up motivated reasoning, mixed motivated reasoning, or perhaps not in any motivated reasoning regime. As I stated previously, it may still be rational for a judge to consider legal variables even in a top-down regime.

However, in top-down motivated reasoning theory, I argue that the use of legal variables to determine precedent citation and treatment patterns should not extend to precedents that cannot be used to further a judge's ideological goals. Stated simply, in Cell 1, ideological factors should theoretically dominate (in case of conflict between legal and attitudinal), but perhaps not completely eliminate the use of legal factors with respect to precedent citation and treatment patterns. Hence, I hypothesize that in a top-down regime, precedent vitality (or the strength of precedent) should only effectively matter for precedents that already allow a judge to behave ideologically (i.e., if multiple precedents allow a judge to reach a conclusion that she desires, the judge should cite and positively treat precedents that have more legal vitality, *ceteris paribus*.)

H 3.7: For cases that are in Cell 4, increases in precedent vitality should increase the probability of citation and positive treatment (relative to negative treatment) by state high court opinion-writers ONLY IF a precedent is ideologically congruent with the ideological position of the judge.

While the strength of precedent and its interaction with ideological congruence is perhaps among the most important types of theoretical evidence in favor of bottom-up forms of motivated reasoning (at least for the court as a whole, if not for individuals), it is not the only important potential indicator of bottom-up motivated reasoning that my research examines. Another indicator of bottom-up motivated reasoning that is useful for my theory is the court of origin/persuasiveness of a precedent. Understanding how the court of origin for a precedent modifies the propensity for winning coalitions to cite and/or the type of treatment the court gives a precedent (see Hinkle 2013). In the next subsection, I describe how the court of origin theoretically affects the potential likelihood of a state high court citing and/or treating a precedent, holding all other known factors constant.

3.5: Where Does Precedent Come From? Why Should We Care?

While factors such as the strength of precedent make up an important part of the legal-based (and/or bottom-up motivated reasoning process), simply examining the strength of legal precedent and its interaction with ideological congruence is not adequate for a full explanation of how justices may engage in bottom-up forms of motivated reasoning. Rather, a good theory explores other potential indicators of bottom-up motivated reasoning, one of which is the degree that a precedent is persuasive Court of origin is another useful indicator of bottom-up motivated reasoning because it allows for the exploration of "norms" in the judiciary such as the nature of precedent (binding v. persuasive), as well as hierarchical perspectives of judicial behavior, that the political science literature is generally interested in (see Fowler and Jeon 2008).

In order to understand how binding and persuasive precedents differ, I give a brief explanation of what binding and persuasive precedents mean, in practice.[23] When examining the judicial hierarchy, all U.S. Supreme Court decisions are mandatory authority in all courts as relate to a federal issue, both state and federal. U.S. courts of appeals decisions are binding on district courts, as well as specialized lower courts, within the same geographic authority, but are merely persuasive authority for other courts of appeals and other lower courts. Furthermore, U.S. courts of appeals decisions are not binding on state high courts. U.S. district court decisions are only binding on specialized lower courts within the appellate jurisdiction of a district court (such as bankruptcy

[23] Binding precedent is also known in other contexts as mandatory precedent.

courts, territorial courts, tax courts, etc.). Again, U.S. district court decisions are not binding on state courts.[24]

In the state court hierarchy, state high court decisions are binding precedent on all lower courts within a state and prior decisions by state high courts are binding on their future decisions (with the exception of overruling precedents). Additionally, they are also binding on federal courts that interpret state law under diversity jurisdiction. Lower state appellate court decisions are binding on all state-level trial and specialized courts within the state (or within a circuit, if a state has multiple circuits). State trial court decisions are only binding authority if the trial court reviews a specialized court's decision (they can be binding on county court, traffic court, municipal court, etc.).

Persuasive precedent also varies in the degree of persuasiveness, based on several factors. First, if a state high court chooses to interpret federal law, the interpretation of that federal law binding on lower courts in that state. Only the U.S. Supreme Court has the possibility of reviewing a state high court decision with respect to federal law, and this is relatively uncommon.

[24] Even in diversity cases, when U.S. circuit courts and district courts directly interpret state laws, the interpretations that federal courts make of state law are merely persuasive precedent on state high courts.

Table 3.4: Precedent Origin with Respect to Theoretical Persuasiveness of Precedent

Precedent Origin	Persuasive/Binding	Level of Persuasiveness (1-3; 3is highest)
U.S. Supreme Court	Binding on state high courts	3
Same state high as court as treats the precedent	Binding	2
Different state high court from the court that treats the precedent	Low levels of persuasiveness; not binding	1
U.S. Courts of Appeals/U.S. District Courts	Low levels of persuasiveness; not binding on state high courts	1
State Court of Appeals/Trial Court	Low levels of persuasiveness	1

Based on these distinctions, I create an ordinal grouping of how state high courts will likely treat precedents from various courts of origin. Highest on the ordinal grouping, at least with respect to positive treatment, are precedents from the U.S. Supreme Court. Only U.S. Supreme Court precedents are absolutely binding on state high courts (Martin, 1973). From the legal understanding of how binding precedents work, state high courts should be especially likely to rely on binding precedents even if the binding precedent is not consistent with an opinion-writer engaging in ideological treatments of precedent, at least in regimes that are not top-down. If a precedent is not relevant, it is most likely the case that a state high court will not cite the U.S. Supreme Court precedent, even if there is a possibility that one party could appeal to the U.S. Supreme Court, as it frequently is possible to decide the same case based on independent state grounds rather than relying

on federal precedent.[25] Because these precedents are legally binding (and it is possible for a litigant to appeal to the U.S. Supreme Court based on a state high court ignoring a U.S. Supreme Court precedent), a U.S. Supreme Court precedent that a party deems as "relevant" should have a lower likelihood of precedent treatment patterns that are consistent with top-down motivated reasoning.

The second grouping in my typology is when the precedent originates from the same state high court that is treating the precedent in an instant case. Given the legal socialization training that law schools teach to all attorneys, attorneys learn to use generally the narrowest grounds possible when deciding a case in order to prevent massive upheavals of the law, given that society is reliant on a certain level of inelasticity in the law to create and promote laws and/or regulations. Even so, if party briefs are highly persuasive, state high courts may examine language from the party briefs, which ultimately allows party briefs to affect the final opinion, and hence, the law (Corley 2007). Again, from a theoretical perspective, the logic is identical to that of hypotheses 3.6 and 3.7, where regime type is determined by the confluence of case easiness and issue salience.

H 3.8: For Cell 1, as precedent persuasiveness increases, the probability of citation and positive treatment will increase regardless of whether a precedent is congruent with a state high court opinion-writer's ideological preferences.

[25] An important distinction: I believe that if there is a perceived need for the state high court to use a federal precedent, it will use it as it does not wish to raise the ire of the U.S. Supreme Court, which could lead to a reversal and potentially a claim that justices are activist. If this occurred, it could lead to a loss of legitimacy for the court.

H 3.9: For Cell 4, as precedent persuasiveness increases, the probability of citation and positive treatment will increase only if a precedent is congruent with a state high court opinion-writer's ideological preferences (i.e., the convergence variable is coded as a 1.)

I place lower federal courts, state court precedents from other states, and lower state court precedents in a third grouping. I expect that both lower federal court and state court precedents from outside of the state are less likely to be persuasive than precedents that originate from the U.S. Supreme Court or the state high court that is adjudicating the instant case. While federal court of appeals make many rulings that are highly persuasive on state high courts within their circuit, they are technically not binding (*Yee v. City of Escondido*, 1990). Finally, circuit court rulings on state law are not binding on state courts within the circuit, which gives state high courts almost unlimited power, in practice, to operate relatively freely from the concerns of circuit courts. Similarly, rulings from other state high courts can be used as persuasive precedent, but are not considered binding on state high courts.

In the case of lower federal courts, while substantive precedent is highly persuasive to state high courts, in practice, federal courts, with the exception of the U.S. Supreme Court, can do nothing to prevent state high court non-compliance. The only form of recourse that a potential petitioner would have is to petition the U.S. Supreme Court for a hearing.[26] While it is theoretically possible that the U.S. Supreme Court can

[26] In contrast with the previous scenario with U.S. Supreme Court precedent, I expect that the U.S. Supreme Court would be unlikely to accept merely a "wrongly-decided" case from a state high court, as the impact of that decision would be relatively small and given that most state high courts can simply ignore a lower federal court precedent by declaring "independent state grounds", in contrast with U.S. Supreme Court precedents, which are binding on state high court interpretation of federal law.

overrule a state high court interpretation of a lower federal court precedent, it is exceptionally unlikely to do so, given the low probability that the U.S. Supreme Court will take a state high court case on *certiorari* (an average of fifteen cases per year from 2000-2005-Spaeth Supreme Court Database). Nevertheless, if a U.S. Supreme Court precedent is relevant to a case, a state high court is legally obliged to utilize that precedent.[27] For this reason, I expect that a precedent that is from a lower federal court, *ceteris paribus*, will have a lower probability of citation and positive treatment in a bottom-up regime compared with a precedent that is from a more persuasive case origin, but the exact nature as to when this relationship applies will depend on the cell (or regime) that one is in.

3.6: Attorney Quality and Bottom-Up Motivated Reasoning

I expect attorney quality to be another area that has theoretical implications based on the type of motivated reasoning that one follows. The political science literature has found evidence that under certain conditions, discrepancies among attorney quality may alter the likelihood of success in court (Farole 1999; McGuire 1995; Szmer et al. 2007). Still more recent evidence from the political science literature suggests that attorney quality may only matter under certain conditions, particularly when cases are not politically

[27] One minor exception to this rule exists. If a state high court decision in fact is related to the U.S. Supreme Court decision and is broader than the U.S. Supreme Court precedent, the state high court may use the state-incorporated precedent in place of the U.S. Supreme Court federal precedent. Regardless, this fact should not alter the hypothesized relationship between U.S. Supreme Court precedents and their influence on top-down motivated reasoning.

salient, as defined by appearing on the front page of the *New York Times* (McAtee and McGuire 2007).

Based on previous theory and findings in the literature, I expect that attorney quality will matter, but only under one the four specific conditions that I outline in the theory. In particular, I expect that attorney quality will matter with respect to the likelihood of positive treatment when a case is not easy to decide (low fear of invalidity) and when attitudinal accessibility/salience is low, both for precedents that are congruent and for precedents that are not congruent with a judge's ideological predispositions. For cases that are especially easy to decide, because of the nature of the case (and the fact that the state high court is highly likely to affirm a lower court in easy cases), it seems unlikely that attorney quality will have much of an impact on the likelihood of citing or treatment of precedent in line with what the petitioner/respondent asks for, regardless of whether a precedent supports the ideological predisposition of a judge. Similarly, for cases in Cell 4, ideological impacts should swamp any potential impact of attorney quality. In cases where attitudinal accessibility is low and where fear of invalidity is low, I expect to find evidence that increases in attorney quality in Cells 2 and 3 should increase the probability of precedent citation and positive treatment (Bartels 2010).

H3.10: Increases in attorney quality will increase the probability of citing and positively treating precedent only in the intermediate cells (Cells 2 and 3).

3.7: Motivation for Private Torts Cases

At this point, it is appropriate to discuss my case selection strategy as it has several possible impacts on my theoretical framework. Cooter and Ulen in *Law and Economics* define tort law as "concerns compensable wrongs that do not arise from breach of

contract and cannot be remedied by injunction against future interference." Compared with other forms of law, torts are somewhat unique in that tort law generally involves application of a supposedly determinate legal rule created by common law to a series of facts in a case. In the aggregate, this should mean that many private law torts cases should primarily show evidence of bottom-up forms of motivated reasoning (see Cooper-Stephenson 1993) At the same time, private torts cases also have several elements that might encourage the use of top-down forms of motivated reasoning as well.

Private torts cases are a useful venue for studying precedent citation and usage in the context of motivated reasoning for several reasons. These include a large degree variance in attorney quality, as well as variance in levels of attitudinal accessibility and fear of invalidation across private torts cases. Private torts also have the advantage that state courts (with some input from state legislatures) are responsible for most tort laws in the United States and that most state high courts devote at least ten to fifteen percent of their docket to private torts cases (typically the second highest issue area after criminal).[28] [29]Just as importantly, the idea that courts may be constrained by legislative statutes that codify private tort procedure and substantive decisions, although the level of constraint by state legislatures in this area is fairly low overall. Torts are also of interest to political scientists because they are political in a direct way-by helping to determine "who gets

[28] I obtain data for this statistic from the State Supreme Court Data Project, which contains case and docket data from all fifty-two state high courts from 1995-1998 (Brace and Hall 2008.)

[29] Fewer than five percent of all private torts cases end up in the federal court system, although the federal court system disproportionately hears a large number of class-action lawsuits and product liability cases, which are among the most salient types of private torts cases (Galanter 1996.)

what" and the cumulative impact on the distribution of wealth from torts cases is relatively large.

As previously mentioned, private torts are an interesting venue for analyzing the effects of attorney quality because of the potentially large levels of variation in attorney quality without having interference from the "government gorilla" (Kritzer 2003). There is quite a bit of variation among levels of "attorney quality" in my data, although the modal level of "attorney quality" is at the baseline level. In the political science literature, the utility of party capability theory lessens if the analysis does not account for state and/or federal government (Kritzer 2003; Songer and Sheehan 1990).

As also mentioned previously, one of the main rationales for selecting private torts cases is that torts cases have much variance with respect to the range of attitudinal accessibility and the fear of invalidity. Different issue areas within the domain of private torts likely have varying degrees of importance to legal actors in state high courts, creating variance on the hypothesized level of attitudinal accessibility. Similarly, while some torts cases are likely to be easy (I define this in the dissertation as a unanimous affirmance of a unanimous lower court decision), many torts cases are much more difficult, with case law not providing easy answers to instant cases on state high courts. Since the two primary drivers of motivated reasoning type (fear of invalidity and attitudinal accessibility) likely vary significantly among private torts cases, private torts cases should provide an appropriate unit of observation for the empirical study of motivated reasoning phenomena, while at the same time, providing some natural control for differences among issue areas.

An interesting reason for examining torts cases is disagreement as to how salient private torts cases are. On one hand, political scientists may not expect these cases to be salient because there is relatively little federal influence with respect to torts cases and these cases frequently do not establish major precedents.[30] For instance, the U.S. Supreme Court devotes less than 1% of its docket to torts cases (Spaeth Supreme Court Database, 2012). This is not particularly surprising given that the vast majority of torts cases nationally primarily involve state law, as opposed to federal law. On the other hand, state high courts seem to approach private torts cases differently from the U.S. Supreme Court. Even the state with the lowest proportion of torts cases in my analysis, North Carolina, still devotes 8% of its docket annually to private torts cases. In contrast to North Carolina, Wisconsin devotes an average of 19% of its docket to private torts cases (Wisconsin represents the other extreme).[31]

[30] On the other hand, while these cases do not result in federal precedents, they are a major area of state high court litigation, which allows for the potential for important state precedents. In the process of creating important state precedents, these new persuasive precedents might encourage other states to follow the new precedent in a diffusion theoretical framework (Canon and Baum 1981). Even though tort policies are not binding, Canon and Baum find evidence that persuasive precedents, along with similar institutional characteristics, do structure other states responses to similar questions.

[31] It is not simply the case that these two courts must accept private torts cases. Both North Carolina and Wisconsin have essentially full docket control over the civil law portion of their docket, yet both states take a much larger proportion of their caseload from private torts cases, compared with the U.S. Supreme Court. Similarly, Florida and Kentucky both have full docket control over their civil cases. Only Montana and North Dakota have less than full docket control with respect to their civil law docket in my analysis.

Several examples of public opinion and legal research elaborate on the salience of private torts in the general public. In a 1996 survey of 1,200 mock jurors (Hans), descriptive statistics show that eighty percent of the public believed that torts claims were excessive, despite the fact that in state high courts, the number of torts claims has not increased since the late 1980s, and may have in fact, decreased slightly. Additionally, approximately eighty-five percent of those polled disagreed with the notion that tort law could possibly have been designed to deter corporations (and individuals) from engaging in egregious behaviors that were punishable in a civil trial. Additionally, media also tends to heavily exaggerate the median amount of damages that a plaintiff receives in torts trials, which may skew many in the public to believe that tort law is a salient concern (Bailis and MacCoun 1996.)[32]

Furthermore, in judicial elections, torts claims frequently are a major issue and were a major substantive issue in judicial elections, from 2000-2005.[33] Perhaps the

[32] In a most striking example, Baillis and MacCoun found that while automobile accidents represent 60% of state trial court filings, in 246 articles in popular magazines in the 1980s (*Time, Newsweek, Fortune, Forbes,* and *Business Week*), only 4% of torts coverage mentioned automobile accidents. In contrast, while product liability cases only consist of 4% of state court filings, product liability cases received 49% of the tort issue coverage in these magazines. Medical malpractice was also overrepresented in magazines, with 7% of actual filings being malpractice cases, but medical malpractices cases received 25% of the total torts coverage in these magazines.

[33] Several examples exist during the 2000-2005 time period where tort reform and torts, more generally, became a major issue. These include the judicial election campaigns in 2000 in Mississippi, Alabama, Ohio, Michigan, as well as in 2002 in the same states, 2004 in Illinois, Alabama, Ohio, and West Virginia. I mention two examples in the text in greater detail.

biggest example of torts claims becoming a major issue was in the 2000 Ohio reelection campaign for Justice Resnick. In this reelection campaign, the Ohio Chamber of Commerce released an attack ad against Justice Resnick that failed. The ad showed "Lady Justice" with a blindfold over her eyes and mentioned that Justice Resnick ruled 70% of the time to support trial lawyers who made large contributions (over $750,000) (Champagne 2005). In another example of tort salience, in Alabama, after the passage of a tort reform package in 1987, the Alabama Supreme Court declared most of the act unconstitutional in the 1990s, leading to a decade-long attempt to replace most of the justices on the Alabama Supreme Court with more "business-friendly" justices, who would be less likely to uphold large tort verdicts that Alabama was infamous for at this time (Champagne 2005).

Finally, within the private torts legal domain, I hypothesize that different cases likely have different levels of salience for the public, and possibly the majority of the court. In particular, the issues of toxic torts and product liability seem especially salient for several reasons, which should support precedent citation and treatment patterns that are mixed to top-down in nature (see Baillis and MacCoun 1996). First, these cases both have the potential to affect many individuals and typically involve an individual against a major corporation, ensuring that attitudinal accessibility of these cases is at least moderately high. Second, these cases are not hugely common, but tend to revolve around issues such as environmental safety or potential hazards to children. They tend to receive much coverage in popular media, compared with less "salient" types of tort law, such as automobile accidents, which are ubiquitous, yet most of the public sees as unimportant (Baillis 2006; Baillis and MacCoun 1996.) Elaborating on this previous point, many

interest groups and/or federal governmental agencies exist that lobby and establish policies on issues of environmental safety, as well as toy safety for children, when compared with other issues such as "run-of-the-mill" car accidents and defamation cases.

I believe that "insurance bad faith" torts likely have a high level of attitudinal accessibility for several reasons. Although it is fairly unusual for individuals to know about any specific "insurance bad faith" tort cases, these cases do occasionally feature large verdicts and strongly relate to the highly politicized issue of insurance reform, which seems extraordinarily salient to state high court justices who are elected. Furthermore, mass media, such as newspapers and magazines tend to give disproportionate coverage to torts cases with especially large verdicts, which may influence the belief that the public believes that tort law is an important priority (Robbenolt and Studebaker 2003.) Given the environment that state high court justices operate in, where torts cases can define one's career as a state high court justice, given the potential for state high court decisions to alter policymaking heavily within this area (Canon and Baum 1981). Because these cases tend to receive coverage due to relatively large verdicts and a general belief in the salience of insurance fraud, I argue that these cases should have a high level of salience and attitudinal accessibility, as a result, implying that these types of cases should only be in Cells 3 or 4, but not in Cells 1 or 2.

In contrast to these highly salient cases, other types of torts cases, such as automobile accidents and medical malpractice cases are different in nature, from these charged cases. These cases typically result in an individual litigating against another individual, in addition to being relatively common case types (approximately 65% of the cases fall under these categories.) There is relatively little public knowledge about the

prevalence of automobile accidents in tort law and relatively little scholarly attention to the area. Automobile accident cases tend to be relatively clear in terms of the law, as well, resulting in fewer legal ambiguities at trial, and should generally have results that are consistent with bottom-up motivated reasoning theory (Bornstein 2008.) Additionally, these issues likely have reduced levels of attitudinal accessibility because of the lack of political interest in these cases by judges and by the population at large; unless someone is injured in an automobile accident or injures themselves on someone else's property due to negligence, there is likely not much attitudinal interest among the public (or among judges) in these cases.

In order to test my theoretical model fully, one needs to assess a general issue area that has a variety of case types with differing levels of attitudinal accessibility in order to provide a natural control for issue area, yet allow for testing of the intricate theory (and resulting hypotheses) that motivated reasoning requires. In particular, one should note that product liability, insurance "bad faith", and cases that involve individuals versus corporations should potentially have high levels of attitudinal accessibility, with varying levels of "fear of invalidation", which should encourage patterns of judicial behavior that are consistent with top-down forms of motivated reasoning. In other areas of tort law, I expect there may be a combination of either high levels of "fear of invalidation" or not much attitudinal accessibility for most judges, which should encourage behavior consistent with bottom-up forms of motivated reasoning and for mixed forms of motivated reasoning to dominate precedent citation and treatment patterns in these cases.

3.8: Summary of Chapter Three

The goal of this research is to understand how state high courts cite and treat precedent in majority opinions. Because I hypothesize that the act of citation and treatment are two separate theoretical processes for a collegial court, I analyze these two processes separately. Although these processes are linked in some ways, at least some previous research that examines these processes, surprisingly, does not find selection effects between citation and treatment (Hinkle 2013).

For both of these analyses (Chapters 4 and 5), I make several contributions from a theoretical standpoint by using motivated reasoning theory, which better elaborates as to when (and how) ideological conditions should influence citation and treatment patterns as well as under what conditions variables consistent with bottom-up motivated reasoning become statistically significant and among what categories of precedents legal variables should have an effect. While contemporary iterations of the attitudinal model of decision-making posit that ideology matters more for high salience cases than for low salience cases, my theoretical typology argues for a significantly more layered approach to understanding the act of precedent citation and/or treatment, based on the confluence of salience as well as case easiness.

In the next three chapters, I outline and conduct several empirical tests of the general theoretical implications that I describe in this chapter. Chapter Four focuses on the role of systematic information-processing frameworks on determining why state high court opinions cite particular precedents, with an emphasis on the bottom-up motivated reasoning process that should theoretically dominate the precedent citation process.

Chapter Five examines the influence of motivated reasoning on precedent treatment patterns, with a focus on understanding when ideological patterns of precedent treatment are most (and least) likely, as well as under what conditions one should see empirical implications of reasoning theory that suggest bottom-up motivated reasoning theory. Finally, Chapter Six examines precedent citation and treatment patterns using a pooled analysis (because of the lack of results for motivated reasoning), that examines precedent citation and treatment using a non-interactive approach, but simply seeks to describe general trends in the data overall for the purposes of theoretical development for future projects.

CHAPTER FOUR:

THE CITATION OF INDIVIDUAL PRECEDENTS ON STATE HIGH COURTS

The citation of precedent is an important part of judicial opinions, and hence, judicial policy-making in general. As the literature describes, the political science and legal community consider precedent citation an important indicator of how important a precedent is and potentially how applicable it is to multiple cases. While a frequently cited precedent that is applicable to many areas of the law is not qualitatively "better" than other precedents, there still is a utility and purpose for understanding patterns of state high court citation, from the perspective of a state high court opinion. Citation patterns are important because they can show under what conditions citation of precedent might have a pattern that is partially consistent with top-down forms of motivated reasoning and under what conditions bottom-up motivated reasoning variables will reduce the likelihood of behavior consistent with top-down forms of motivated reasoning. Particularly, under most conditions, I expect that citation patterns will be consistent with bottom-up forms of motivating reasoning, with the exception of citations in cases that have both high levels of attitudinal accessibility and low levels of legal clarity, which should show evidence of both top-down and bottom-up forms of motivated reasoning (i.e., "hard" cases").

This chapter is the first of three empirical chapters. For this chapter, I examine the explicit research question of what causes opinion writers to cite precedents from

petitioner and respondent briefs with the individual precedent as the unit of analysis. I hypothesize that bottom-up and top-down forms of motivated reasoning are evident in state high court opinion citation patterns.[34] In particular, top-down motivated reasoning should have two empirical regularities with respect to precedent citation. The first piece of evidence that would favor of top-down motivated reasoning, as I mention in Chapter Three, is congruence between the citation of precedent and a state high court opinion-writer's ideology having a positive association with the likelihood of precedent citation. The second evidence that might favor top-down motivated reasoning would be the appearance of interactions between legal variables and ideological congruence that would be significant, but that the legal variables would not be significant if ideological congruence was absent.

Given the theoretical discussion in the previous chapter, I hypothesize several causal mechanisms that potentially describe how motivated reasoning processes should work. It is in this chapter that I test these theoretical expectations on data regarding citation of individual precedents. This chapter is foundational in that citation is essentially one form of treatment, even if not by name. In fact, a precedent citation is an acknowledgment that a given precedent must be taken into account in order to have a proper legal understanding of a case or legal failure. If a state high court opinion fails to cite relevant precedents, it would be easy for other judges or observers of the court to "objectively" determine that such failure may lead to legitimacy concerns (Benesh and

[34] This theoretical expectation is different with respect to precedent treatment, where I expect higher levels of salience to encourage top-down forms of motivated reasoning, which contrasts with issues with reduced salience.

Reddick 2002; Klein 2002; Kassow Songer and Fix 2012.) As a result, if *fear of invalidity* is high (such as when a case is easy), judges should be especially attentive towards behaving in ways that are consistent with bottom-up forms of motivated reasoning.

The rest of this empirical chapter proceeds as follows. I begin with listing and elaborating on several specific hypotheses that follow from Chapter Three. I continue with discussion of the research design that I use to test my theoretical hypotheses. I specify several statistical models to test my research hypotheses. Finally, I conclude by interpreting these results and discussing how the results fit into the larger theoretical framework.

4.1: Theoretical Foundations and Hypotheses

I argued in Chapter Three that the impacts of top-down versus bottom-up motivated reasoning may be evident with respect to both precedent citation and precedent treatment. I expect that one would see more evidence of bottom-up motivated reasoning via non-conditional patterns of legal variables being statistically significant, such as the "strength" of precedent, attorney quality, and the degree that a precedent is persuasive. Furthermore, I argued theoretically that unlike precedent treatment, one should rarely see all of the empirical predictions that are solely consistent with top-down forms of precedent. Similarly to precedent treatment and the "fundamental model" as I outline in Chapter Three, under conditions where the law is extremely clear and where issue salience is low, patterns of citation should not be conditional on whether the citation of precedent is ideologically congruent with the state high court opinion-writer. In fact, for

cases that fit in Cell 1 (the bottom-up motivated reasoning cell), I do not expect that precedents where citation is ideologically convergent with the opinion-writer will have a higher rate of citation compared with precedents where citation is not ideologically convergent.

Unlike the case for precedent treatment, certain precedents should inherently have a higher likelihood of citation regardless of the ideology and/or direction (liberal or conservative) of the precedent. In particular, given the discussion in Chapters Two and Three about the processes of judicial decision-making and legal reasoning and the intense nature of the legal research that justices and their clerks conduct. Certain precedents will sometimes appear to be "objectively" relevant to the issues in the case regardless of the ideological preferences of the judges. For example, one might expect that in many criminal cases about the admission of a confession, judges among all ideological beliefs should agree that understanding *Miranda* is key to the resolution of the issue at hand and will cite *Miranda* even if the different judges disagree about how *Miranda* should be applied or treated in a given case. Theoretically, one of the factors that may induce the citation of precedent is if a precedent is included in both the petitioner and respondent's briefs. I hypothesize that the presence of a precedents in both merit briefs may serve as a signal to the justices on a state high court If a precedent is cited in both briefs, I expect that clerks and/or the justice themselves, in their intense reading of merit briefs by the petitioner and respondent, may focus as on the reasons that both parties cited a precedent in the briefs and will investigate these precedents that both parties cite in great detail. After engaging in this detailed fact-finding process that is consistent with bottom-up forms of motivated reasoning, it will likely be evident to the state high court opinion-

writer as to why both briefs cited the precedent and they will also likely feel a pressure to address this "important" precedent, at least by mentioning the precedent in the final court opinion, even if not actually treating the precedent in any substantive manner.

Similarly, precedents that discuss a standard of review or another technicality are likely to be less politically charged and will therefore generally not evoke a strong attitudinal response by judges. Consequently, even in a case that overall is quite salient, the technical precedents will generally be less ideologically based compared with substantive precedents. Still, in many cases, judges may not feel the need to address a technical precedent that discusses a relevant standard of review or discusses an issue of standing, etc., but does not directly relate to the substantive topic of an instant case. Because of the lack of relatedness to the instant case, I expect that state high court opinion-writers will be less likely to cite a technical precedent, regardless of the regime that one is in.

H4.1: If both the petitioner and respondent's briefs cite a precedent, there should be an increased likelihood that the precedent will be cited in the opinion.

H4.2: If a precedent is technical in nature rather than substantive in nature, there will be a decreased likelihood that the precedent will be cited in the opinion.

In Chapter Three, I outline several additional theoretical expectations with respect to various combinations of salience and case easiness. Because I expect that citation patterns primarily should be driven by bottom-up forms of motivated reasoning, I expect the majority of the results to be more similar to the bottom-up hypotheses rather than the top-down hypotheses (Hansford and Spriggs 2006.)

As mentioned in Chapter Three, legal variables should operate differently in top-down and bottom-up regimes, with respect to precedent citation. In regimes that are top down (such as Cell 4), I postulate that legal variables should only have an impact in situations where the legal variables will not force a justice to write an opinion that is against their own ideology. In other words, legal variables will sometimes influence a state high court opinion-writer's patterns of precedent citation, but only among precedents where a citation of precedent is compatible with an opinion-writer's own ideology. In contrast, in regimes that are bottom up (such as Cell 1), legal variables, such as precedent vitality and precedent origin, should have an impact in all situations, irrespective of whether a citation of precedent is congruent with the opinion-writer's own ideology (see Kunda 1990.) I expect this result to be the case because in a bottom-up regime, judges will be guided by "accuracy" goals (Fazio 1994), which will lead judges to examine evidence, such as precedents, without ideological bias and without any propensity to engage in ideological behavior.

H4.3: In Cell 4, increases in precedent vitality will increase the likelihood of a citation, only if a citation of precedent is congruent with top-down motivated reasoning.

H4.3b: In Cell 1, increases in precedent vitality will increase the likelihood of citation, for precedents that are congruent and for precedents that are not congruent with top-down motivated reasoning

H4.4: In Cell 4, increases in precedent persuasiveness will increase the likelihood of a citation, only if a citation of precedent is congruent with top-down motivated reasoning.

H4.4b: In Cell 1, increases in precedent persuasiveness will increase the likelihood of citation for precedents, regardless of whether a citation of precedent is congruent with top-down motivated reasoning.

H4.6: Precedents that are ideologically congruent (the baseline term) should have a higher probability of citation compared with precedents that are not ideologically congruent for Cell 4.

However, given the nature of motivated reasoning theory and that it naturally can be divided into two types of motivated reasoning (bottom-up and top-down), it is also important to discuss the implications of top-down motivated reasoning theory with respect to precedent citation. The first implication/signal of top-down motivated reasoning is the basic role that ideological convergence may have in a top-down motivated reasoning framework. As Chapter Three argues, one implication of top-down motivated reasoning with respect to precedent citation is that in a top-down regime, judges might be more likely to cite precedents that are being argued for in a way that allows a judge to behave ideologically, because of the lack of clarity in the law in the particular case as well as the issue being one that a judge would likely have an ideological view on (Bartels 2010.) Similarly, ideological distance may matter in a top-down regime because *ceteris paribus*, a judge would prefer to rely on a precedent that is ideologically similar to their own views rather than relying on a precedent that is ideologically distant from their views.

H4.7: In Cell 4, precedent convergence should have a positive effect on the likelihood of precedent citation.

H4.8: In Cell 4, increases in ideological distance should have a negative effect on the likelihood of precedent citation.

At this point, I continue with a zero-order difference of proportions test that is designed to take a "first look" at whether there is a difference in the proportion of cases that are cited ideologically. An additional implication of motivated reasoning theory, as articulated in the social psychology literature, is that under conditions where top-down forms of motivated reasoning are likely, there should be a greater propensity to engage in top-down patterns of precedent citation compared with conditions where bottom-up

motivated reasoning is likely. If this empirical pattern is as predicted, the proportion of precedents that state high court opinion-writers cite consistently with top-down forms of motivated reasoning should be higher for cases that are in Cell 1 compared with Cell 4. The next section describes the zero-order test in significantly more detail.

4.2: Zero-Order Test

For the initial test of my theory that under ideal conditions for top-down motivated reasoning, there will be a higher proportion of precedents that are cited consistently with top-down motivated reasoning, compared with ideal conditions for bottom-up motivated reasoning (see Bartels 2010.) Because the hypothesis test requires that I directly examine the proportion that a precedent is cited consistently with top-down motivated reasoning under two specific conditions, I use a two-sample difference of proportion tests to examine the question of whether a greater proportion of precedents that are ideal for top-down motivated reasoning are cited consistently with top-down forms of motivated reasoning. Ideally, four conditions would be satisfied in order for the motivated reasoning account to be suggestive. If motivated reasoning theory is accurate, one should expect the following ordering of the zero-order test:

Corollary 4.1a: The proportion of precedents that are cited consistently for top-down motivated reasoning will be higher for cases with both high salience AND low levels of easiness than for cases that have low salience and low levels of easiness and high salience and high levels of easiness.

Corollary 4.1b: The proportion of precedents that are cited consistently for top-down motivated reasoning will be higher for cases with both high salience AND low levels of easiness than for cases that have low salience AND high levels of easiness

Corollary 4.2: The proportion of precedents that are cited consistently for top-down motivated reasoning will be higher for cases with both low salience and low levels of easiness or high salience and high levels of easiness than for cases that have low salience AND high levels of easiness.

In order to set up the test, I create several variables that contain combinations of attributes that I argue are consistent with motivated reasoning theory as articulated by Bartels (2010.) Each pair of possible relationships are explored in this analysis: conditions where top-down motivated reasoning is most likely, conditions where bottom-up motivated reasoning is most likely, as well as an intermediate condition. For this test, I also needed to code a variable that outlines under what conditions a citation is consistent with top-down motivated reasoning. For this variable, if a precedent is liberal and a state high court opinion-writer is liberal, I code the dependent variable as a 1 if the state high court cites the precedent and a 0 if the state high court opinion-writer does not cite the liberal precedent. If a precedent is liberal and a state high court-opinion writer is conservative, I code the dependent variable as a 1 if the opinion writer does not cite the precedent and as a 0 if the opinion writer cites the precedent. The coding is similar for conservative court opinion-writers (if a precedent is conservative, I code the dependent variable as a 1 if the opinion writer cites the case and as a 0 if the opinion writer does not; the inverse is true of a conservative state high court opinion-writer interpreting precedent from a petitioner who is liberal).

The results of the two-sample difference of proportions supports Corollary 4.1b, but not 4.1a or 4.2. When examining the difference of proportions between cases that have low salience and are easy compared with cases that are high salience and difficult, the difference in proportion of citations supporting top-down motivated reasoning is statistically significant, although quite small substantively (a proportion of .321 for top-down motivated reasoning in the hypothesized bottom-up condition compared with a probability of .376 for the top-down condition.) Table 4.1 shows this particular result.

The second test, shown in Table 4.2, compares intermediate versus top-down forms of motivated reasoning with respect to the proportion of precedents that state high court opinion-writers cite consistently with top-down forms of motivated reasoning. Somewhat contrary to expectations, the corollary that Cells 2 and 3 have a lower baseline rate of top-down patterns of citation compared with Cell 4 is not supported. In fact, Cells 2 and 3 have a higher baseline rate of top-down citation even compared with cases where I expect top-down citation to be most likely (.429 for intermediate cases compared with .376 for cases where top-down motivated reasoning is most expected). This results is not in favor of theoretical expectations, in that Corollary 4.1a suggests that for motivated reasoning theory to be supported, the fundamental prediction is that cases in Cell 4 should have a higher proportion of precedents that are consistently with top-down expectations than the intermediate cells (Cells 2 and 3.)

At this point in the chapter, I continue with discussion of data limitations in my analysis and threats to generalizability due to the limited sample that I use. After this next section, I continue with a multiple variable logit regression that examines top-down and bottom-up motivated reasoning hypotheses more explicitly, by including other variables as controls.

4.3: Data Limitations/Generalizability of the Empirical Analyses in the Dissertation

Before discussing any specific research design and noting the empirical results in any form of scientific research, it is essential to note the limitations and discuss the degree of generalizability that one should make from the data in any specific research project. Even though the data and research design of a project or manuscript can be well-chosen and carefully selected in a way that mitigates bias as much as possible, at the same time, it is

also important to construct empirical analyses in such a way as to allow for valid theoretical inference from a sample that is chosen for a project to a larger population of hypothetical cases. In this section, I describe characteristics of the states that I selected for the dissertation as well as what the selection of private torts as an issue area means for larger theoretical implications of the study.

As I make clear throughout the dissertation, the sample of states that I use for the dissertation is non-random, as there were severe data limitations as of the start of the data collection for the dissertation.[35] Specifically, the major relevant data limitation for the study of precedent citation and treatment patterns for state high courts is the inability to easily obtain briefs for state high court decisions (since I did not have grant funding to travel to additional states, it was not practical for me to obtain data for states that did not have merit briefs online.)The six states that I ultimately collected data for and use for the statistical analyses in the dissertation are Florida, Kentucky, Montana, North Carolina,

[35] Fortunately, future revisions of the dissertation should allow for a sample that is more representative of the population. In the past two years (2011-June 2013), significant increases in the quantity of data (from attorney's briefs) should allow for a more robust test of the theoretical predictions and hypotheses that motivated reasoning theory addresses. Most specifically, if one examines data from the 2008-2012 time period rather than the 2000-2005 time period, there are now approximately twenty states that have the population of merit briefs for all state high court, non-criminal, cases. I plan to start coding random samples from these twenty states (the six states that are in my dissertation and roughly an additional sixteen) to create greater degrees of generalizability from the empirical tests that I construct. One of my aims in doing so is to make this section more perfunctory for future iterations.

North Dakota, and Wisconsin.[36] While these states are seemingly few in number, they actually are representative of state high courts in general. Four of the state high courts have intermediate appellate courts in their states, which means that they have the ability to decide the vast majority of their cases via a *certiorari* process that is somewhat similar to the U.S. Supreme Court.

In contrast, Montana and North Dakota's supreme courts, in some ways, are functionally similar to the U.S. Courts of Appeals in that they must accept any case that meets the requirements of standing, mootness, and ripeness, as would be similar in a federal circuit court (Songer et al. 2000.) One area where all of the states in my sample are homogenous is in judicial retention type: all six states use either partisan or nonpartisan elections of judges; none use merit retention or elite reappointment methods of judicial retention. One implication of this is that liberal judges (and court opinions) may perhaps have a slight bias towards behaving in bottom-up forms of motivated reasoning, if one makes the implicit assumption that most of the state electorate has views towards tort cases that are more conservative than the relatively liberal judges. Thus, for liberal judges, the degree of bottom-up motivated reasoning may be lessened in a larger sample of the data (I do not expect any change for moderate to conservative judges.)

[36] I originally also had data from the Texas Supreme Court as well, although inaccurate information on the Texas Supreme Court's website restricted the analysis from late 2002-2005. Because of the lack of comparability in the data time period of coverage, I ultimately chose not to use the data from the Texas Supreme Court due to concerns of temporal bias in the empirical findings.

In other aspects, the data are very representative of the population of states at large (with the usual caveat that the variance may be increased, leading to Type II errors in the sample.) In terms of tort litigiousness, the six states have a large range, with Wisconsin listed as the eighth most tort-litigious state in the United States, with North Carolina being the second least tort-litigious state. The other four states occupy intermediate positions with respect to tort-litigiousness, with Florida being relatively tort-litigious, and Kentucky, Montana, and North Dakota, occupying areas near the hypothetical median state. The degree of relative tort caseload also varies significantly among the states in my sample. While approximately 23% of the Wisconsin Supreme Court's docket consists of private tort cases (this is fairly high), in North Carolina, only 8% of the North Carolina Supreme Court's docket consists of private torts cases.[37] The other four states occupy intermediate positions, with Kentucky having private torts cases make up 12% of their docket, North Dakota and Montana have private torts cases make up approximately 11-12% of their docket, and the Florida Supreme Court having private torts cases make up approximately 17% of their docket (the data obtained are from 1995-1998, although these private torts docket rates tend to vary more by state than by temporal period or partisan composition of the court.)

Overall, the sample selection process for my dissertation analysis suggests that some degree of caution is necessary when interpreting the results for the remaining

[37] I obtained this information from the Brace and Hall State Supreme Court Data Project (2008), which contains information on approximately the population of state high court cases from 1995-1998. Nevertheless, my own examination of trends in state high court dockets after 1998 did not show major change from these particular percentages through 2005.

empirical chapters, even though I am not selecting on values of the dependent variable, which leads to within-sample bias (King Keohane and Verba 1994.) Rather, one needs to be careful with generalizability from a selection sample of limited types of cases, due to possible differences between private torts cases and other forms of law, such as criminal cases and civil liberties cases With that caveat explicitly mentioned, I generally believe that the results from the empirical analyses should translate relatively well to other state high courts, at least within the realm of tort cases.

For examining other case types, additional study is necessary as the range of salience may be limited in torts cases compared with the overall population of state high court dockets; by doing so, this might under-represent the degree of top-down motivated reasoning in other areas of the law, such as death penalty decisions (the inverse is true when solely including death penalty decisions in an empirical study of state high courts.) In contrast, private torts cases, allow for a full range of the fear of invalidation aspect of motivated reasoning studies and the results based on the changing of this factor should be robust across issue area. Future research should definitely expand the scope of issue areas of observation to obtain more robust (and varied) results of salience, which would allow for a less blunt measurement of salience.

4.4: Research Design: Data

The data for this analysis come from the population of private torts cases from six state high courts from the years 2000-2005. The six states that I utilize for the analysis are Florida, Kentucky, Montana, North Carolina, North Dakota, and Wisconsin. I use these six states because they have public data that allows for easy, free, observation and

selection of cases.[38] I classify each issue area within torts on a scale of salience, which I describe in my theoretical chapter. For the pool of precedents that I examine, I obtain these precedents from the petitioner and respondent's briefs and I only code "strong" precedents. I define a strong precedent as one that a brief explicitly discusses, rather than one that the brief cites as part of a string citation with several other citations that are related (see Collins Moyer and Haire 2009.) I only include "strong" citations in the coding scheme in order to focus on precedents that either party believes are particularly important. Strong citations in particular, are useful for study because the petitioner (or respondent) makes a definitive statement about. String citations may be seen by the litigant/respondent as *pro forma*, rather than having any intrinsic meaning for the resolution of an instant case. Any discussion of a precedent, outside of a string citation, is sufficient to make a precedent "strong" for the purposes of my analysis, and also reduces the likelihood of inter-coder reliability issues because of the relative ease (and lack of subjectivity) at identifying strong citations.

For salience, I use the definitions from my theoretical chapter. I code cases as moderate to high levels of salience if the opinion discusses the following issues: product liability, medical malpractice, individual versus business torts, business versus business torts, and insurance bad faith, as well as medical malpractice cases. I code cases as having low levels of salience if a case addresses the following issues: individual v.

[38] While all state high court opinions are accessible through regional reporters, to obtain a pool of relevant precedents for my models, I need to locate not only state high court opinions but also state high court briefs on the merits, which are only publicly available (and easily accessible) for six states for cases prior to approximately 2008.

individual injury torts, invasion of privacy/emotional distress, personal injury (against an individual), defamation, civil fraud and slander. These issue areas and categories cover all data from the case population that I test. I consider cases that have a strong fear of invalidity to be cases where the law is especially clear: that is, cases that are unanimous affirmances of a unanimous lower court decision. For cases that are not unanimous affirmances of a unanimous lower court decision, I code this variable as a zero.

Dependent Variable

For this chapter, the dependent variable that I use is whether a state high court opinion cites a particular precedent from a merit brief. For the citation model, I also separate out models by regime type, as is denoted by the description of each of the four cells in Chapter Three. I code the dependent variable for the logit model as a 1 if a state high court cites a precedent and as a 0 if a state high court opinion does not cite a particular precedent from an attorney's brief. Because of the non-normal distribution of the dependent variable and the limited values of the variable (0 and 1), I use a logistic regression model to mitigate these issues that render OLS substantially biased, such as non-normality of errors and linear predictions that may not comport with the coding of the dependent variable (Aldrich and Nelson 1984). To address issues of heterogeneity among individual precedents, I cluster standard errors on the individual state high court case that contains all of the precedents for any particular cases and include fixed effects on the individual state to address any concerns of unit heterogeneity caused by differences among states (Beck and Katz 1998.)

I use a combination of graphical and tabular approaches for the interpretation of my results, with additional in-text discussion of the results. I use several subsets and

interactions to better obtain substantively interesting results. By sub-setting the data on individual cells (of which I have four), I am better able to examine the empirical implications of motivated reasoning theory as applied to patterns of precedent citation, with respect to particular expectations of precedent citation patterns in specific cells. For the citation models, to prevent contamination of the data by including precedents that both the petitioner and respondent cite in the same model, I separate each model out into different models for the petitioner and respondent.

Top-Down Motivated Reasoning Variables

I use two primary variables to examine the potential influence of top-down forms of motivated reasoning for precedent citation. The first variable is precedent congruence, which I interact with all of the bottom-up reasoning variables below to examine the conditional hypotheses that motivated reasoning theory predicts. This variable is defined in the "Zero-Order Test" section immediately preceding the research design. The key point for this section with respect to this variable is that I interact ideological congruence with each of the bottom-up motivated reasoning variables that I discuss, based on the conditional hypotheses that I describe in Chapter Three and previously in Chapter Four. Consequently, the interpretation on the bottom-up variables is conditional on whether a citation of precedent is congruent with the opinion-writer's ideology. Because of the interactive nature of the model specification, it is somewhat difficult to address H4.7 because the coefficient will vary depending on where the "zero" value is (Brambor, Clark, and Golder 2006.) In order to partially mitigate this issue, when examining the baseline effect of precedent congruence, I set all other continuous variables to their mean values and all other discrete variables to their modal values. Consequently, my

interpretation of the baseline effect primarily applies to precedents that are near "the average."[39] I also move the persuasiveness variable to low levels of persuasiveness to show the lack of effect of congruence when persuasiveness is low. It is certainly possible that on extreme points of the data that the results for ideological congruence may vary.

The second top-down motivated reasoning variable that I use for this analysis is ideological distance. I define ideological distance as the distance in how liberal/conservative the state high court that potentially is citing the case and the court that creates the precedent. To measure ideological distance between the court setting a precedent and the court potentially citing a precedent, I use the absolute value of the difference between the opinion writer ideologies of both cases to calculate ideological distance, unless it is not possible to do so. For *per curiam* opinions, I use the median member of the court for ideology when possible to do so.[40] Because of a lack of comparability between state court and federal court ideological scales, I use relative z-scores and several tests to compare the comparability of the z-scores. While the effect of ideological influences may be less on state high courts than on the U.S. Supreme Court, evidence is strong that ideological influences still matter for state high court decision-making (Brace and Hall 1997; Langer 2002). The difficulty with creating a measure that compares state court ideology with U.S. Supreme Court ideology is the absence of

[39] A second approach that would modify the "main effect" coefficient would be to center the other interacted variables of interest at their mean (or modal values.) When doing so, the results for the main effect of ideological congruence become significant for Cells 2-4.

[40] I also test the models using the absolute value of the difference between the court medians of both cases when possible and find comparable results as for the models that I show.

directly comparable measures between federal court and state high court judges. Given this difficulty, I utilize a three-stage process that I argue is a valid approximation. First, I normalize PAJID (Brace, Langer and Hall 2000) scores for all state high court judges and calculate z-scores for each judge-year. Next, I invert and normalize the judicial common space scores (Epstein et al 2007) for federal judges for the same time period and calculate z-scores for each judge-year.[41] Third, I take the score of the opinion writers for each of the courts and take an absolute distance of the difference between the scores to create a relative ideological distance measure.[42]

To measure the validity of this measure, I performed a supplementary analysis of the comparability of the two normalized measures. Ideally, a comparability measure would have instances of judges being on all of the possible ranges of courts. While this is not possible, one can still assess the fit based on the fact that from 1970-2005, 18

[41] Either the judicial common space scores or the PAJID scores must be inverted because PAJID scores range from conservative to liberal, whereas the judicial common space scores range from liberal to conservative.

[42] The baseline score that I use for state high courts is the PAJID score by Brace, Langer, and Hall (2000). For federal courts, I utilize Epstein et al. common space scores (2007), with the exception of U.S. Courts of Appeals, where I use the Songer and Szmer modified Giles, Hettinger, and Peppers (2003) ideology scores. For lower state courts, I use the Berry et al. score for the state where the court is in for the year the opinion writer first served on the court (some lower court judges are nonpartisan, so I cannot systematically obtain information on their ideological leanings). Because PAJID scores are strongly based on the Berry et al. state ideology scores and not all state intermediate courts give information about intermediate state court judge partisanship, it is not necessarily possible to create a PAJID score for lower state court judges. I posit that this alternative is reasonable one.

individual judges have served on both state high courts and the U.S. Courts of Appeals (see Kassow, Songer, and Fix 2012). Because the common space measure (Epstein et al. 2007) for both the U.S. Courts of Appeals and the U.S. Supreme Court lie in the same ideological space, if there is no significant difference in the two sets of scores for these judges, our measure should be valid. To test this, I perform both a difference of means and a Wilcox Sign-Rank test for the normalized PAJID and common space scores of the 18 individuals. As a result, I found no statistically significant difference, confirming the validity of this measure.

Bottom-Up Motivated Reasoning Variables

I utilize three explanatory variables as indicators of my theoretical concept of bottom-up motivated reasoning: precedent vitality/strength, court of origin for a precedent, and attorney/brief quality. Again, to analyze motivated reasoning theory, I interact each of these variables with the ideological congruence variable that I describe above. I discuss each of these variables in turn in this section.

I utilize precedent vitality as a proxy for the strength of precedent. I use Hansford and Spriggs' definition (2006), which defines precedent vitality as how a court treats its own precedent over time, based on *Shepards Citations* listing of precedent treatments. If a court reinforces its own precedent in an opinion, the court gives that precedent a positive treatment. In contrast, if a court that creates a precedent attacks the precedent or reduces the applicability of a precedent, the court gives a precedent a negative treatment. Precedent vitality utilizes the sum of the number of positive treatments minus the number

of negative treatments to create a sum, called precedent vitality (Hansford and Spriggs 2006; Spriggs and Hansford 2000, 2001).

A legal service, provided through Lexis-Nexis, known as *Shepards' Citations* provides information on the population of federal and state high court cases, with respect to how other courts have discussed or treated a precedent over time. *Shepards Citations* uses several descriptors to describe case citations and treatments by various courts of interest. These include the terms "Followed", "Harmonized", "Distinguished", "Criticized", "Limited", "Superseded" and "Overruled."[43] When a precedent is "coded as "followed", this descriptor means that a court discussed and used a precedent as a primary basis for a decision. A precedent that is "distinguished" is one that a state high court rules inapplicable to a particular case at hand, which has the potential to weaken the value of that precedent for the state high court that is treating the case. Precedents that are "criticized" or "limited" are those that, in my data, a state high court attacks in writing or argues should be narrowed. Finally, precedents that are "superseded" or "overruled" are a "classic" type of negative treatments: superseded precedents are those that no longer apply because a new statute or precedent exists that makes the earlier precedent no longer binding, whereas a precedent that is overruled is explicitly made null and void by the state high court that is treating it in this way.

. If a precedent is "followed" or "harmonized," I code this as a positive treatment. I code a "distinguished", "criticized", or "limited" treatment of a precedent as a negative

[43] There are no instances in my dataset where a state high court overrules or supersedes a precedent; therefore, any discussion of these categories in *Shepards Citations* is purely for the sake of completeness.

treatment of precedent for this measure. The precedent vitality score can range from -∞ to +∞, although it only can take discrete values. In my data, these values range from a minimum of -8 to a maximum of +13.

The measure for precedent origin is relatively simple in nature. I include variables that show what type of court a precedent originates from. This variable is designed to examine the persuasiveness of a precedent, beginning with the U.S. Supreme Court which I code with a "2" if a precedent originates from the U.S. Supreme Court. If a precedent originates from the same state high court as is treating the precedent, I code this persuasiveness variable as a "1." If a precedent originates from a court other than these two, I code this variable as a "0", thereby creating an ordinal measure.

Finally, for attorney quality, I create a polychoric index of several factors that I believe relate to attorney quality, and therefore, at least indirectly related to brief quality. A polychoric index is one that potentially combines both continuous and discrete independent variables to create a principal-components index (Kolenikov 2010). Given that I intend to create a principal-components index of these variables and that a standard principal components analysis assumes an approximately linear continuous independent variable and that a tetrachoric based analysis assumes a dichotomous series of independent variables, a method is needed that can properly use both tetrachoric and linear principal components in the analysis, to create unbiased estimates and indices.[44]

[44] Because all four of the variables in the attorney quality principal-component index are dichotomous in nature, the polychoric index actually converges to a tetrachoric index in this case. Tetrachoric indices,

I base the index on four variables: whether an attorney was a member of law review in law school, whether an attorney attended an elite law school, whether an attorney had honors from law school, and whether an attorney served as a clerk for a judge. I code these variables from Martindale-Hubbell's website and augment this search with Google searches of attorneys, which contains public information on all attorneys that are not a part of local/state/federal government. I code each of these variables as a "1" if an attorney was on law review, if an attorney graduated with honors from law school, and whether an attorney attended an elite law school. I code the law review variable based on whether an attorney had any position on any law review at their particular law school; if the attorney was a member of their law school review, I code this variable as a "1." I base this measure from Slotnick's (1983) measure, where he codes the following law schools as elite: Harvard, Yale, Chicago, Stanford, Columbia, Michigan, Berkeley, Pennsylvania, New York University, Duke, Virginia, Texas, Cornell, Northwestern, and UCLA. Szmer and Songer note that this measure correlates with several other measures, which shows a certain level of construct validity (Adcock and Collier 2001, 537). If an attorney attended any of these law schools, I code this variable as a "1." Finally, for law school honors, if an attorney received "Order of the Coif", *magna cum laude*, or *summa cum laude* on their degree, I code this variable as a "1." Otherwise, I code this variable as a 0, for the purpose of the index. For the index itself, I do not use an additive index, but rather I use a polychoric principal-components index as a way to derive the variance from each of these variables that I believe fall on one

however, assume a dichotomous series of variables, whereas a polychoric index may contain both dichotomous and normally distributed constituents in the index.

dimension of attorney quality. I find that there is only one principal axis with an eigenvalue of greater than 1.0, accounting for approximately 70% of the common variance. Three of the four variables loaded substantially on this dimension; the one exception was being on law review.[45]

Although the index is one important component of attorney and/or party quality, I believe it is important to include several other potential markers of party capability as well. In particular, I include a variable that represents of attorneys representing an individual side. Szmer, Johnson, and Sarver (2007) find that for the Canadian Supreme Court, the number of attorneys representing a particular petitioner or respondent correlates with the likelihood of a particular petitioner or respondent winning on the Canadian Supreme Court. For this variable, I simply code the number of attorneys listed in the court opinion for each party, ranging from 1 to 48, although the vast majority range between 1 and 4.[46] The purpose of including attorney quality is primarily to serve for a proxy of brief quality. Unfortunately, unlike recent works on the U.S. Supreme Court (see Johnson, Wahlbeck, and Spriggs 2006; Wedeking, Owens, and Black, forthcoming), it is not possible to obtain any direct measure of brief quality from a state high court

[45] As an additional robustness check, I also include each of the constituent variables in the index individually in my analysis. I find that the lack of statistically significant results are generally similar across model specification and form of index construction. I include this series of results in an appendix at the end of this empirical chapter.

[46] Because of the possibility of high levels of skewness in this variable, I also test the variable with both the square root and natural log of team size. There is no substantive difference in the results with either alternate operationalization of the team size variable.

justice. As a result, I need to use a related proxy to "tap into" as much of the likely determinants of brief quality as possible: namely, "attorney quality."

I do not include attorney experience in my model specifications because of the lack of comparability in the values of attorney experience in my analysis. Including this variable would likely induce substantial bias in the results. In particular, for North Dakota and Montana, the number of times an attorney appears at the state high court is much higher than for other states. This finding is likely the case for two reasons: first, the population of each state is extremely small, which means that the pool of attorneys for each state is likely smaller (see Bonneau 2005, 2006). Second, North Dakota and Montana do not have intermediate appellate courts, which means that the state high courts in these states essentially function as a hybrid of lower state appellate courts and state high courts in other states, given that they must hear all cases that are appealed to the court.[47]

Finally, the other independent variable of interest that I include is a dummy variable that denotes whether both the petitioner and respondent include a citation in their briefs. Again, based on Chapter Three, I argue that if the fact that a precedent is cited by both briefs decreases the likelihood of a citation consistent with top-down motivated reasoning, this fact is suggestive of (at least partially) a bottom-up form of motivated

[47] While North Dakota nominally has a North Dakota Court of Appeals, this court consists of retired North Dakota Supreme Court justices and only hears cases that the North Dakota Supreme Court specifically sends to them. As a result, the North Dakota Court of Appeals functions differently from intermediate appellate courts in most states or from the U.S. Courts of Appeals.

reasoning (Bowie et al. 2013.) Descriptive statistics bear out the importance of this variable; based on descriptive statistics of other variables in the dissertation dataset, if both parties cite a precedent, a state high court is roughly 30% more likely to cite a case compared to circumstances when only one party cites a precedent. I code this variable as a "1" if both parties discuss the precedent and "0" if otherwise.

Control Variable

I include several control variables in my model. I include a control variable for whether a precedent is procedural in nature (i.e., whether it addresses a substantive issue related to the instant case). I expect that it may be the case that procedurally based precedents have a lower likelihood of citation compared with substantive precedents. If it does, I code this variable as a "1" and "0" if otherwise. I also include a control for team size for the petitioner/respondent. This variable is a discrete count, potentially ranging from zero (which is rare) to positive infinity (see Szmer, Johnson, and Sarver 2007.) Finally, because there are cases where both parties cite a brief, to prevent counting precedent citations twice and possibly biasing my results, I include a separate model for the petitioner and respondent in each of my tables and in the discussion.

4.5 Empirical Results

I begin with a brief discussion of descriptive statistics to examine exploratory patterns in the data before continuing with several logistic regression models. Ultimately, I present two models for the logit regression analysis (subset by petitioner/respondent): these models include several interactions, as shown in the results below. When examining the overall numbers with respect to salience, approximately .669 of the precedents in my

dataset fall into the hypothesized attitudinally accessible category, although some of these fall into the "easy"/high fear of invalidity category as well.

When looking at cross-tabulations of salience levels by state, most of the states are relatively similar with respect to proportions of cases that are salient versus non-salient based on my coding criteria. While Florida, Kentucky, and Wisconsin all have between 27 and 33 percent of cases that are non-salient by my criteria, North Carolina has 50% of cases that are non-salient issues, and North Dakota has approximately 41% of cases that address non-salient issues. Perhaps the largest surprises descriptively are Montana and North Carolina, although for different reasons. In the case of Montana, it is somewhat surprising to see such a large proportion of salient cases given the fact that Montana's high court does not have docket control. In the case of North Carolina, given that the North Carolina Supreme Court does have docket control, it is surprising to see that 50% of the cases in my analysis are non-salient, which suggests that the North Carolina Supreme Court may be taking substantively different types of cases from the other states in my analysis.

Descriptive statistics are interesting on several for the variables of note. In particular, precedent vitality ranges from a minimum to -8 to a maximum of 13, although 55% of precedents have a vitality score of 0 and approximately 90% of the precedents listed in attorney's briefs on the merits have a vitality from -2 to +2, which suggests that there are outliers with respect to precedent vitality scores.

At this point, I continue with several logit regression analyses examining how ideological congruence molds the prevalence and importance of variables associated with

bottom-up motivated reasoning theory. As indicated in Chapter Three, motivated reasoning theory leads to the expectation that in "difficult cases" that are highly salient, judges will employ mixed motivated reasoning while in easy cases with low salience, they will employ bottom up motivated reasoning, primarily. In the two intermediate categories, it is expected that the citation patterns will be primarily bottom-up, but this hypothesis is relatively weak (this is in contrast with precedent treatment, where I expect that precedent treatment patterns in the intermediate categories will be consistent with mixed forms of motivated reasoning.)

In general, the model fits of all of the statistical analyses are relatively strong, with all models have an LROC classification rate of >.7, which suggests that the model that I use fits the data acceptably. Additionally, all models have χ^2-statistics that are significant at the .0001 level, suggesting that these models are statistically discernible from a naive model.

I begin with examinations of cases that are in Cell 4 (the top-down cell), with separate models for the petitioner and respondents. My discussion of the results begins with the petitioner model, and continues with discussion of the respondent model. In keeping with the theoretical framework, I begin with discussion of the ideological congruence hypothesis, in that for Cell 4, I expect that under typical conditions, precedents where a citation is ideologically congruent with a state high court opinion-writer's ideological predisposition should have a higher base rate of citation in a top-down regime compared with precedents where a citation is ideologically in opposition with a state high court opinion-writer's ideological beliefs. In an interactive model, one needs to be extremely careful with how one interprets this finding, due to the particular

interpretation of the baseline term in an interaction.[48] Upon initial examination of the baseline coefficient (which again, only has meaning if all of the other constituent terms are artificially set to zero), the coefficient does not reach statistical significance, suggesting that at least for this limited set of observations, ideological congruence does not have the hypothesized impact on the probability of citation. Additionally, statistical tests of the difference in intercepts should only a .015 difference in the probability of citation when setting all constituent terms to zero, which does not approach statistical significance. As Footnote 48 notes, the baseline coefficient only applies to a very small subset of conditions (most importantly, where persuasiveness is zero.)

[48] Specifically, in my model specifications in Chapters Four and Five, the baseline term coefficient is only accurate when ALL of the following are true: precedent vitality is equal to zero, persuasiveness is equal to zero, attorney quality is equal to zero, and team size is equal to zero (an extremely rare configuration in the data). If the zero-term is not typical for the data on any of the variables, the baseline coefficient will be devoid of substantive meaning (see Brambor Clark and Golder 2006.) In particular, to get around this issue of a meaningless baseline term, I force Stata to derive predicted probabilities and marginal effects based on setting precedent vitality to 0, precedent persuasiveness to 1, attorney quality to -.3 (which is the mean of the data) and team size equal to 2, in order to get more useful predictions with respect to the baseline term. The key variable that seems to influence this relationship in models that relate to Cells 2-4 is persuasiveness; particularly, when persuasiveness is 0, the difference in predicted probabilities for citation as ideological congruence varies is never significant, whereas in contrast, when persuasiveness is 1 or 2, the difference in predicted probabilities for citation always reaches statistical significance. Although not an explicit part of my theory, this result is fairly interesting and suggestive that credibility of information may impact whether judges treat that information ideologically.

In order to derive more typical values for the test of ideological congruence, I set all continuous variables at their means and all discrete variables at their modal values, which gives results that are extremely different. In particular, when setting the other variables as described for determining marginal effects and differences in predicted probabilities, the difference in predicted probabilities is now .462 (with congruent precedents have a .323 higher probability of citation compared with precedents that are not congruent, which is significant at the .004 level.) Thus, at least for "typical" conditions where persuasiveness is moderate to strong, ideological convergence seems to have a large substantive impact on the probability of citation. In contrast, when persuasiveness is weak, the difference in predicted probabilities decreases to .099, which is not significant at the .1 level. These results show, that the relationship between ideological congruence and the probability of citation in Cell 4 is substantially more complex than as hypothesized, given the seeming importance of persuasiveness with respect to the proclivity to engage in top-down motivated reasoning.

In contrast to this relative ambiguous test as to the impact of ideological congruence (because the impact varies depending on the values of the other variables, given that it is interactive in a maximum-likelihood based model), the results for the other hypotheses are quite clear, given that the hypotheses are either relatively simple conditional hypotheses or are simply non-conditional hypotheses in the case of precedents being cited by both briefs and technical versus substantive precedents.

With respect to precedent vitality, coefficients are actually in the opposite direction as hypothesized, with increases in precedent vitality associated with a negative probability of precedent citation when precedents are congruent and with an increased

probability of precedent citation when the citation of precedent is not congruent with an opinion-writer's ideology. While this result is seemingly counterintuitive and is in fact in opposition to my predictions for top-down motivated reasoning, examining predicted probability plots (see Figure 4.1) helps to understand what is actually occurring in the data. Figure 4.1 includes the probability of citation on the y-axis and the level of precedent vitality on the x-axis. The two lines with point estimates (and associated 95% confidence intervals) show the predicted probabilities for precedents where citation is congruent with an opinion-writer's ideology, as well as where citation is not congruent. These results are quite interesting, with a large difference in the predicted probability of citation when precedent vitality is low, but in fact this difference dissipates as precedent vitality increases. Thus, the results seem to illustrate that most of the action in precedent vitality is occurring with strong increases in the probability of citation for precedent citations that are not congruent with ideology as precedent vitality increases, but that the same result is not true for precedents where citation is congruent with ideology. The second interesting result for petitioners relates to precedent persuasiveness. On examining coefficients, results seem to be consistent with top-down motivated reasoning, with the persuasiveness coefficient only reaching significance for precedents where citation is ideologically congruent with ideological preferences of the opinion-writer. In fact, this result is almost exactly as hypothesized, with increases in persuasiveness having no substantive impact on the likelihood of citation when citation of precedent is not congruent with the opinion-writer's ideology. In contrast, when citation is congruent, the substantive results are fairly strong (increasing from a probability of .477 for citation when persuasiveness is zero to a probability of .723 for citation when persuasiveness is

1.) Figure 4.2 shows this result graphically, with the predicted probability of citation on the y-axis and with persuasiveness on the x-axis. Additionally, the difference in marginal effects is statistically significant (.213 with a p-value of .036), suggesting that there is a difference of slopes based on whether a citation of precedent is congruent with an opinion-writer's ideological preferences.

It is necessary to also briefly discuss the results with respect to the coefficients on attorney quality and team size. Again, because of the interaction term, each of the coefficients are conditional on whether the citation of precedent is congruent with a state high court opinion-writer's ideology. With respect to attorney quality, results are not consistent with either top-down or bottom-up forms or motivated reasoning theory, given the lack of significance of the coefficients. Additionally, the marginal effects are not statistically significant and when using linear combinations to examine whether the slopes is statistically significant, the p-value is extremely large (.562 in a two-tailed test.) Similarly, coefficients on the team size variable are not statistically significant. Furthermore, when examining the average marginal effect of these variables on the probability of citation, the results are also not statistically significant. Again, linear combination tests examining the difference of slopes between the effect of team size when a citation of precedent is congruent with ideology and the effect of team size on citation when a citation of precedent is not congruent with ideology does not reach statistical significance (two-tailed p-value of .838.) Finally, both technical precedents and the presence of a citation on both briefs both work as expected. Specifically, the marginal effect of a precedent being cited in both briefs is .258 (significant at the .001 level), suggesting that moving this variable from a "0" to a "1" increases the probability of

citation by .258. Similarly, the marginal effect for a technical precedent is -.181 (significant at the .001 level), suggesting that a technical precedent, *ceteris paribus*, has a .181 lower probability of precedent citation compared with a substantive precedent.

At this point, I continue with discussion of the results in Cell 4 when looking at respondents only. Overall, the results are relatively similar to that for petitioners, with the exception that the coefficients for precedent vitality no longer reach statistical significance. Beginning with the test on ideological convergence, results are similar to that for petitioners. Using the same test that I use for petitioners, when persuasiveness is moderate, I find a .281 increase in the probability of citation, when a citation of precedent is congruent compared with when the citation of precedent is not congruent with ideology. Similar to previous results, when persuasiveness is low, ideological congruence no longer has a statistically significant effect on the probability of precedent citation (again, providing additional evidence supporting the idea that the effect of ideological congruence may be conditional on the persuasiveness of precedent.)

Similarly to my test for petitioners, the other hypotheses have somewhat less ambiguous results. Figure 4.3 shows the graphical results for precedent vitality, again with the probability of citation in the y-axis and precedent vitality in the x-axis. Importantly, even though the point estimates are increasing slightly as precedent vitality increases, the results are not statistically significant. Similarly, when testing the difference of slopes, the difference of slopes is not statistically significant (.007 with a p-value of .787.) In fact, these results support neither top-down nor bottom-up forms of motivated reasoning. On the other hand, results support top-down motivated reasoning with respect to precedent persuasiveness. Figure 4.4 shows the graphical results for

precedent persuasiveness, again with the probability of citation in the y-axis and precedent persuasiveness in the x-axis. Again, one should note that for low levels of persuasiveness, the point estimates between congruent and non-congruent citations of precedent do not vary, but the slope for precedents that are congruent is strongly positive, suggesting that the probability of citation increases dramatically for these cases (from .286 for a persuasiveness of 0 to .661 for a persuasiveness score of 1 and a .912 probability of citation for a persuasiveness score of 2.) A difference of slopes test also strongly supports top-down motivated reasoning with respect to precedent persuasiveness (the difference in slopes is .390, with a p-value of .000), suggesting further evidence that precedent persuasiveness citation patterns are consistent with top-down motivated reasoning.

Results for attorney quality and team size are almost identical for respondents as they are for petitioners, with attorney quality and team size not reaching conventional levels of significance, nor is there a statistically significant difference in slopes, suggesting that attorney quality and team size have no effect on the probability of citation. Also similar to the previous results are the effects for technical precedents and those precedents that are cited in both briefs. The marginal effect for a precedent cited in both briefs is .282, suggesting that a precedent that is in both briefs has a .282 higher probability of citation compared with a precedent that is not mentioned in both briefs. Similarly, a technical precedent has a .154 lower probability of citation compared with a substantive precedent, *ceteris paribus* (the p-value is .001.)

At this point, I continue with discussion of the precedents in Cells 2 and 3 (the intermediate cells) for petitioners. The results are similar with respect to the results in

Cell 4 with respect to ideological congruence. In particular, when persuasiveness is moderate to high, precedents where citation is congruent with a judge's ideology have a higher probability of citation compared with precedents where citation is not congruent (the difference is .206, with a two tailed p-value of .025.) Also similar are the lack of results for congruence when persuasiveness is low and holding all other variables at their means/modal values (the difference in predicted probability of citation is only .080, which has a two-tailed p-value of .494.) Again, the results indicate that the effect of ideological convergence varies according to the value of precedent persuasiveness, which is an interesting finding. The coefficient for ideological distance is not significant, nor are the individual marginal effects, or the difference in marginal effects.

Continuing with the analyses of differences in slopes, the results based on coefficient values are fairly different from the cases in Cell 4. In particular, the results for Cells 2 and 3 do not show significant coefficients for precedent vitality or persuasiveness in a manner that suggests either top-down or bottom-up forms of motivated reasoning. Similarly, the marginal effects for precedent vitality are not significant for either precedents where citation is congruent with an opinion-writer's preferences or where citation is not; the difference in marginal effects is -.019, which has a two-tailed p-value of .530. Similarly, for precedent persuasiveness, the coefficients are not statistically significant, the marginal effects are not statistically significant, and the difference in marginal effects is not statistically significant (.136 with a two-tailed p-value of 233), suggesting that persuasiveness has no effect on the likelihood of citation for these precedents.

The results for attorney quality are similar to the previous models in that the coefficients do not reach statistical significance. Perhaps more importantly, the marginal effects are also not statistically discernible from zero, nor are the marginal effects statistically different from one another (-.047 with a two-tailed p-value of .724), suggesting that attorney quality does not modify the likelihood of precedent citation. In contrast to earlier results, the effect of team size seems to correspond well with top-down forms of motivated reasoning. As predicted by top-down MR, the coefficient for team size is only significant when precedent citations are congruent with the state high court opinion-writer. Additionally, the marginal effect is significant as well, as is the difference in marginal effects (.140, with a p-value of .015.) Figure 4.5 graphically shows the effect of team size on the predicted probability of citation, with the probability of citation on the y-axis and with the team size on the x-axis. These results are consistent with top-down motivated reasoning, with team size only having an effect when precedent citations are congruent with a state high court opinion-writer's ideology. Similarly to earlier results, if a precedent in cited in both briefs, the marginal effect is .304, which suggests that the probability of citation increases by .304. Again, technical precedents have a lower probability of citation (the probability is reduced by .125, which is moderate in size.)

At this point, I continue with results for Cells 2 and 3 for respondents. Results are extremely similar to the results for petitioners, with the same variables reaching statistical significance as in the previous model. I begin with tests of the ideological hypotheses. Ideological congruence again has the same basic pattern as the previous results, with the difference in the probability of citation being statistically significant when persuasiveness

is moderate to strong, but not statistically significant when persuasiveness is weak (the difference in predicted probabilities is .215 when persuasiveness is 1, but only.064 when persuasiveness is 0, which is not statistically significant.) Again, the coefficient for ideological distance is not significant, nor is the marginal effect for ideological distance statistically significant (the marginal effect is .019, with a .479 two-tailed p-value.)

Similarly to petitioners, I find that precedent vitality, precedent persuasiveness, and attorney quality do not have statistically significant coefficients. Nor do I find statistically significant marginal effects or evidence that the marginal effects between precedents where citation is congruent with an opinion-writer's ideological preferences (or vice versa) are statistically different from one another, suggesting that these variables have no effect on the probability of precedent citation. The coefficient for team size (when a citation of precedent is congruent with an opinion-writer's ideology) is statistically significant, as is the marginal effect (.067, with a two tailed p-value of .011.) Using a linear combination difference of marginal effects test, I also find that the difference is statistically significant at the .05 level, with a difference of marginal effects centered at .1. Figure 4.5 shows the change in predicted probabilities of citation as team size increases, showing the probability of citation on the y-axis and team size on the x-axis. These results are reasonably consistent with the results that I found for petitioners in Cells 2 and 3. Finally, as with the other models, a technical precedent has a lower probability of citation compared with a substantive precedent (the decrease is .130), and a precedent that is cited in both briefs has a higher likelihood of citation compared with one that is only cited by the respondent (the marginal effect is .206.)

Finally, I discuss the cases that are in Cell 1, beginning with petitioners. Unlike the models for Cells 2-4, even when persuasiveness is moderate to high, ideological congruence does not increase the probability of a citation, which actually is in keeping with my theoretical expectations for bottom-up motivated reasoning with respect to citation (the difference in probability is only .06, which has a two-tailed p-value of .562.) Similarly, the difference in predicted probability of citation is not significant when persuasiveness is low, which is also in keeping with motivated-reasoning theory. Ideological distance, like in the other models, does not have a statistically significant coefficient. Nor is the marginal effect significant for ideological distance, suggesting that ideological distance does not have an impact on the likelihood of citation for petitioners in Cell 1.

Upon examining coefficients for vitality, the pattern appears consistent with what would be top-down motivated reasoning, except that the predicted probabilities are never statistically different from zero, suggesting that these results are problematic to interpret with respect to vitality in this model. For precedent persuasiveness, the coefficients do not reach statistical significance, nor do the marginal effects show any statistical difference based on whether a citation of precedent is congruent with top-down motivated reasoning. While attorney quality is statistically significant in terms of the coefficient value, in fact, the difference of slopes linear combination test does not suggest any difference between the marginal effect of attorney quality, which is a bit strange given the difference in coefficient p-values. Finally, the baseline coefficient for team size is significant (meaning if a precedent citation is not congruent with the state high court opinion-writer's ideology), as team size increases, the probability of a citation also

increases. Again, this result is problematic given that the difference in marginal effects test does not reach conventional levels of statistical significance (p-value is .15). Finally, the coefficient for cited by both briefs is positive and statistically significant, with the marginal effect of going from a precedent that is only cited in the petitioner's brief to a precedent that both briefs cite is marginally significant and a marginal effect of .229.

The final model for this chapter examines respondents in Cell 1. However, I will not discuss this model in great detail as there seem to be some issues in terms of separation in the model. In particular, the baseline term for precedent congruent has a coefficient of 36 and a z-score of 10.17, and the interaction between congruence and team size is -19.465, with a z-score of -10.42, which suggests one might be running into issues of near-perfect prediction, creating issues with the maximum likelihood estimates for the model. Additionally, no χ^2 statistic is reported, which also may suggest issues with the model. The LROC score is also extremely strong (probably because of the separation issue) with a score of .8947, which represents an excellent fit of the model to the data. After adjusting the model to examine realistic values of variables in the model (rather than the zero-values that I previously discussed), I found several issues. In particular, the results on ideological convergence show major issues, with the probability of a citation when the citation of precedent is convergent with the state high court opinion-writer's ideological preferences is .00005, compared with a probability of citation of .269 when a precedent is not convergent. Similarly, the interaction between ideological congruence and team size shows similar issues. As a result, I do not necessarily trust the model results that I have for respondents in Cell 1 for citation (this is partially to a small *n* problem that also is problematic in Chapter Five for Cell 1.

4.6: Conclusions

This empirical chapter has three aims within the broader scope of the dissertation. The first aim of the chapter is to outline specific research hypotheses that apply to the act of precedent citation specifically and to delineate why studying precedent citation is a useful, but not sufficient test, by itself of motivated reasoning theory as applied to precedent citation and treatment patterns. The second aim of the chapter is to discuss data limitations that apply to the empirical analyses in the dissertation as a whole. I sound a cautionary note and detail how the six states in my population resemble the aggregate population of states within America. The third aim of the chapter is to use quantitative analyses in order to determine whether my hypotheses can be falsified by the data that I collect. In this regard, I find generally discouraging findings.

The results are somewhat confounding in terms of statistical findings. While the model fit is fairly strong (LROC>.7 in all models), to a large degree, evidence does not support either top-down or bottom-up forms of motivated reasoning in the empirical models, with respect to the hypotheses about the interactions between congruence and legal variables. However, one area that is partially consistent with theoretical expectations relate to the results for ideological congruence, at least when persuasiveness is not low. When persuasiveness is moderate or high, results are consistent with top-down motivated reasoning on the ideological congruence variable for cells 2-4, but are consistent with bottom-up motivated reasoning for Cell 1, with respect to ideological congruence. However, when persuasiveness is low, ideological congruence no longer increases the probability of a citation of precedent, which is an interesting result, even if

not supportive of my theory. These results seem to show that for precedents that are not very persuasive, ideological congruence no longer has a statistically significant effect.

In contrast with this chapter, Chapter Five focuses on patterns of precedent treatment, with a primary comparison of positive versus negative forms of treatment, using a combination of logit models and Heckman probit models, due to the possibility that there is a selection effect as to whether a case is treated (with the data that I collect, I can actually control for a court ignoring precedents to some degree.) Precedent treatment is perhaps the most crucial test of motivated reasoning theory and allows for a precise empirical test of this theory because it is hypothetically more attitudinally-driven and one should see a greater influence of top-down motivated reasoning at the precedent treatment stage rather than at the precedent citation stage, although the results for precedent citation generally do not support motivated reasoning theory (with the partial exception of ideological congruence).

Table 4.1: Zero-order Test (Difference of Proportions) Results for Precedent Citation

	Bottom-up (Cell 1)	Top-Down (Cell 1)	Intermediate (Cells 2 and 3)	One-Tailed Significance Level
Bottom-up v. Top-Down	.321 (.021)	.376 (.009)	Not applicable	.0106
Bottom-up v. Intermediate	.321 (.021)	Not applicable	.429 (.009)	.0001
Intermediate v. Top-Down	Not applicable	.376 (.009)	.429 (.009)	1.0000

Table 4.2: Citation Models for Cell 4

Independent Variables	Petitioner Precedent Cited	Respondent Precedent Cited
Ideological Distance	-0.0110	-0.141
	(0.170)	(0.146)
Ideological Congruence	0.381	-0.0162
	(0.896)	(0.510)
Precedent Vitality	0.352	0.0962
	(0.0977)	(0.0787)
Congruence*Vitality	-0.492	0.0427
	(0.125)	(0.141)
Persuasiveness	0.102	-0.129
	(0.330)	(0.279)
Congruence*Persuasiveness	1.028**	1.871***
	(0.523)	(0.486)
Attorney Quality	-0.0491	-0.121
	(0.285)	(0.217)
Congruence*Attorney Quality	0.347	-0.137
	(0.593)	(0.344)
Team Size	-0.0519	0.128
	(0.162)	(0.110)
Congruence*Team Size	0.0820	-0.313
	(0.406)	(0.224)
Technical	-0.945***	-0.765***
	(0.185)	(0.204)
Cited in Both Briefs	1.204***	1.355***
	(0.250)	(0.285)
Constant	-0.458	-0.555
	(0.430)	(0.434)
Observations	991	1,054
LROC	.7576	.7540

Standard errors are clustered on the case. State fixed effects are omitted from the table for the purpose of parsimony.

*** p<0.01, ** p<0.05, * p<0.1

Table 4.3: Citation Models for Cells 2 & 3

Independent Variables	Petitioner Precedent Cited	Respondent Precedent Cited
Ideological Distance	0.0472	0.0939
	(0.131)	(0.132)
Ideological Congruence	-0.979	-0.599
	(0.759)	(0.677)
Precedent Vitality	0.135	0.0156
	(0.123)	(0.0791)
Congruence*Vitality	-0.0983	0.0774
	(0.140)	(0.109)
Persuasiveness	0.108	0.182
	(0.302)	(0.367)
Congruence*Persuasiveness	0.558	0.629
	(0.529)	(0.518)
Attorney Quality	0.322	-0.272
	(0.422)	(0.415)
Congruence*Attorney Quality	-0.248	0.381
	(0.604)	(0.615)
Team Size	-0.0895	-0.178
	(0.138)	(0.137)
Congruence*Team Size	0.641**	0.509**
	(0.299)	(0.213)
Technical	-0.645***	-0.777***
	(0.220)	(0.225)
Cited in Both Briefs	1.432***	0.994***
	(0.242)	(0.240)
Constant	-0.700	-1.042**
	(0.590)	(0.531)
Observations	1,135	1,414
LROC	.7449	.7182

Standard errors are clustered on the case. State fixed effects are omitted from the table for the purpose of parsimony.

*** p<0.01, ** p<0.05, * p<0.1

Table 4.4: Citation Models for Cell 1

Independent Variables	Petitioner Precedent Cited	Respondent Precedent Cited
Ideological Distance	-0.155	0.200
	(0.397)	(0.281)
Ideological Congruence	3.972	36.21***
	(3.310)	(3.554)
Precedent Vitality	-0.898	-0.307
	(0.461)	(0.243)
Congruence*Vitality	1.088	-0.167
	(0.672)	(0.269)
Persuasiveness	-0.359	0.521
	(0.979)	(0.982)
Congruence*Persuasiveness	-0.140	0.381
	(1.775)	(1.314)
Attorney Quality	1.845***	-0.597
	(0.613)	(0.687)
Congruence*Attorney Quality	2.494*	21.79***
	(1.452)	(1.313)
Team Size	-1.859**	0.103
	(0.772)	(0.360)
Congruence*Team Size	-1.008	-19.47***
	(1.686)	(1.848)
Technical	0.916	-0.489
	(0.953)	(0.683)
Cited in Both Briefs	3.243**	2.283***
	(1.287)	(0.782)
Constant	-2.886	-1.898**
	(1.842)	(0.962)
Observations	178	213
LROC	.8889	.8947

Standard errors are clustered on the case. State fixed effects are omitted from the table for the purpose of parsimony.

*** p<0.01, ** p<0.05, * p<0.1

Table 4.5: Cell 4 Results with Variables Centered at Their Means/Modal Values.

Independent Variables	Appellant/Centered Precedent Cited	Respondent Centered Precedent Cited
Ideological Distance	-0.0110	-0.141
	(0.170)	(0.146)
Ideological Congruence	1.468***	1.271***
	(0.566)	(0.409)
Vitality	0.352	0.0962
	(0.0977)	(0.0787)
Congruence*Vitality	-0.492	0.0427
	(0.125)	(0.141)
Persuasiveness	0.102	-0.129
	(0.330)	(0.279)
Congruence*Persuasiveness	1.028**	1.871***
	(0.523)	(0.486)
Attorney Quality	-0.0491	-0.121
	(0.285)	(0.217)
Congruence*Attorney Quality	0.347	-0.137
	(0.593)	(0.344)
Team Size	-0.0519	0.128
	(0.162)	(0.110)
Congruence*Team Size	0.0820	-0.313
	(0.406)	(0.224)
Technical	-0.945***	-0.765***
	(0.185)	(0.204)
Cited by Both Precedents	1.204***	1.355***
	(0.250)	(0.285)
Constant	-0.445	-0.391
	(0.468)	(0.414)
Observations	991	1,054

Standard errors are clustered on the case. State fixed effects are omitted from the table for the purpose of parsimony.

*** p<0.01, ** p<0.05, * p<0.1

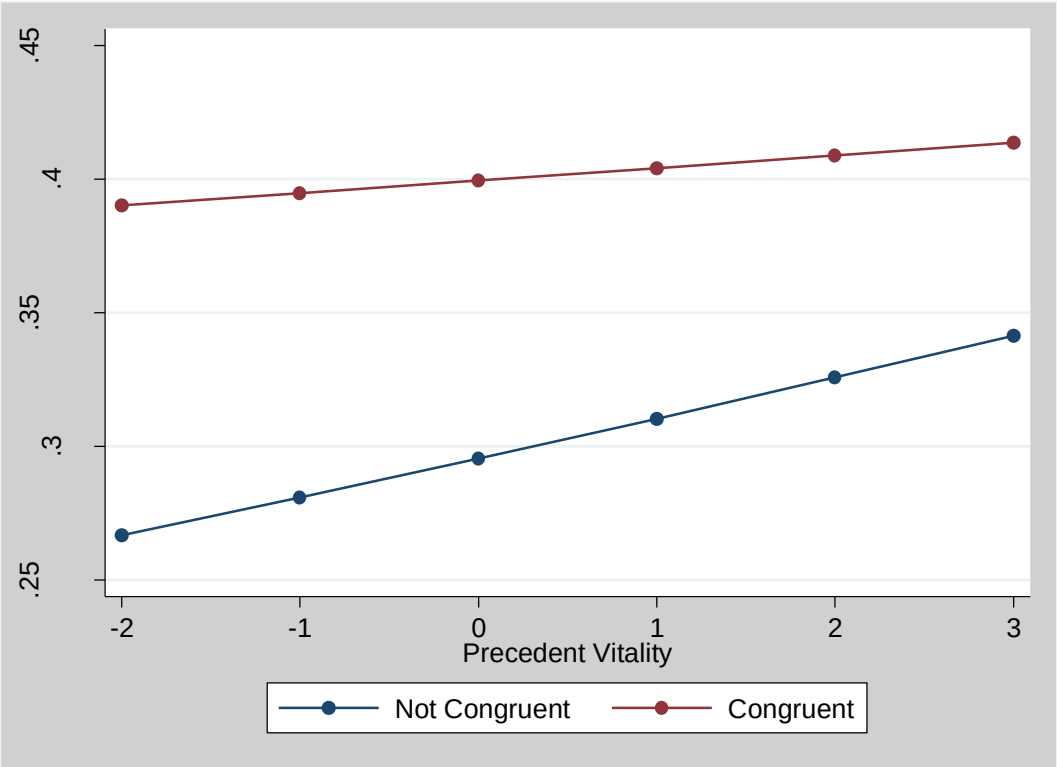

Figure 4.1: Probability of Citation for Cell 4 as Precedent Vitality Changes

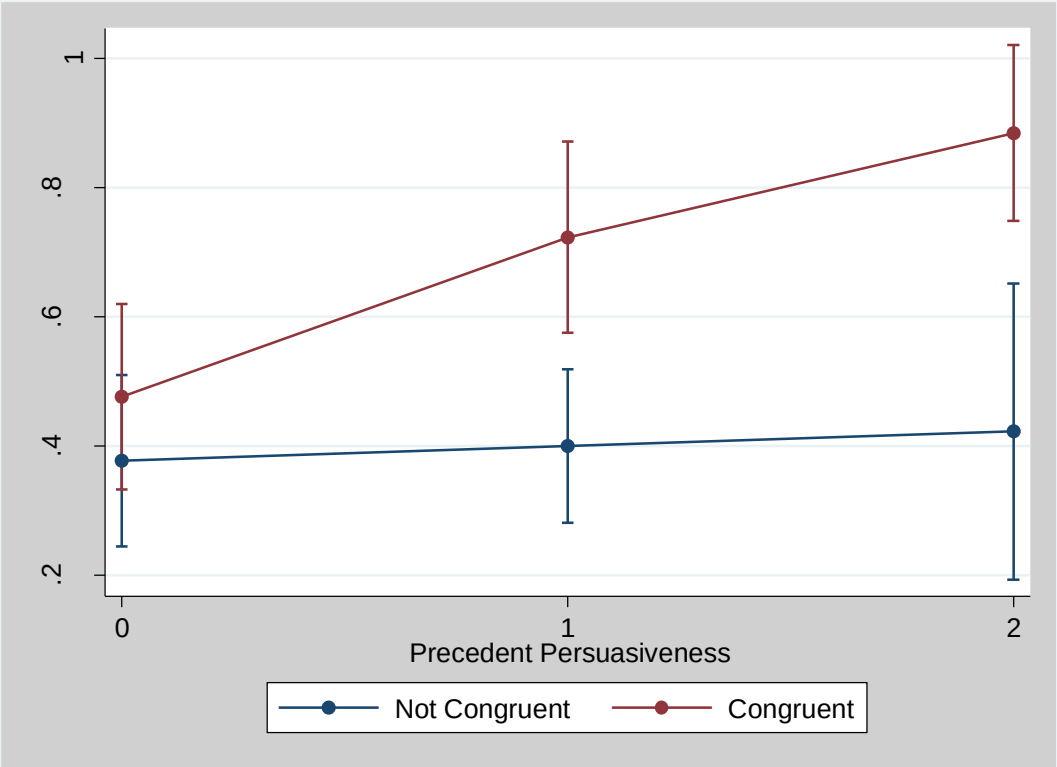

Figure 4.2: Probability of Precedent Citation for Cell 4 as Persuasiveness Changes

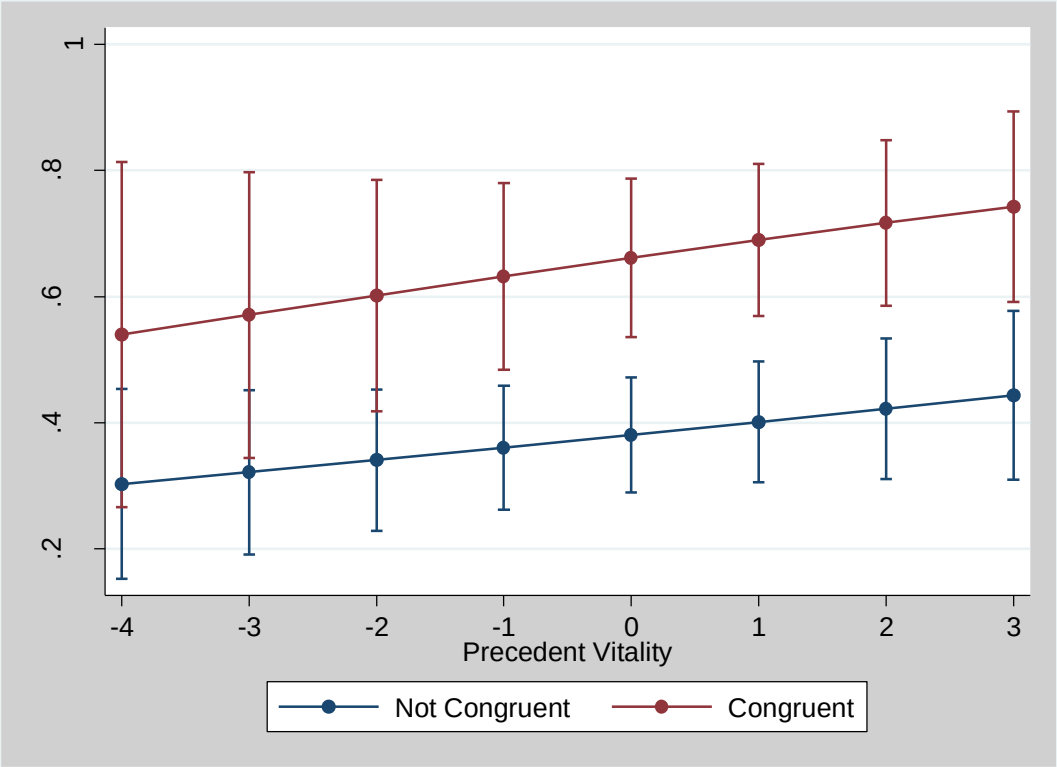

Figure 4.3: Probability of Precedent Citation in Cell 4 for Respondents

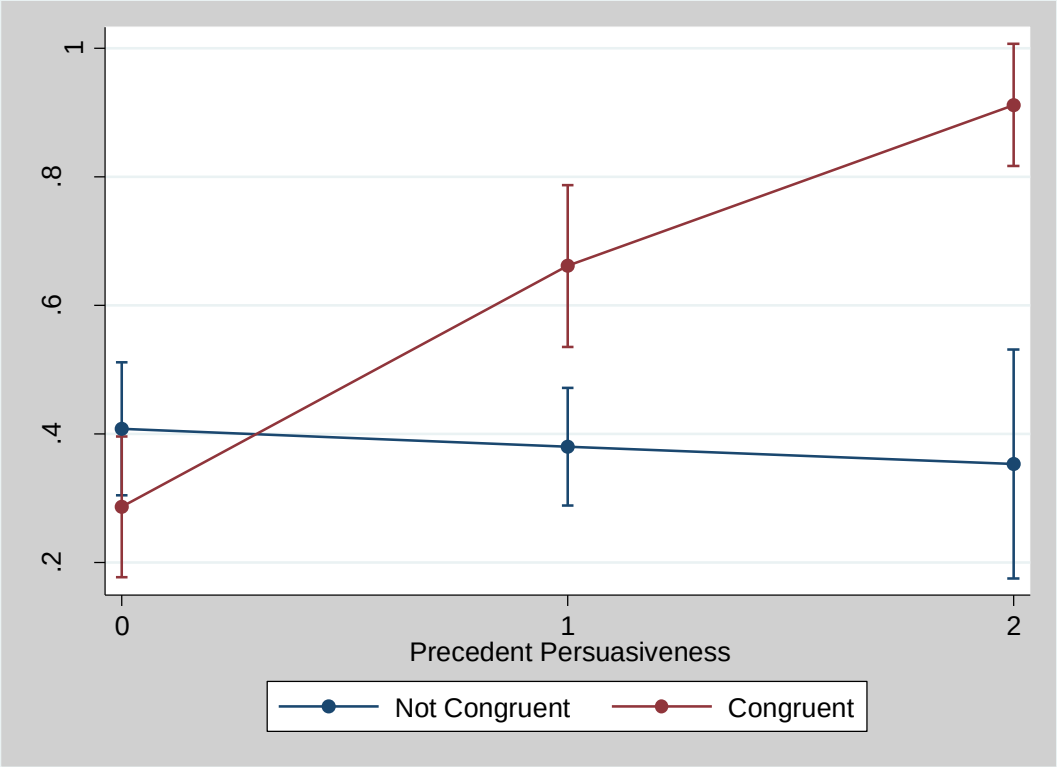

Figure 4.4: Probability of Citation for Respondents in Cell 4

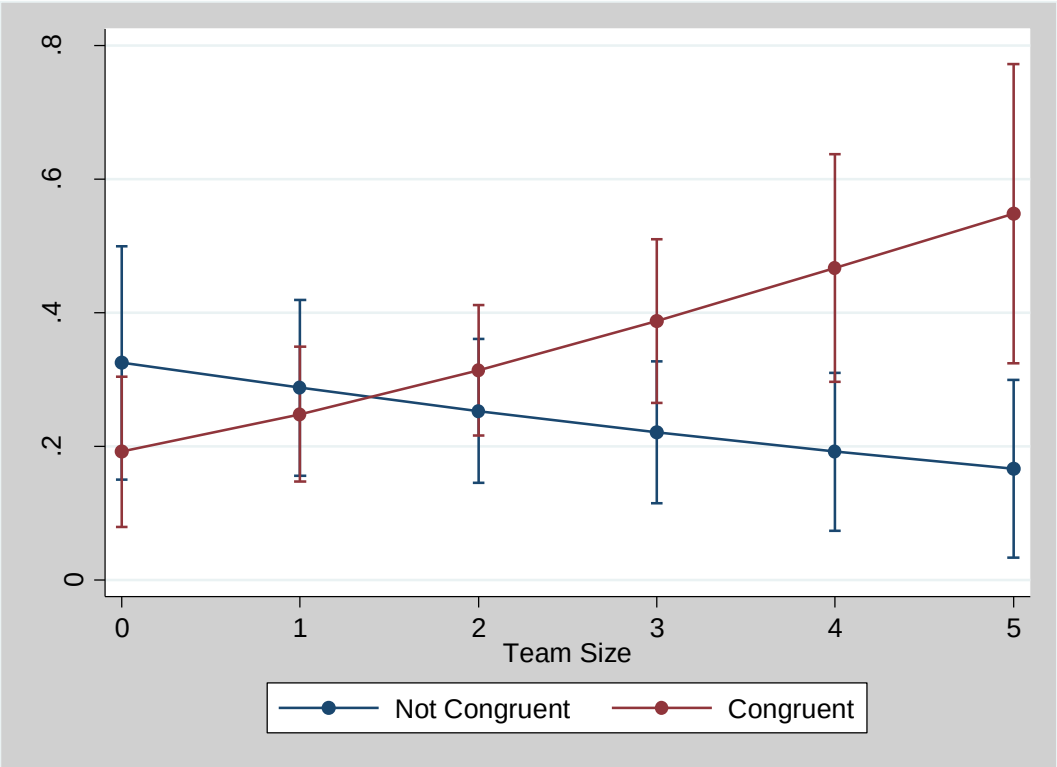

Figure 4.5: Probability of Citation in Cells 2/3 for Respondents

CHAPTER FIVE:

TREATMENT OF INDIVIDUAL PRECEDENTS

While the citation of precedent is an important part of judicial opinions and judicial policy-making, perhaps the strongest evidence of motivated reasoning should occur with regard to the treatment of precedent. Even though I find in Chapter Four that motivated reasoning's relationship with precedent citation is tenuous at best, there are several causal explanations as to why precedent treatment is more likely to correspond with either top-down forms of motivated reasoning or mixed forms of motivated reasoning, compared with the act of precedent citation.[49]

Even though the literature on precedent treatment is quite vast, there are several lacunae in the literature. One of these lacunae is a lack of understanding what factors cause state high court opinions (and common law judiciaries more generally) to cite and/or treat particular precedents within the opinion itself and under what conditions ideological treatments of precedent occur (and do not occur). Similar to previous chapters, I utilize a motivated reasoning framework to predict conditions where top-down patterns of precedent treatment are most likely.

[49] Bartels 2010 describes *mixed* forms of motivated-reasoning as occurring when there is both a bottom-up and top-down form of motivated reasoning, although both forms are attenuated compared to other conditions, where strictly top-down or bottom-up forms of motivated reasoning should dominate.

As I describe in previous chapters, the court opinion is especially important to study for two reasons. First, because opinion-writers create an explicit judicial policy through a court opinion, understanding how a court opinion-writer may decide what precedents to treat and how to treat them likely has an impact on how other courts and other political actors, both within a state and outside of a state, perceive a particular policy or understand what "the law" actually is. Second, because state high courts do not operate in isolation, but rather rely on information from other actors in the litigation process, obtaining knowledge about how state high court opinions (and judges) utilize information may be informative for our understanding of how a legal framework may operate for state high courts, as well as better understanding about the opinion-writing process and the final court policy (see Corley Collins and Calvin 2011; Corley 2007.) These actors include interest groups through *amicus curiae* briefs, oral arguments that typically last for fifteen to thirty minutes per side on state high courts, lower court opinions that help to inform state high courts about the case, as well as party briefs, which outline each party's views as to how a case should be decided and the legal framework that the decision should be best placed within. I focus on this lattermost source of information for the dissertation, generally, as well as for this specific empirical chapter.

For the empirical analysis that I include in this chapter, I again focus on a pool of "strong" precedents from attorney's briefs, determining which of these precedents a state high court treats and whether a treatment is positive or negative. Based on the literature, precedent treatment can occur in several fashions: positive, negative, neutral treatment, or simply the absence of any treatment. For this model, I focus on the act of when state high

court opinion-writers treat a precedent consistently with top-down forms of motivated reasoning, using an interactive independent variable and coupled with theoretical expectations as to what exactly top-down and bottom-up forms of motivated reasoning look like with respect to precedent treatment patterns for positive and negative precedent treatments.

5.1: The Utility/Implications of Precedent Treatment

The primary research questions for this analysis are whether legal characteristics of precedent influence how state court opinions treat precedent and whether ideological characteristics, through the process of top-down motivated reasoning, influence how state high court opinions treat precedents. In particular, given the focus of the previous chapter, which examines the influence of motivated reasoning on the inclusion of precedent citations in state high court opinions, I expand the focus to the substantive treatment of precedent. Given the focus of motivated reasoning theory on attitudinal accessibility (measured via issue salience) and fear of invalidity (measured by case easiness), I examine the treatment of precedent separately for various combinations of salience and the easiness of the case. While I find (in Chapter Four-for citation) that evidence for top-down motivated reasoning is modest at best in state high court opinions, there are several reasons to expect stronger results with respect to precedent treatment.

While no work explicitly addresses these questions to date, researchers frequently examine court treatment of precedents in several other relevant contexts, most notably through the process of compliance (Johnson 1979; Kassow Songer and Fix 2012; Westerland et al. 2010.) Notwithstanding the debate in the literature as to whether a

positive precedent treatment is actually equivalent to compliance with a precedent (see Comparato and McClurg 2007), the literature finds several important contributions that relate directly to my theory and the importance of the research question. Hansford and Spriggs (2006) find that precedent vitality influences the frequency of lower court citations and positive treatments of precedent, but find no evidence of ideological distance on the frequency of citation or positive treatment. Kassow, Songer and Fix have similar findings with respect to precedent vitality for state high court treatment of precedent, but moderately different findings for the role of ideology (see also Corley 2009; Johnson 1979.)

Other works that analyze determinants of precedent treatment of U.S. Supreme Court cases find several important covariates that relate to how precedents are treated. Lower courts (both federal and state high courts) are less likely to treat positively cases that are particularly controversial or divisive on the U.S. Supreme Court (Corley 2008.) Lower courts are more likely to cite and positively treat precedents that originate in courts that are similar to the lower court[50]. Still more works that are recent find that previous treatment of U.S. Supreme Court precedent by the U.S. Courts of Appeals has a strong influence on how the same circuit court will treat a U.S. Supreme Court precedent in the future (Westerland et al. 2010). Comparato and McClurg find similar results for

[50] The clearest example of this is in Hansford and Spriggs' 2006 book, *The Politics of Precedent.* Even though they only include court of origin as a control variable, their analysis of lower court treatment of precedent finds that the U.S. Courts of Appeals are most likely to respond to precedents that move to the U.S. Supreme Court from the U.S. Courts of Appeals

state high courts, with respect to search and seizure cases (Comparato and McClurg 2007).

Legal factors seem to matter with respect to precedent treatment, although the evidence is somewhat mixed. The literature specifically shows that precedent vitality, under some conditions, has a major impact on how lower federal and state high courts treat precedents, both at the individual and aggregate levels (Corley 2009; Hansford and Spriggs 2006; Kassow Songer and Fix 2012; Westerland et al 2010.) As with the citation chapter, the primary goal of this chapter is to examine under what conditions top-down and bottom-up forms of motivated reasoning are most likely.

5.2: Hypotheses and Theoretical Implications of Motivated Reasoning Theory on Precedent Treatment Patterns

One of the most important expectations of motivated reasoning is that in Cell 4, the greatest impact on positive treatment will come when a positive treatment of precedent is consistent with the ideological preferences of the judge. I refer to this variable as "ideological congruence" in Chapters Three and Four and continue with the terminology in this chapter. In Cell 1 (the bottom-up cell), ideological congruence should not have an impact on the likelihood of positive versus negative treatment. In Cell 4 (the top-down cell), ideological congruence between a positive treatment of precedent and the ideological preferences of the judge should result in a higher probability of positive treatment of precedent (relative to negative treatment.) As I also discuss in Chapters Three and Four,

In Chapters Three and Four, I made the theoretical claim that the impacts of top-down motivated reasoning would be evident in both precedent citation and treatment patterns, but that the largest effects and the most traditional application of motivated reasoning would be in the precedent treatment chapter (Chapter Five.) In Chapter Three, I argued that two conditions primarily would determine to what degree that legal variables would constrain justices from engaging in top-down motivated reasoning. For this chapter, I make several expectations as relate to how top-down motivated reasoning might work with respect to precedent treatment. I specifically noted in Chapter Three that ideological congruence and ideological distance should be the two primary ideological influences on state high court treatment patterns. Because Cell 4(salient issues and hard cases- see chapter three) assumes top-down motivated reasoning dominates, several tests are necessary to examine the implications of motivated reasoning theory in this chapter. I include a zero-order analysis, which simply examines the propensity for state high court opinion-writers to engage in precedent treatment patterns that are consistent with top-down motivated reasoning implications that I discuss in Chapter Three. Specifically, one of the expectations that is consistent with top-down motivated reasoning is that precedents that are ideologically congruent with positive treatment of precedents should have a higher likelihood of positive precedent treatment (see Chapters Three and Four.) I expect this to be the case because in a top-down motivated reasoning regime, judges are unconsciously being guided by their ideological beliefs. If a judge naturally empathizes (or simply agrees) and is in a situation where the judge does not have to worry about their opinion seeming invalid (i.e., if the case or issue is heavily contested from an ideological perspective), that judge may determine that the law is unclear and may innocuously allow

their ideological preferences to influence whether they treat particular precedents positively or negatively, in particular treating precedents more positively from those who they may agree with. In contrast, if a judge is in a regime where attitudinal accessibility is low and where fear of invalidity is extremely high, a judge may determine that the law is clear and therefore, they cannot allow their ideological preferences to potentially contaminate precedent treatment patterns in an instant case. Consequently, at realistic values of other variables, ideological congruence should not increase the likelihood of a positive treatment of precedent compared with the probability of a negative treatment of precedent in Cell 1.

In particular, even in top-down motivated reasoning, there are several hypotheses that one can test. First, as Chapter Three shows, as ideological distance between the opinion writer and the court that established the precedent increases, the propensity to treat a precedent positively should be reduced, regardless of whether the petitioner's brief is congruent with the opinion-writer's ideological predispositions. In Cell 4, increases in ideological distance should be associated with a decreased likelihood of a positive treatment of precedent relative to a negative treatment of precedent.

H5.2: As ideological distance increases, the likelihood of a positive treatment of precedent will decrease regardless of whether the precedent is ideologically convergent with the opinion-writer's ideology.

In bottom-forms of motivated reasoning (Cell 1), in contrast, the fact that a case is both relatively easy to resolve (regardless of ideological preferences) and is not salient suggests that ideological distance should not be a factor with respect to Cell 1. In contrast, the legal variables should be significant in Cell 1 and the interactions should also be significant. This is the case, because in conditions that encourage bottom-up

motivated reasoning (Fazio 1994; Kunda 1990), judges should be intensely examining legal arguments to determine which argument is correct. While ideological factors such as congruence should not affect the probability of a positive treatment in Cell 1, legal factors should influence the probability of a positive treatment in Cell 1, with increases in precedent vitality increasing the probability of a positive treatment for both the baseline and interactive terms for ideological congruence and precedent vitality. Similarly, increases in attorney quality, as Chapter Three shows, should increase the likelihood of a positive treatment of precedent both for the baseline and interactive term in the model.

H5.3: Increases in ideological distance should not influence the likelihood of a positive treatment of precedent in Cell 1.

H5.4: Both increases in the baseline and interactive terms in Cell 1 for precedent vitality should increase the probability of a positive treatment of precedent in Cell 1.

H5.4b: In Cell 4, increases in precedent vitality should only increase the probability of a positive treatment of precedent in the interactive term between vitality and congruence.

H5.5: Both increases in the baseline and interactive terms in Cell 1 for attorney quality should increase the probability of a positive treatment of precedent in Cell 1.

H5.5b: In Cell 4, increases in attorney quality should only increase the probability of a positive treatment of precedent in the interactive term between attorney quality and congruence.

Again, for Cell 4, I predict that the ideological terms should have results that are consistent with top-down motivated reasoning (with significant results for ideological distance as well as congruence.) Although ideological factors should matter significantly in Cell 4, legal factors should also matter, at least conditionally, as even as highly ideological judges will attempt to make the most compelling legal argument that still supports their ideological preferences.

In particular, when looking at precedents where a petitioner (or respondent) is on the same side as the judge and where the judge would naturally agree with the petitioner (or respondent), legal variables may have an effect as judges may be interested in using the law in such a way that is advantageous, but not to the degree that it legal factors would actually drive a precedent treatment pattern (see Hansford and Spriggs 2006.) For example, if a like-minded petitioner suggests four different precedents that all could be used to reach the ideological outcome preferred by the judge, the top down oriented judge may be most likely to choose and positively treat the precedent that has the highest vitality. This suggests that the interaction between the judge's preferences and the vitality of a precedent should be statistically significant while the baseline term (i.e., reflecting when the precedent is not aligned with the political preferences of the judge) should not be significant. In contrast to Cell 4, for Cell 1, the baseline legal variables (for the side that the judge is naturally ideologically opposed to) should not be statistically significant and positively signed by virtue of being in a top-down motivated reasoning framework. In fact, if the baseline legal variables were statistically significant and the interactions were also significant, this would indicate partial support for bottom-up forms of motivated reasoning, based on the lack of difference of slopes and both slopes being positively signed and significant.

H5.6: Only the interactive legal terms (not the baseline legal terms) should be statistically significant and positively signed for Cell 4.

The final hypothesis in Chapter Five relates to ideological distance in Cell 4. Unlike Cell 1, where I hypothesized that increases in ideological distance should not influence the likelihood of a positive treatment of precedent, in contrast, in a pure top-down motivated reasoning regime, ideological distance should be significant and

negatively signed, as we would expect that a judge who is acting in this regime would want to primarily choose precedents that are ideologically aligned with the state high court opinion-writer, *ceteris paribus*. I derive this hypothesis from the precedent treatment literature, which has established that ideological distance between a precedent and a court results in a lower probability of a positive treatment compared with the probability of a negative treatment (Corley 2009; Kassow Songer and Fix 2012.)

H5.7: Ideological distance should be statistically significant and negatively signed in Cell 4.

At this point of the chapter, I continue with a zero-order hypothesis test that examines a slightly different dependent variable. In particular, I create a variable that is based on whether a justice is acting in a manner that is consistent with top-down motivated reasoning. If the opinion-writer is acting in a top-down manner, I code this variable as a 1. If the opinion-writer is not acting in a top-down manner, I code this variable as a 0.[51] Because I am interested in the proportion of precedents that a state high

[51] The specific coding scheme that I use to create this variable is as follows. If a state high court opinion-writer is liberal, I code this variable as a 1 in any of the following conditions: if a liberal respondent asks for a positive treatment and receives one, if a liberal respondent asks for a negative treatment and receives one, if a conservative respondent asks for a positive treatment of a precedent and gets a negative treatment, and if a conservative respondent asks for a negative treatment of a precedent and gets a positive treatment of precedent. For conservative opinion-writers, I code a 1 as follows: if a liberal respondent asks for a positive treatment and gets a negative treatment, if a liberal respondent asks for a negative treatment and gets a positive treatment, if a conservative respondent asks for a positive treatment and gets a positive treatment, and if a conservative respondent asks for a negative treatment and receives a negative treatment.

court opinion-writer uses in a top-down manner, the variable is dichotomous and a two-sample test of proportions is appropriate.

When first examining the extreme case of Cell 1 versus Cell 4, contrary to predictions, the zero-order test does not show a difference in the proportion of precedents that are treated consistently with top-down motivated reasoning (the proportion of precedents treated consistently with top-down motivated reasoning in Cell 1 is .416 compared to .405 in Cell 4). When comparing the intermediate cells (Cells 2 and 3, combined) with Cell 4, the difference between the proportions of precedents that are cited consistently with top-down motivated reasoning is statistically significant (.313 for Cells 2 and 3 versus .405 for Cell 1). These results are suggestive of the fact that the intermediate cases in Cells 2 and 3, in fact, may be somewhat unique from the other categories of the matrix in the dataset. These results are somewhat counterintuitive in that I expected the proportion to be lowest in Cell 1, with Cell 4 occupying a higher proportion of precedents that are treated consistently with top-down motivated reasoning expectations. I also expected that Cells 2 and 3 would occupy an intermediate position in the zero-order analysis. At this point, I continue with discussion of the research design for the multiple logit models.

5.3: Research Design

The data that I use for this analysis is analogous to the analysis in Chapter Four, although the emphasis of the analysis is on patterns of precedent treatment rather than precedent citation. Because I am primarily interested in whether a precedent is treated positively and to what degree precedent treatment patterns are congruent with top-down

or bottom-up forms of motivated reasoning, I again primarily rely on interactions between ideological congruence and the legal variables that I discuss previously in Chapter Four.

Dependent Variable

The dependent variable for my analysis is the type of treatment that a state high court majority opinion applies to a precedent from an attorney's brief. The possible categories for this dependent variable are positive (when a state high court opinion relies on a precedent), and negative (where the state high court opinion attacks a precedent or states why a precedent is not applicable to a case). I do not include neutral precedents treatments or cases that are not treated in this model.[52]

Independent Variables

At this point, I discuss several independent variables, beginning with attitudinal variables and continuing with legal variables.

Precedent is Congruent with Court Opinion-Writer: I use this variable as a way to make the necessary interactions for my motivated reasoning hypotheses. This variable is coded as a 1 when a precedent is used in a brief to advance a policy position that is consistent with the policy preferences of the state high-court opinion writer. Specifically, if a positive treatment of precedent is consistent with top-down forms of motivated reasoning,

[52] I have run various Heckman probit models, however, to try and control for any possible selection effects. The selection models have issues converging and when these models successfully converge, likelihood ratio tests indicate that these models do not work any better than a regular probit (or logit) model.

I code this variable as a 1. If a positive treatment of precedent is not consistent with top-down forms of motivated reasoning, I code this variable as a 0.

Ideological Distance: I use the same ideological distance measure that I use in Chapter Four of the dissertation.

Each of the following variables are interacted with this precedent congruence variable, in a similar fashion to Chapter Four:

Precedent Vitality: I use the same measure for precedent vitality that I use in Chapter Four, as well. Precedent vitality is also interacted with precedent congruence in this model.

Court of Origin/Persuasiveness: The court of origin ordinal variable is the same in this analysis as in Chapter Four. Persuasiveness is interacted with precedent congruence in this model

Attorney Quality: The attorney quality measure is the same as what I use in Chapter Four and is interacted with precedent congruence.

Team Size: This variable is identical to what I use in Chapter Four and is interactive with precedent congruence in the model.

I include a control for whether a precedent is technical or substantive, similarly to Chapter Four, but remove the control for whether both briefs cite a precedent in the model specification, as I do not expect this variable to be pertinent for precedent treatment patterns. Again, similarly to Chapter Four, I include (but do not list) fixed effects on the state to control for cross-sectional heterogeneity, as well as utilizing

clustered standard errors on the case to mitigate the concern of correlated errors within cases (Arceneaux and Nickerson 2009.)

Method of Analysis:

For the method of analysis for this chapter, I rely on a series of logit models, because of the dichotomous nature of the dependent variable (Nelson 1984.)[53]Similarly to Chapter Four, I primarily utilize graphical techniques to show predicted probabilities and marginal effects of the hypothesized relationships in this chapter. I also include selection models in appendices using a dependent variable on the selection stage of whether a precedent was treated (either positively or negative) in a state high court opinion, but do not rely on the models too heavily because of the lack of theory as to which precedents are substantively treated by state high courts. Additionally, for selection models, it is generally problematic to use the same variables on the selection stage as on the main stage, due to issues of model identification, requiring that one have strong theory as to predictors for both stages of the model. Because the selection models do not reach statistical significance and because I do not have a strong theory as to what the selection mechanism should be for precedent treatment (I show them in the appendices to Chapter Five), I focus on the more parsimonious logit models.

[53] I also have tested the model with several Heckman Probit selection models. In no case was there any statistically significant selection effect in any of the models, when the models successfully converged.

5.4: Logit Results

I continue with discussion of the results of the multiple logit models at this point. Again, for these models, I begin with a brief section of descriptive statistics with respect to the dependent variable (positive or negative precedent treatment type). When examining the dependent variable without any subsets, the distribution of 0's and 1's is relatively even, suggesting that a scobit or rare events logit regression is likely unnecessary for the purposes of modeling statistical results. 54.5% of the data are coded as positive treatments, where 45.5% of the data are coded as a negative treatment. In this model, I exclude neutral treatments, as well as precedents that are cited but not treated in a state high court opinion. Towards the end of this section, I also include several Heckman probit models as a way to examine whether there is any substantial selection effect that may be biasing the statistical results in the standard logit models. While the breakdown of proportions of 0's and 1's are similar for the cases that fit in Cell 4, for the precedents that fit in Cell 1 (only 72), the proportions are roughly reversed with 55.6% of precedents coded as negatively treated and only 44.4% of cases coded as positively treated.

I begin with discussion of the first model, which examines the likelihood of a positive treatment in Cell 4. I begin by first discussing the difference in predicted probabilities between precedents that are congruent and precedents that are not congruent, setting all other variables to mean values (for continuous variables) and modal values (for discrete variables). Because the baseline coefficient for congruence assumes that all variables that are interacted are artificially at zero, simply examining the value of the coefficient is not an ideal test for examining shifts in intercepts (Brambor, Clark, and

Golder 2006.) Rather, a more appropriate test must allow for one to set the baseline for the other interactive terms at reasonable values in the data. For this test, I set all continuous variables at their mean and all discrete variables at their modal values. In fact, I find that upon doing this, the difference in predicted probabilities for a positive versus negative treatment is statistically significant, in the expected direction at the .002 level. Specifically, for precedents where a positive treatment is congruent with a high court opinion-writer's ideological predispositions, the probability of a positive treatment is .858, whereas for precedents where a positive treatment is not congruent with a high court opinion-writer's ideological predispositions, the probability of a positive treatment is only .567. Additionally, ideological distance does not approach conventional levels of statistical significance, suggesting that ideological distance does not have an influence on the likelihood of a positive or negative treatment of precedent. To examine the other hypotheses for Cell 4, the focus of the hypotheses tests must shift to examining coefficients and tests of differences in marginal effects to ascertain whether precedent congruence modifies the effect of other variables, as motivated reasoning theory predicts.

As previously mentioned, I use a combination of examining coefficients and tests of differences in slopes to determine whether the data and empirical results support my conceptualization of motivated reasoning theory. I begin with discussion of the interaction between ideological congruence and precedent vitality. Examining the coefficients, when a positive treatment of precedent is not congruent with an opinion-writer's ideology, increases in precedent vitality increase the likelihood of positive treatment (comporting with mixed or bottom-up motivated reasoning), but for precedents that are congruent with an opinion-writer's ideology, the effect is in the wrong direction

and statistically insignificant, at least from examining coefficient values. To assess whether a statistically significant difference in slopes exists, I use a linear combination test. While the difference in slopes test is marginally significant, the finding is negative, which is contrary to theoretical expectations. Finally, Figure 5.1 shows the change in predicted probabilities graphically, with the predicted probability of positive treatment on the y-axis and vitality on the x-axis, which comports with the previous two tests that I describe above.

The next variable that needs to be examined in the analysis is the interaction between precedent congruence and persuasiveness. Initial examination of the coefficients and tables suggests results that are similar to what one would expect from top-down motivated reasoning, with the coefficient for the interaction term being significant and positive, whereas the baseline term for persuasiveness is positively signed, but not near conventional standards of statistical significance. On the surface, this result seems to favor top-down motivated reasoning theory with respect to the role of precedent persuasiveness.

One must examine differences in marginal effects and/or predicted probabilities to better ascertain whether there actually is a real difference in whether precedent congruence alters the slope of persuasiveness. Again, in top-down motivated reasoning, I expect that the coefficient should only be statistically significant for precedents where top-down motivated reasoning is congruent with an opinion-writer's ideology. Additionally, there should be a statistically significant difference in the magnitude of the marginal effect, which I find is marginally significant in the expected direction (the difference is .232, with a two-tailed p-value of .067.) The linear combination difference

of slopes tests shows a marginally significant two-tailed test and the difference of slopes is positively signed, suggesting that for cases that are ideologically congruent, increases in persuasiveness have a larger effect on the probability of positive treatment, compared with precedents where a positive precedent treatment is not ideologically congruent with a state high court opinion-writer's ideological beliefs. Figure 5.2 shows a summary of these results graphically, with the predicted probability of a positive treatment (versus a negative treatment) on the y-axis and the level of persuasiveness on the x-axis. The difference in predicted probabilities of positive treatment, however, is only statistically significant for higher levels precedent persuasiveness, suggesting that if a precedent is not persuasive, ideological congruence between a precedent and an opinion-writer does not matter with respect to patterns of positive treatments of precedent.

Results with respect to attorney quality and team size generally do not comport to theoretical expectations. Examining the p-values on the coefficients in the logit model, statistical evidence suggests that attorney quality and team size do not exert an effect on the likelihood of positive versus negative treatment of precedents regardless of whether a positive treatment of precedent is naturally congruent with a state high court opinion-writer's ideology. Even though the coefficients do not reach statistical significance, I do run the linear combination difference of slopes tests on these variables to examine evidence of any type of difference that may be suggestive of top-down or bottom-up motivated reasoning. With respect to attorney quality, I find no statistically significant difference between the slopes for attorney quality regardless of whether a positive treatment of precedent is ideologically congruent with a state high court opinion-writer's ideological predispositions. Similarly, I find no statistically significant difference

between the slopes for team size, suggesting that neither attorney quality or team size has an effect on the likelihood of positive versus negative treatment. Furthermore, this relationship does not seem to be conditional on whether a positive treatment of precedent is ideologically congruent with a state high court opinion-writer.

Although it is impossible to run a logit model on Cell 1, due to issues with a small number of precedent treatments of precedents that fit the requirements for Cell 1, I do include an analysis of Cells 2 and 3 in one model and compare the results with what I found in Cell 4. Again, results do not generally seem to support either top-down or bottom-up forms of motivated reasoning, with respect to precedent treatment patterns, as I hypothesized. Again, similarly to Cell 4, I begin with a test to examine whether ideological congruence between a positive treatment of precedent and a state high court opinion-writer increases the probability of a positive treatment for Cells 2 and 3. Because of the nature of interactive terms and that the baseline indicates results that moves all other variables to values of zero (regardless of whether this makes sense), the best way to examine this first hypothesis is to set all of the interacted variables to realistic values in the data, namely the mean for continuous variables and modal values for discrete variables.

Similarly to the results for Model 1 that examines Cell 4, ideological congruence at realistic values of the data does seem to increase the likelihood of a positive treatment of precedent compared with a negative treatment of precedent, suggesting that the ideological congruence baseline results are comparable for Cells 2/3 and Cell 4, even if the effect is slightly smaller (the baseline probability of a positive treatment is .74 if a positive treatment of precedent is congruent with an opinion-writer's ideology, versus a

probability of .488 if a positive treatment of precedent is not congruent with an opinion-writer's ideology.) The results on this variable are highly consistent with what one would expect from top-down motivated reasoning and the substantive effect, as one can see, is quite large. In contrast, ideological distance does not seem to have any type of systematic effect on the likelihood of positive treatment of precedent for precedents that are congruent (or are not congruent) with the ideological predispositions of the state high court opinion-writer.

Results for precedent vitality are essentially identical to that in Cell 4, with precedent vitality only having a positive impact on the likelihood of precedent treatment if a positive treatment of precedent is not congruent with an opinion-writer's ideology. Again, Figure 5.3 shows the probability of positive treatment on the y-axis and precedent vitality on the x-axis. One should note that the coefficient for vitality is positively signed and significant when a positive treatment of precedent is not congruent with an opinion-writer's ideology, but is marginally significant and negative, contrary to theoretical expectations. Figure 5.4 shows the predicted probability of positive treatment on the y-axis with precedent vitality on the x-axis. The figure shows that for high levels of precedent vitality, ideological congruence does not have an impact, although for lower levels of precedent vitality, ideological congruence may have an impact on the likelihood of positive treatment (but note the large confidence intervals for precedents where a positive treatment is congruent with a state high court opinion-writer's ideological beliefs.) Running a difference of slopes tests also shows a statistically significant difference between the slopes, although negatively showed, suggesting additional evidence that the graph already shows with respect to the patterns of slopes for vitality.

Results for persuasiveness are somewhat suggestive of interesting results, but there are some issues with the results. Again, results show no statistically significant difference in the point estimates when persuasiveness is minimal, but as persuasiveness increases, precedents that are ideologically congruent have approximately a .25 higher probability of positive treatment compared with precedents that are not. However, difference of slopes tests conclude that there is not a statistical difference between the slopes of precedents that are congruent compared with the slopes that are not. Similarly, coefficient p-values approach, but do not reach, conventional levels of statistical significance for this variable. Similarly to Cell 4, attorney quality and team size do not exhibit any influence on the probability of a positive treatment of precedent (versus a negative treatment). Although team size approaches marginal levels of statistical significance for precedents where a positive treatment is convergent with a state high court opinion-writer's ideological predisposition, in fact the substantive effect is small (considering the baseline probability of positive treatment is already extremely high for these cases).

Finally, I include some brief discussion of cross-tabulations of results examining Cell 1, the hypothesized bottom-up condition for motivated reasoning. Unfortunately, because of the lack of data, it is not possible to get trustworthy results with respect to the examination of Cell 1 for precedent treatment, leading to a partially incomplete test of my theory due to data limitations. For the cross-tabulations, I include the dependent variable for my analysis (treatment type) along with several of the independent variables that I use to test for bottom-up reasoning (focusing particularly on precedent vitality and persuasiveness.)

When examining the precedent vitality cross-tabulations for Cell 1, there does not seem to be any visible consistent relationship or interesting patterns in the data. In particular, the majority of precedents have a vitality of 0, with relatively little variation in the vitality scores. Additionally, there does not seem to be much of a trend in increasing proportions of positive treatments as precedent vitality increases, although the Pearson χ^2 statistic is statistically significant at the .001 level, suggesting that there are statistically significant differences among the three categories in terms of the proportion of positively treated precedents. In contrast, while persuasive precedents seem to have a visual difference in terms of the relative proportion of positively treated precedents, in fact, Pearson χ^2 statistics do not show evidence of any statistically significant differences in the proportions of positive treatments.

5.5: Conclusions

Somewhat surprisingly, results mostly do not show strong evidence for motivated reasoning patterns of precedent treatment, as I hypothesized. While Cell 4 has some results that are compatible with top-down motivated reasoning (notably ideological congruence, at least when persuasiveness is now low), other results are quite confounding. In particular, precedent vitality exerts effects in the model that are not consistent with either top-down or bottom-up forms of motivated reasoning. Also problematic, as is the case with the other models, attorney quality and team size do not seem to exert an effect compatible with either top-down or bottom-up forms of motivated reasoning. Consequently, for Cell 4, while some evidence exists in favor of top-down motivated reasoning, the results are fairly weak and highly conditional.

Unfortunately, in the treatment model, it is not possible to test Cell 1 in the logit model because of a lack of observations causing logit models to be unable to converge. However, when examining cross-tabulations, the theory, with respect to theoretical expectations for Cell 1, does not seem to be supported in the descriptive data. When testing Cells 2 and 3, the results are fairly similar to that in Cell 4 (where ideological congruence matters, at least when persuasiveness is not low.) Also a bit strangely, results for precedent vitality are not consistent with either top-down or bottom-up motivated reasoning. It is also troubling in Cells 2 and 3 for my theory that none of the other variables reach statistical significance in this model, which suggests that motivated reasoning models may not adequately explain precedent treatment, especially for cases that are not in Cell 4. In fact, these intermediate cases are acting pretty similarly to the top-down cases.

So, why might motivated reasoning not function as predicted in the precedent treatment models? Perhaps, unlike Bartels' theoretical account of motivated reasoning for U.S. Supreme Court decision-making, the idea of motivated reasoning might not actually be an appropriate theoretical model for analyzing state high court citation and treatment patterns. Rather than assuming that a justice in Cell 1 or Cell 4 will be in a condition where either top-down or bottom-up forms of motivated reasoning dominate, perhaps it is the case that the effect of ideological and legal factors cannot simply be forced into a 2x2 matrix, but that there is a continual interplay of ideological and legal factors across all case types with respect to precedent treatment. A consequence of this would be that one should never expect pure top-down or bottom-up motivated reasoning when analyzing

treatments of precedents. Another possibility is that private torts do not offer enough variation in the degree of salience and enough variation in the *fear of invalidation*.

In the next chapter, I focus on other potential explanations of precedent citation and treatment patterns besides motivated reasoning. In particular, I run several models that analyze the total number of precedents in one model, focusing on to what extent ideological and legal factors predict the likelihood of a positive or negative treatment of precedent. In this chapter, I find evidence that suggests that when looking at all state high court torts precedents in one model, both attitudinal and legal factors help to explain why state high court opinions are likely to cite and treat positively particular precedents. After Chapter Six, I conclude the dissertation with additional comments about motivated reasoning theory and precedent citation and treatment patterns more generally.

Table 5.1: Zero-order test results for a difference in proportions test of ideological treatments of precedent for each of the four cells.

	Bottom-up	Top-Down	Intermediate	One-Tailed Significance Level
Bottom-up v. Top-Down	.416 (.058)	.405 (.023)	Not applicable	.5725
Bottom-up v. Intermediate	.416 (.058)	Not applicable	.313 (.025)	.9554
Intermediate v. Top-Down	Not applicable	.405 (.023)	.313 (.025)	.0050

Table 5.2: Treatment Type of Precedent for Cell 4

Independent Variables	Positive Treatment of Precedent
Ideological Distance	-0.128
	(0.306)
Ideological Congruence	0.665
	(0.733)
Precedent Vitality	0.533**
	(0.220)
Congruence*Vitality	-0.646*
	(0.375)
Precedent Persuasiveness	0.525
	(0.530)
Congruence*Persuasiveness	1.618**
	(0.763)
Attorney Quality	-0.276
	(0.341)
Congruence*Attorney Quality	-0.604
	(0.463)
Team Size	0.179
	(0.185)
Congruence*Team Size	-0.389
	(0.285)
Technical	0.0716
	(0.469)
Constant	-0.538
	(0.678)
Observations	352
LROC	.7886

Clustered standard errors on the case in parentheses. State-level fixed effects are used, but not reported.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.3: Treatment Type of Precedent for Cells 2 and 3

Independent Variables	Positive Treatment of Precedent
Ideological Distance	0.309
	(0.358)
Ideological Congruence	-1.052
	(0.791)
Precedent Vitality	0.750***
	(0.278)
Congruence*Vitality	-0.553*
	(0.336)
Precedent Persuasiveness	0.698
	(0.428)
Congruence*Persuasiveness	1.064
	(0.761)
Attorney Quality	0.140
	(0.443)
Congruence*Attorney Quality	-0.216
	(0.690)
Team Size	-0.242
	(0.239)
Congruence*Team Size	0.558
	(0.367)
Technical Precedent	-0.133
	(0.485)
Constant	-1.322
	(0.868)
Observations	309
LROC	.7585

Standard errors are clustered on the case. State fixed effects are utilized, but not included, in the models.

*** p<0.01, ** p<0.05, * p<0.1

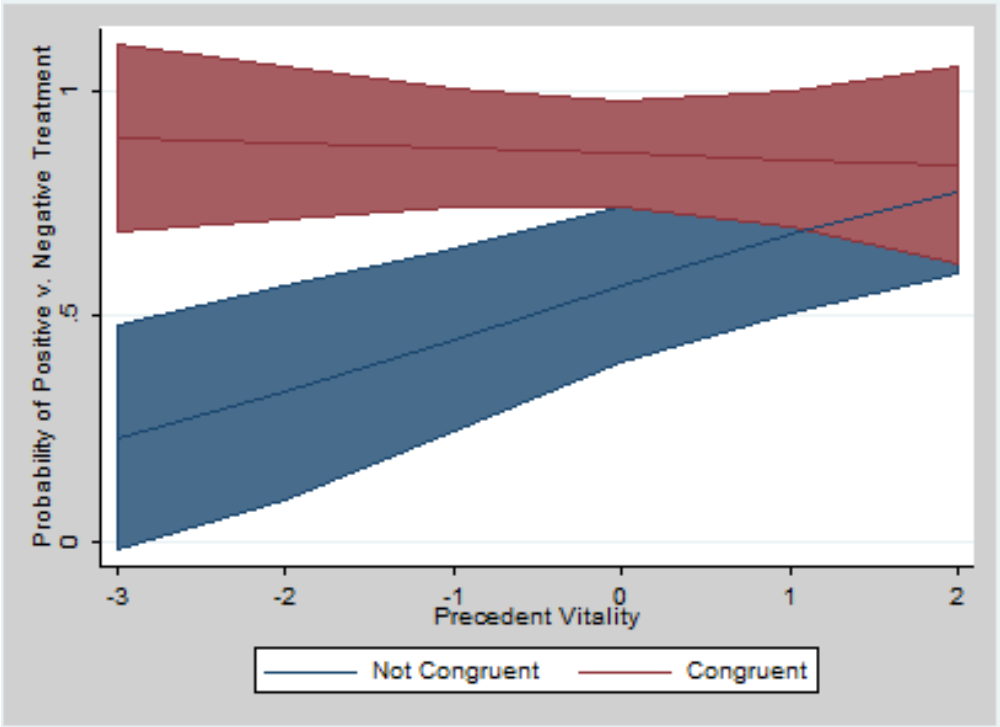

Figure 5.1: Likelihood of Positive Treatment as Vitality Increases in Cell 4

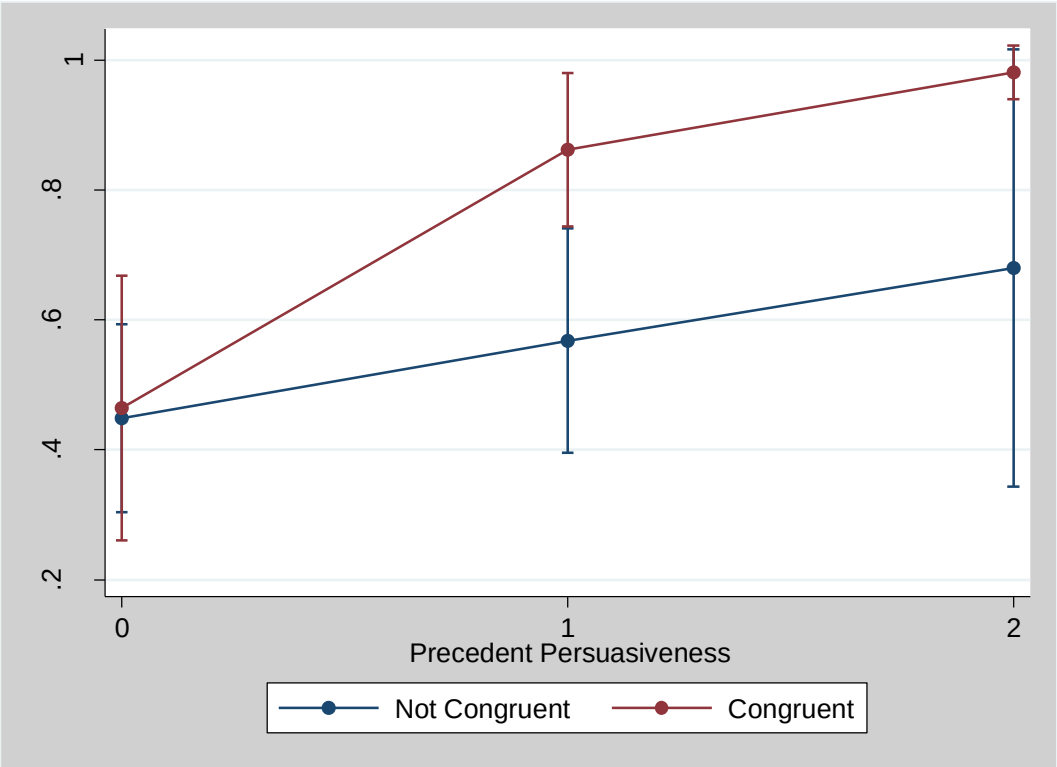

Figure 5.2: Predicted Probability of Positive Treatment in Cell 4 as Persuasiveness Increases.

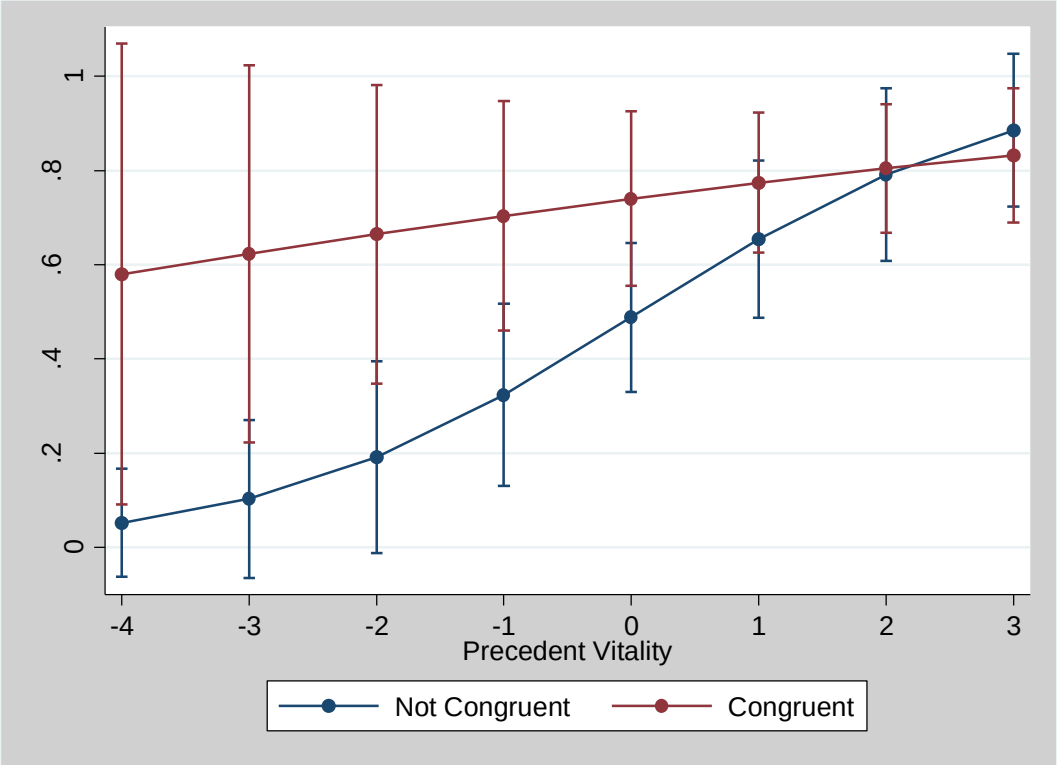

Figure 5.3: Probability of Positive Treatment in Cells 2/3 as Vitality Increases

Table 5.4: Cross-tabulations of Vitality and Treatment Type for Cell 1

Positive Treatment	(1) Negative Vitality Frequency	(2) Neutral Vitality Frequency	(3) Positive Vitality Frequency
0	12	16	12
	(75)	(40)	(75)
1	4	24	4
	(25)	(60)	(25)
Total	16	40	16

Pearson χ^2 statistic=8.82, Probability (Pr=0) =0.012

Table 5.5: Cross-tabulations of Persuasiveness and Positive Treatment for Cell 1.

Positive Treatment	(1) Low Persuasiveness Frequency	(2) Moderate/High Persuasiveness Frequency
0	24 (63.16)	16 (47.06)
1	14 (36.84)	18 (52.94)
Total	38	34

Pearson χ^2 statistic=1.8836, Probability (Pr=0) =0.170. I group the moderate and high persuasiveness categories for this test because there are only 8 instances of high persuasiveness precedents for Cell 1 with respect to treatment.

Table 5.6: Heckman Probit Model for Cell 4-Positive Treatment is the Dependent Variable.

Independent Variables	Positive Treatment	Precedent Treated At All	Ath-rho
Ideological Distance	-0.0823		
	(0.170)		
Ideological Congruence	0.375		
	(0.401)		
Precedent Vitality	0.312**		
	(0.128)		
Congruence*Vitality	-0.404**		
	(0.186)		
Precedent Persuasiveness	0.284		
	(0.300)		
Congruence*Persuasiveness	0.963**		
	(0.433)		
Attorney Quality	-0.143		
	(0.189)		
Congruence*Attorney Quality	-0.348		
	(0.254)		
Team Size	0.0889		
	(0.107)		
Congruence*Team Size	-0.224		
	(0.152)		
Technical	-0.118	-0.476***	
	(0.353)	(0.104)	
Cited by Both Briefs		0.600***	
		(0.116)	
Product Liability Case		0.0607	
		(0.221)	
Individual v. Business Case		0.0766	
		(0.191)	
Medical Malpractice		0.300	
		(0.206)	
Constant	-0.724	-1.152***	0.356
	(0.758)	(0.178)	(0.553)
Observations	2,454	2,454	2,454
Censored Observations		2,102	
Uncensored Observations		352	
Wald χ^2		28.42	
Prob. > χ^2		.0191	

Clustered standard errors on the case in parentheses. State-level fixed effects are used, but omitted, from the table.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.7: Heckman Probit Model for Cells 2/3-Positive Treatment is the Dependent Variable.

Independent Variables	Positive Treatment	Treat Precedent At All?	Ath-rho
Ideological Distance	0.195		
	(0.199)		
Ideological Congruence	-0.609		
	(0.471)		
Precedent Vitality	0.456***		
	(0.155)		
Congruence*Vitality	-0.324*		
	(0.188)		
Precedent Persuasiveness	0.449*		
	(0.265)		
Congruence*Persuasiveness	0.587		
	(0.437)		
Attorney Quality	0.0740		
	(0.270)		
Congruence*Attorney Quality	-0.170		
	(0.393)		
Team Size	-0.157		
	(0.148)		
Congruence*Team Size	0.334		
	(0.211)		
Technical	-0.0604	-0.610***	
	(0.414)	(0.107)	
Cited by Both Briefs		0.756***	
		(0.121)	
Product Liability Case		-0.0132	
		(0.196)	
Individual v. Business Case		-0.225	
		(0.161)	
Medical Malpractice		0.288	
		(0.249)	
Constant	-0.804	-1.207***	-0.00575
	(0.831)	(0.104)	(0.486)
Observations	2,932	2,932	2,932
Censored Observations		2,623	
Uncensored Observations		309	
Wald χ^2		39.48	
Prob.> χ^2		0.0005	

Clustered standard errors on the case in parentheses. State-level fixed effects are used, but omitted, from the table.

*** p<0.01, ** p<0.05, * p<0.1

Table 5.8: Results for Treatment with Centered Variables.

Independent Variables	Cell 4 Positive v. Negative Treatment	Cells 2 and 3 Positive v. Negative Treatment
Ideological Distance	-0.128	0.309
	(0.306)	(0.358)
Ideological Congruence	1.688***	1.194**
	(0.571)	(0.553)
Precedent Vitality	0.533**	0.750***
	(0.220)	(0.278)
Congruence*Vitality	-0.646*	-0.553*
	(0.375)	(0.336)
Persuasiveness	0.525	0.698
	(0.530)	(0.428)
Congruence*Persuasiveness	1.618**	1.064
	(0.763)	(0.761)
Attorney Quality	-0.276	0.140
	(0.341)	(0.443)
Congruence*Attorney Quality	-0.604	-0.216
	(0.463)	(0.690)
Team Size	0.179	-0.242
	(0.185)	(0.239)
Congruence*Team Size	-0.389	0.558
	(0.285)	(0.367)
Technical	0.0716	-0.133
	(0.469)	(0.485)
Constant	0.429	-1.151*
	(0.646)	(0.687)
Observations	352	309

Clustered standard errors on the case in parentheses. State-level fixed effects are used, but omitted, from the table.

*** p<0.01, ** p<0.05, * p<0.1

CHAPTER SIX: POOLED ANALYSIS-WHAT HAPPENS WHEN MOTIVATED REASONING FAILS?

The fundamental question of this dissertation, ultimately, is the examination of why state high court opinion-writers (and opinions more generally) cite and treat precedents that are included in attorney's merit briefs. In Chapter Three, I introduce a theory of motivated reasoning, where I strongly argue that state high court patterns of precedent citation and treatment can largely be determined by the salience of an issue in a particular case, as well as how easy the case is to decide, in an articulation of motivated reasoning theory, as espoused in social psychology and in political science (Bartels 2010; Fazio 1994; Fazio and Towles-Schwenn 1996; Kunda 1990.) In Chapters Four and Five, I quantitatively test the empirical predictions and implications of motivated reasoning theory, as I conceptualize in Chapter Three. Given the lack of support for bottom-up (and very mild support for top-down) motivated reasoning theory in the empirical results in Chapter Four and in Chapter Five, I use Chapter Six to examine other types of theories and descriptively examine the data to try and determine why the results do not support motivated reasoning in Chapters Four and Five.

There are two primary goals for this chapter. One goal is to examine the hypothesis in Chapters Four and Five about ideological congruence in greater detail, given the limitations of examining a general hypothesis in an interactive theoretical framework. In this chapter, using a conventional additive framework, it is easy to

examine the effects of ideological congruence in a way that makes sense for empirical examination of the data that I have. The second (and primary) objective is to examine to what degree the hypothesized attitudinal and legal variables actually may be affecting behavior in cases that are pooled, under a different (and more conventional) political science theoretical framework (McAtee and McGuire 2007; Unah and Hancock 2006.) Unlike the preceding two chapters, in Chapter Six, I pool all of the precedents that I obtained into one model (for the most part) and run non-interactive models to examine precedent citation and treatment patterns more generally, without the specific conditional nuances that theories, such as motivated reasoning theory, require to be tested.

I organize remainder of the chapter as follows. I begin with an examination of why motivated reasoning theory may not have shown support in the data that I have and explore other theories of precedent citation and treatment and how these legal and ideological variables might work in other types of political science frameworks. I continue with an empirical examination of state high court patterns of precedent citation and treatment. Ultimately, I conclude the chapter by discussing the results of the empirical examination that I conduct, which leads into Chapter Seven (the concluding chapter).

6.1: Theoretical Framework

After the results in the preceding two chapters, it seems quite clear that my articulation of motivated reasoning theory is primarily not supported by the empirical analyses that I conduct (as well as in many other specifications). This result is somewhat surprising given the rigorous, highly testable nature of my theory that derives specific conditional

hypotheses that I test in Chapters Four and Five. In fact, many of the results that I find do not support results that are consistent with either top-down or bottom-up forms of motivated reasoning. As a result of these confounding findings, I believe that some exploration and discussion of the data and results are necessary, prior to the empirics in this chapter.

As I note in Chapter Three, motivated reasoning theory essentially has two required elements in the theory: what the social psychology refers to as "motivation" and "opportunity", but others have referred to as "fear of invalidation" and "salience." The specific conditional nature of both of the elements is what makes motivated reasoning especially interesting. Again, according to motivated reasoning theory (which can be organized into four cells), ideological behavior (or top-down motivated reasoning) should occur most prevalently in the condition that fear of invalidation is low and when salience is high (see Bartels 2010.) In the cell where fear of invalidation is high and where salience is low, bottom-up forms of information-processing should dominate. In the other two cells, theoretical hypotheses are weaker, except that there should be evidence of both top-down and bottom-up forms of motivated reasoning in these cells. Of course, in Chapters Four and Five, I actually find evidence that supports neither the top-down nor bottom-up motivated reasoning hypotheses, but rather, I find evidence that suggests that under some circumstances, legal variables are only impacting precedents that are not congruent with a court-opinion writer's ideology. In other circumstances, evidence does seem to support a bottom-up form of motivated reasoning, at least under specific conditions. If motivated reasoning theory does not help to explain precedent citation and treatment patterns, what other approaches might exist?

The conventional political science explanation of precedent citation and treatment patterns, however, might work more effectively to explain patterns of precedent citation and treatment than the highly conditional form of motivated reasoning theory that I test in Chapters Four and Five. In a conventional political science model of precedent treatment and citation (such as Corley 2009), one includes both ideological factors and legal factors in the same model, postulating that both ideological and non-ideological factors should influence the likelihood of precedent citation (and treatment type.) I use a similar modeling approach in this chapter, including both ideological and non-ideological variables in the same model, without interactions between the two types of variables, as other political scientists have also done (see also Westerland et al 2010). Westerland et al (2010), in an innovative study, find that both precedent vitality and ideological factors influence the probability of a positive (versus neutral or negative) treatment of precedent, but note that the main influence in terms of precedent vitality is from how a lower court treats a U.S. Supreme Court precedent, rather than how the U.S. Supreme Court itself treats the precedent (*contra* to what Hansford and Spriggs, 2006, predict.)

In fact, one alternative might simply be that attitudinal and legal factors (non-interactively) might both contribute to precedent citation and treatment patterns, even if the law does not actually constrain ideological uses of precedent and treatment. In this theoretical possibility (once we are away from motivated reasoning theory), it might simply be the case that state high court opinion-writers can always pick precedents that are consistent with their ideological beliefs and therefore, can rely on precedents that are legally vital and persuasive, while accounting for their ideological goals at the same time (but perhaps not via the interaction of these variables with ideological convergence).

Consequently, in this chapter, I primarily rely on pooled additive models that include both legal and attitudinal factors and allow for the possibility that both legal and attitudinal factors can shape precedent citation and usage patterns simultaneously and without the exclusion of the other type of factor (legal or attitudinal).

For this chapter, I expect that both attitudinal and legal variables will have an impact on the likelihood of citation and precedent treatment. The literature clearly establishes that to the degree that judges are free from ideological concerns, state high court justices choose to make decisions where the outcome is consistent with their ideologies (Brace and Hall 1997; Hall 1992; Hall and Brace 1994, 1995.) As a result, judges should be more likely to positive treat a precedent if a positive treatment of precedent will allow them to support an outcome that is consistent with their ideological beliefs. Similarly, as ideological distance between the state high court opinion-writer's preferences and the precedent increases, the probability of a positive treatment of precedent should decrease (Kassow Songer and Fix, 2012.)

The attitudinal hypotheses for this chapter (assuming that both legal and attitudinal factors can coexist without the exclusion of the opposite type of factor) are as follows:

H 6.1: Ideological congruent precedents should have a higher probability of citation and positive treatment compared with precedents that are not ideologically congruent.

H 6.2: As attitudinal distance increases, the likelihood of precedent citation and positive treatment of precedents (relative to negative treatments) should decrease.

Similarly, using this theoretical approach, I also expect to find that legal variables may also impact the likelihood of the citation and positive treatment of precedent. One of

the variables is precedent vitality. Evidence shows that lower federal courts and state high courts respond more favorably to precedents that have been treated more positively by the U.S. Supreme Court compared with precedents that have not been treated favorably (Corley 2009; Kassow Songer and Fix 2012.) Thus, I expect that higher levels of precedent vitality will encourage state high courts to cite and positively treat (versus negatively treat) precedents. Similarly, evidence exists that courts tend to respond favorably to litigants who have higher quality counsel and that have counsel from larger firms (Haynie 1995; McGuire 1995; Szmer Johnson and Sarver 2007.) Finally, increases in precedent persuasiveness should also encourage an increased propensity to cite and positively treat precedents.

H 6.3: As precedent vitality increases, the baseline probability of a citation of precedent and/or a positive treatment of precedent should increase.

H 6.4: As attorney quality increases, the baseline probability of a citation of precedent and/or a positive treatment of precedent should increase.

H 6.5: As persuasiveness heightens, the baseline probability of a citation of precedent and/or a positive treatment of precedent should also increase.

6.2: Research Design for Chapter Six

Data: Similarly to Chapters Four and Five, I examine the population of state high court precedents from six states from 2000-2005 from cases that examine private torts issues. Unlike the preceding models, I do not create subsets or interact the data in ways that are consistent with motivated reasoning theory. Because I show strong results that seem to suggest that motivated reasoning theory is not the ideal theory for explaining precedent citation and treatment patterns in Chapters Four and Five, at this point, when considering other theories, I begin with a descriptive examination of the data in its entirety (all four hypothetical cells will now be in one pooled model.)

Dependent Variables: For Chapter Six, the dependent variable is the same as what I use in the logit analyses for Chapters Four and Five: whether a precedent is cited in a state high-court opinion and whether a state high court treats a precedent positively or negatively in a state high court opinion.

Independent Variables: For Chapter Six, the independent variables are similar to the independent variables from Chapters Four and Five respectively, with the main exception being that I do not subset the data based on easiness and/or issue salience of the case, given that the data are pooled. Additionally, because this examination of precedent citation and treatment patterns does not assume conditional relationships among the independent variables, I do not include any interactive terms in the model specifications in Chapter Six.

Methods of Analysis: I primarily rely on logit models for the analyses in this chapter (Aldrich and Nelson 1984.)

6.3: Models

I begin with initial models that examine the question of whether ideological congruence with a precedent influences how likely state high court opinion-writers are to positively treat and cite precedents. In other words, if a precedent treatment is compatible with a judge's natural ideological predisposition, is that judge likely to include a precedent treatment type that is consistent with her ideological beliefs. To the degree that opinion-writers do not have a higher probability of positive treatment (and/or citation) for these precedents, the less of an influence it would seem that ideology has on the process of precedent citation and treatment.

When examining initial pooled models of precedent citation patterns for petitioners, the results are reasonably similar to the predictions in many of the hypotheses. When examining precedent citation patterns, several of the legal variables reach statistical significance in the expected direction (in particular, vitality and persuasiveness), and with ideological congruence (but not ideological distance) behaving as expected. As my discussion earlier in the chapter outlines, these results comport fairly well with the theoretical predictions in Chapter Six. Similar to the other citation models (with individual categories separated out), if a precedent is cited in both briefs, the chance of citation is significantly increased compared with a precedent that is not cited in both briefs. Similarly, precedents that donot discuss substantive issues have a lower likelihood of citation compared with precedents that do discuss substantive issues.

Examining the substantive effects for the variables of interest, the predicted probabilities show that if a citation is compatible with a judge's ideology, the baseline rate of citation is higher compared to when a citation is not compatible with a judge's personal ideology, as the theory in Chapter Six predicts (.445 versus .317), which is a moderately sized effect. Similarly, if a precedent is cited in both briefs, the likelihood of citation is .568, compared with a baseline citation rate of .297 when a precedent is not cited in both briefs, predicting a large difference in the likelihood of citation depending on whether a precedent is included in both briefs. Similarly, a brief that is technical (i.e., not substantive in nature) has a baseline .300 rate of citation, compared with a baseline rate of .439 for a precedent that is substantive in nature, which is in line with theoretical expectations.

Figure 6.1 shows the predicted probability of citation (in the y-axis) as precedent vitality (the x-axis) increases. Specifically, the point estimate of the predicted probability increases from .325 at a precedent vitality of -2 to .417 at a precedent vitality of +3 (2 standard deviations below and above the mean.) While this substantive effect is not huge, it is interesting to note that as petitioners use higher vitality precedents, the probability of citation increases modestly. Similarly to Figure 6.1, Figure 6.2 shows the predicted probability of a citation (the y-axis) as precedent persuasiveness (the x-axis) increases. The effect size of precedent persuasiveness is slightly higher than the effect of precedent vitality (the baseline citation rate is approximately .33 with a persuasiveness of 0, compared with a point estimate for the citation probability of .49 with a persuasiveness of 2.)[54]. Thus, for petitioners, some evidence of variables that explain attitudinal and legal concepts reach statistical significance, suggesting that both ideological and non-ideological variables do influence the likelihood of precedent citation and treatment type.

The results for respondents are quite similar to that for petitioners, at least with respect to citation patterns, although precedent vitality is not significant at the .05 level. Again, ideological congruence is positively signed and significant, as theoretically expected. The substantive effect, again is somewhat small; when a precedent citation is congruent with a judge's ideology, the probability of citation is .403, compared with a probability of citation of only .307 when the citation of a precedent is not congruent with a judge's ideological predispositions. Additionally, persuasiveness is also positively

[54] I also test alternative models that include the interaction of vitality and persuasiveness. When doing so, I find that the interaction between vitality and persuasiveness does not reach statistically significant p-values in any of the models.

signed and reaches statistical significance. Finally, precedents that are cited by both briefs and precedents that are technical both behave as theoretically predicted. Figure 6.3 is interesting in that it shows how the combination of technical (versus substantive) precedents and whether a precedent is included in both briefs impacts the likelihood of precedent citation, with the probability of precedent citation on the y-axis and precedent vitality on the x-axis.

Similarly to petitioners, the substantive effect of both of these variables for respondents is moderately strong to extremely strong. Specifically, for precedents that are cited in both briefs, the probability of citation is .542 compared with a .291 probability of citation if a precedent is only in the respondent's brief. Again, the effect of technical precedents is somewhat weaker (a technical precedent has a baseline rate of citation of .267, compared with a baseline citation rate of .41 for a substantive precedent.) In fact, Figure 6.3 shows the difference in predicted probabilities for different variations of the technical and cited by both variables as precedent persuasiveness increases. The effect of persuasiveness is similar to, but slightly larger than, the effect of persuasiveness on petitioners. Similarly to Figure 6.2, Figure 6.4 shows the point estimate (with 95% confidence intervals) of the predicted probability of citation (in the y-axis) as persuasiveness (in the x-axis) changes.

For precedent treatment, the statistical results of the pooled analysis are actually fairly similar to that for precedent citation, which is perhaps a mild surprise. Again, precedent congruence, precedent vitality, and the persuasiveness of precedent all have results that are consistent with what I call an "integrated" theory of attitudinal and non-attitudinal factors that may contribute to changes in precedent citation and treatment

patterns. The substantive results for precedent congruence are somewhat stronger for precedent treatment than for citation (when a positive treatment is congruent with a judge's ideological preferences, the likelihood of positive v. negative treatment is .648, compared with a .503 probability of positive treatment if a positive treatment is not congruent with a judge's ideological preferences.) Similarly, the results for precedent vitality are extremely strong, with the probability of a positive treatment of precedent at .392 with a precedent vitality of -2 compared with a .732 probability of positive treatment if a precedent has a vitality of +3. Figure 6.5 shows a graph that is very similar to Figure 6.1, showing how the probability of positive versus negative treatment changes as precedent vitality increases. The results for precedent persuasiveness are also extremely strong, with a point estimate of the predicted probability of positive versus negative treatment increasing from .443 with a persuasiveness of 0 to .791 with a persuasiveness of 2. Overall, these results show support for an integrated model of legal and attitudinal factors, but the overall results do not support the specific hypotheses of motivated reasoning theory.

6.5: Conclusions

Given the examination of the results in this chapter, the findings are reasonably as expected. Given the results in Chapter Four and the exposition of motivated reasoning theory in Chapter Three, perhaps it is not surprising that both ideological and non-ideological factors help to predict precedent citation patterns. So, what do the results from this chapter show? For citation, the results are reasonably similar to theoretical expectations. As previously mentioned, the results for citation are consistent with theoretical expectations, with ideological congruence and legal factors both helping to

explain citations patterns. For precedent treatment, results are moderately similar to that of precedent citation, where both ideological and non-ideological factors seem to have an effect on the likelihood of positive versus negative forms of precedent treatment. Consistent with earlier models of precedent treatment in Chapter Five, attorney quality, team size, and ideological distance do not approach statistical significance in the pooled models. Consequently, the results for this alternative theory seem to be supported, but one should keep in mind that this theory is less thorough of a causal explanation than the theory that I espouse in Chapters Three through Five.

Table 6.1: Pooled Analysis of Precedent Citation for Petitioners

Independent Variables	Precedent Citation
Ideological Distance	-0.0382
	(0.0883)
Precedent Congruence	0.630**
	(0.255)
Vitality	0.0927**
	(0.0428)
Attorney Quality	0.118
	(0.116)
Precedent Persuasiveness	0.404***
	(0.146)
Team Size	0.0390
	(0.0603)
Cited in Both Briefs	1.230***
	(0.149)
Technical	-0.681***
	(0.127)
Constant	-0.793***
	(0.262)
Observations	2,692
χ^2	173.05 (Pr=0.000)
LROC	.7220

Standard errors are in parentheses, with clustered standard errors on the case. Fixed effects are used, but not reported, in the table.

*** p<0.01, ** p<0.05, * p<0.1

Table 6.2: Pooled Analysis of Precedent Citation for Respondents

Independent Variables	Precedent Citation
Ideological Distance	0.0765
	(0.0807)
Precedent Congruence	0.478**
	(0.202)
Vitality	0.0645
	(0.0354)
Attorney Quality	0.000146
	(0.104)
Precedent Persuasiveness	0.534***
	(0.130)
Team Size	0.0138
	(0.0253)
Cited in Both Briefs	1.132***
	(0.151)
Technical	-0.707***
	(0.131)
Constant	-1.122***
	(0.243)
Observations	3,012
χ^2	131.99
	(Pr=0.000)
LROC	.7062

Standard errors are in parentheses, with clustered standard errors on the case. Fixed effects are used, but not reported, in the table.
*** p<0.01, ** p<0.05, * p<0.1

Table 6.3: Pooled Analysis of Precedent Treatment (Positive versus Negative).

Independent Variables	Precedent Treatment
Ideological Distance	0.0695
	(0.160)
Precedent Congruence	0.679***
	(0.247)
Vitality	0.319***
	(0.0930)
Precedent Persuasiveness	0.862***
	(0.220)
Attorney Quality	-0.126
	(0.179)
Team Size	-0.0779
	(0.0536)
Constant	-0.885**
	(0.356)
Observations	840

Standard errors are in parentheses, with clustered standard errors on the case. Fixed effects are used on the state, but not reported, in the table above.
*** p<0.01, ** p<0.05, * p<0.1

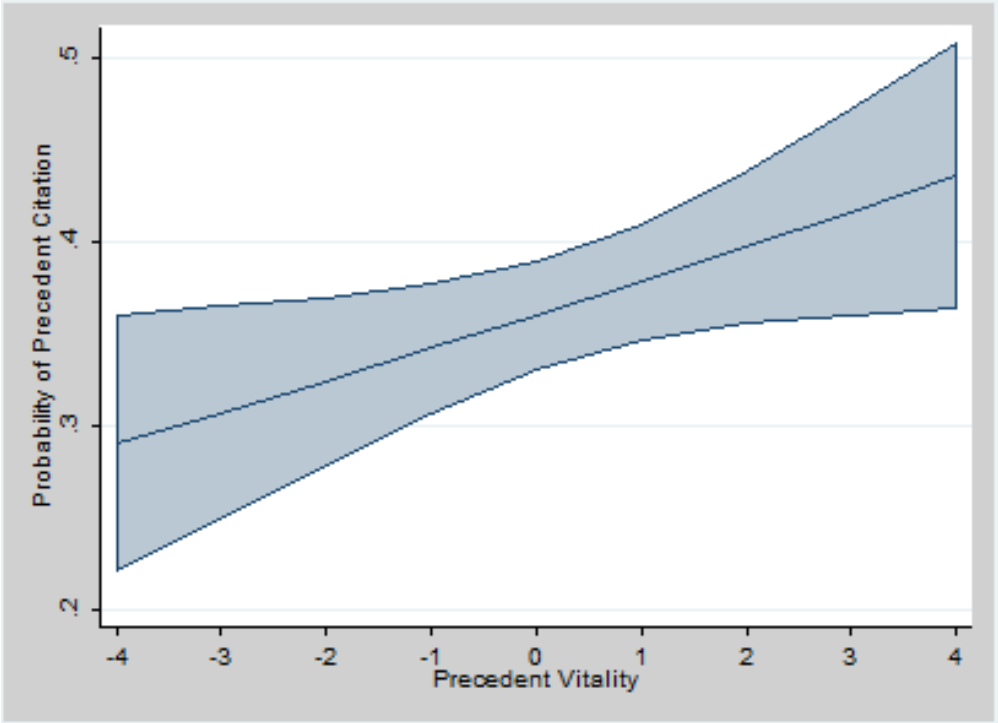

Figure 6.1: Precedent Vitality on Citation for Petitioners

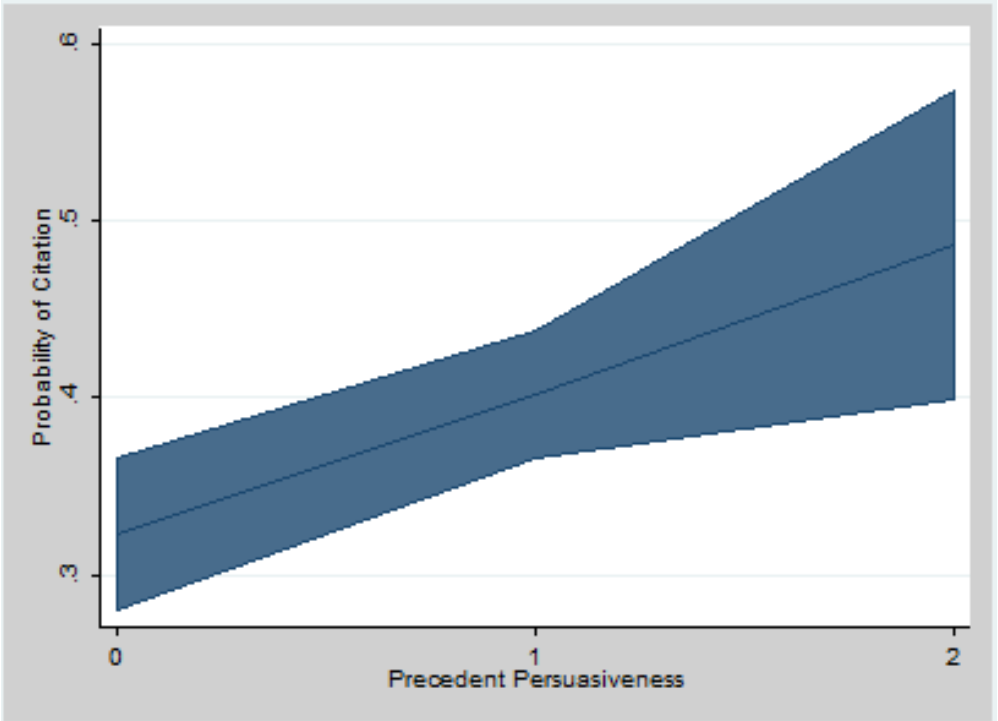

Figure 6.2: Predicted Probability of Citation as Persuasiveness Changes

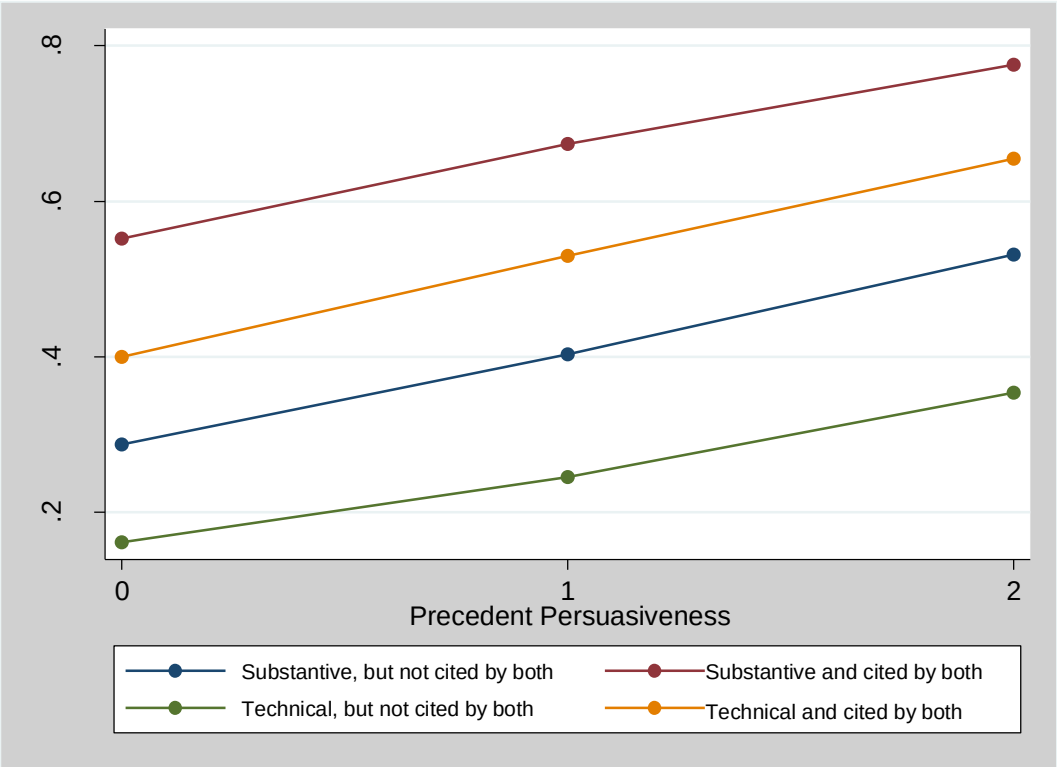

Figure 6.3: Probability of Citation over Technical and Cited by Both Variables

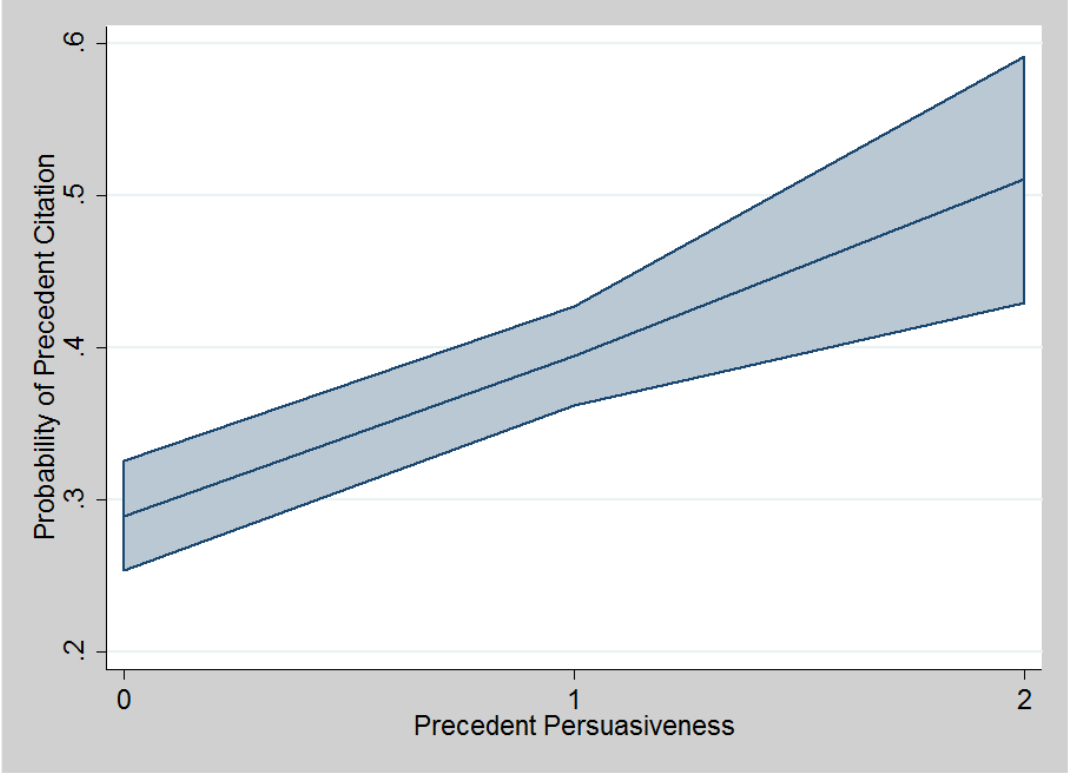

Figure 6.4: Effect of Persuasiveness on Citation for Respondents

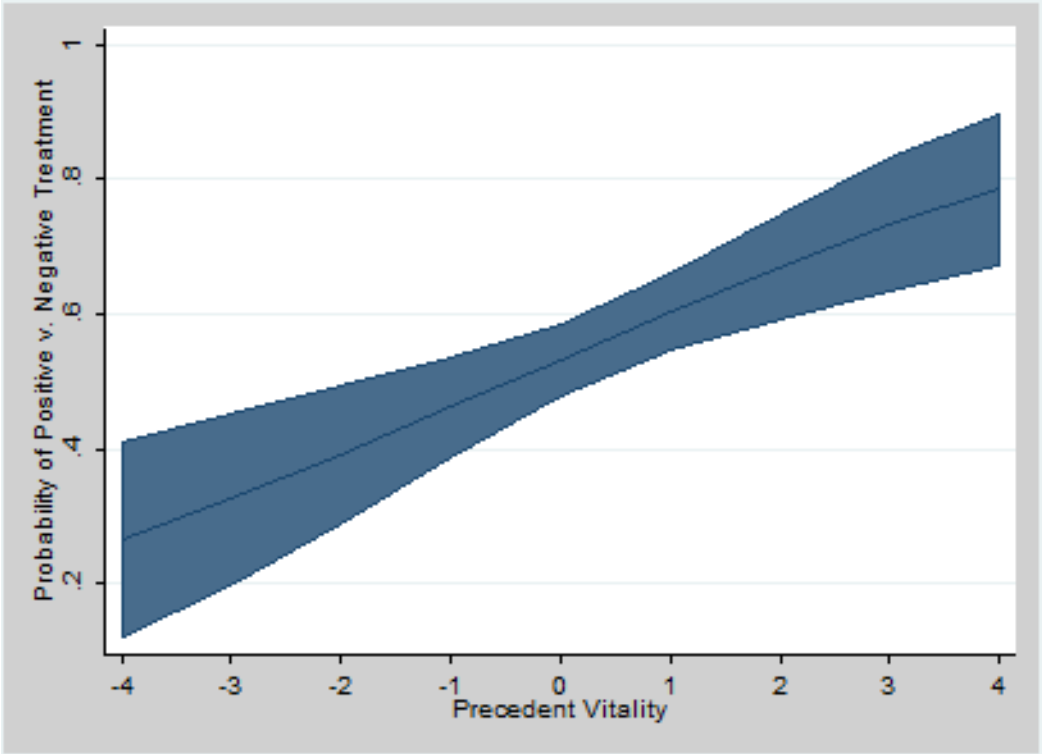

Figure 6.5: Probability of Positive v. Negative Treatment as Vitality Increases

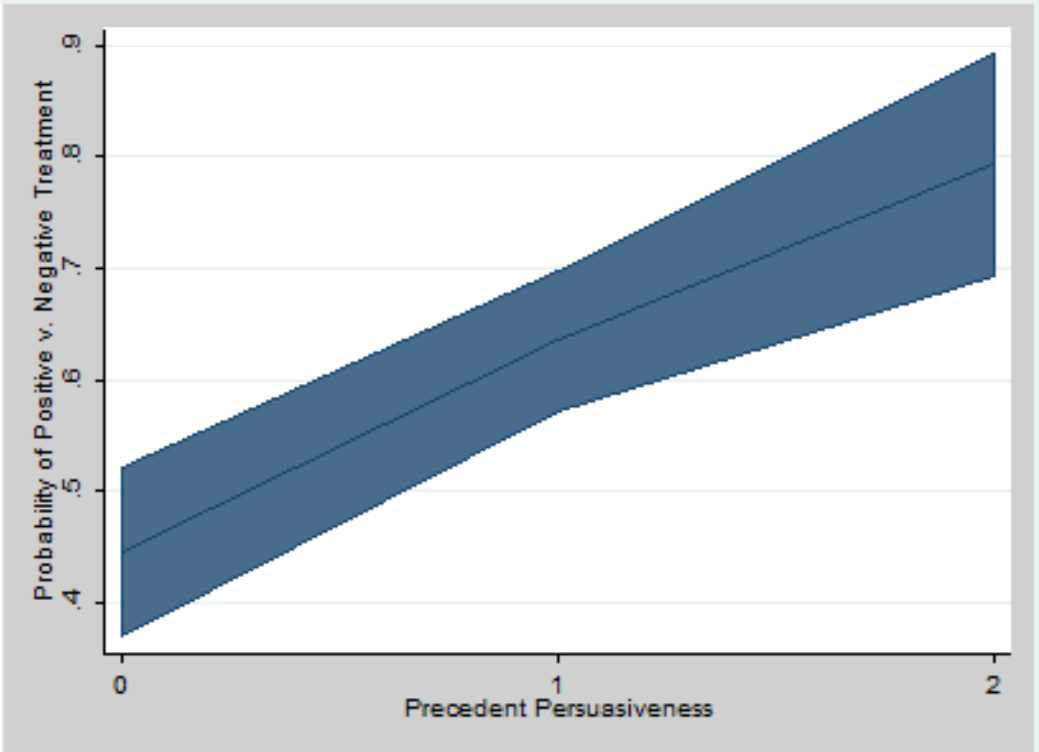

Figure 6.6: Probability of Positive v. Negative Treatment as Persuasiveness Increases

CHAPTER SEVEN:

CONCLUSION

Given the general ambiguity and failure to support for motivated reasoning theory in my analysis, it is important to think about other potential causal explanations and patterns that may better fit the data. In Chapter Five, I postulate that one of the primary reasons that motivated reasoning may have lacked support in the analyses that I conducted was that one of the assumptions of motivated reasoning may have been violated in the data: that is, the key assumption in motivated reasoning that there is a continuum of conditions ranging from the extreme bottom-up to the extreme top-down scenarios with a range of mixed motivated reasoning patterns in the middle of the continuum (see Bartels 2010). While it is very difficult to actually falsify motivated reasoning theory because of the scope and applicability of the theory, motivated reasoning does not seem to be a great fit for the examination of precedent citation and treatment patterns for state high court private torts cases.

As I outline in Chapters Two and Three, a large literature exists that examines the question of why particular precedent citation and treatment patterns exists, as well as understanding how precedent treatment patterns can influence other behavior in the United States judiciary-both federal and state (Cross et al 2010; Hansford and Spriggs

2006; Spriggs and Hansford 2001, etc.) With respect to precedent citation patterns, several patterns seem to persist throughout the model specifications. For all salient cases, there seems to be evidence that persuasiveness of precedent generally increases the probability of citation, regardless of what regime one is in. Additionally, when persuasiveness is relatively high, the empirical evidence seems to support the role of ideological congruence, although this effect dissipates as persuasiveness decreases. In fact, the role of precedent congruence is somewhat counterintuitive. The first key finding is this seemingly conditional relationship between precedent persuasiveness and ideological congruence. In particular, one interesting result that I discovered is that in both top-down and mixed cells (Cells 2-4), ideological congruence mattered conditionally, but only when precedent persuasiveness was relatively high. Equally interesting, when precedent persuasiveness was extremely low, ideological congruence no longer seems to influence precedent citation or positive treatment patterns in any of the models, which is somewhat counterintuitive to my theory, but probably merits additional exploration

The overall empirical evidence suggests a pattern that is neither fully consistent with the theoretical implications of a top-down or bottom-up motivated reasoning regime, which stands somewhat in contrast with Braman's results, where she finds support mostly, but not completely, in favor of top-down motivated reasoning (2006.) Rather, the results in Chapter Six perhaps suggest a different theory that does not place motivated reasoning theory in a four cell block, might work more effectively. Despite the lack of strong support for motivated reasoning theory in the dissertation results, I do find some

interesting results that may lead to further theoretical development in future research projects.

Unlike Braman's (2006; also see Braman and Nelson 2007) experimental results, which show that top-down motivated reasoning is quite common when individuals engage in analogical reasoning and understanding which cases are most applicable to a precedent, my results on this sample of precedents generally show that pure top-down motivated reasoning really does not occur at either the citation or precedent treatment stage in my empirical tests (Braman and Nelson 2007.) This result was somewhat surprising for the cases in Cell 4, especially in the positive treatment models, where I expected both the intercept and slopes test to show evidence of top-down motivated reasoning (when in fact the strongest result that I saw in favor of top-down motivated reasoning was the conditional result with respect to ideological congruence.)

There are several reasons why the results might not comport to theoretical expectations, notably concerns about the data and concerns about the theory itself. The first concern relates to the data that I use for my empirical assessments of the implications of motivated reasoning theory. Specifically, my dissertation only focuses on private torts cases, as a singular general issue type, which is a different approach than what some of the literature on state high court decision-making uses (Langer 1997, 2002; Stricko-Neubauer 2006.) I argue in Chapter Two that private torts are a reasonable issue area to examine the influence of motivated reasoning because I hypothesize that there is significant variation in salience and variance in the degree to which a case is easy (although relatively few state high court cases are truly easy-only approximately 7% of the precedents in my sample come from cases that are both low salience and easy).

In some ways, restricting the sample to one relatively large general issue area is a useful strategy in that it allows for cases that are similar to be tested against one another in an integrated theoretical framework, rather than comparing cases that are fundamentally different from one another, such as death penalty cases versus cases that relate to issues of allegations of fairly routine contract violations.[55] On the flip side, motivated reasoning might be most apparent when examining issue areas that have even more range in terms of salience. If torts cases are mostly low to moderately salient, it might be the case that I would never expect to see top-down motivated reasoning even in cases that are coded as "highly salient" such as medical malpractice, or product liability cases, because they might not be sufficiently salient to encourage true top-down forms of motivated reasoning. Additionally, because relatively of the cases in my sample are both low salience and easy, there may also be relatively few cases where one can realistically expect true forms of bottom-up motivated reasoning to occur.

Theoretically, a second potential reason for the lack of results with respect to motivated reasoning may also exist. In particular, because my predictions do not comport all that strongly either with bottom-up or top-down forms of motivated reasoning, but rather may suggest another process. In fact, what might cause judges to behave in unusual patterns, with respect to precedent vitality? In some cases, it seems that justices simply decide to positively treat cases that are convergent with their preferences regardless of the

[55] Much of the earlier Hall and Brace articles use this approach of focusing on a singular issue for an empirical analysis (1992, 1995), also see Brace and Boyea (2008.)

level of vitality if a positive treatment of precedent will allow an opinion-writer to get the outcome that they desire.

If this is the case, it would seem likely that my conception of motivated reasoning does not apply to precedent citation and treatment, at least in a pure top-down or bottom-up form. Rather, with respect to precedent vitality, it seems as though judges behave in a bottom-up fashion with respect to precedents that they are not ideologically predisposed towards, but simply positively treat precedents when a positive treatment allows a judge to behave ideologically. Future research should consider a theoretical framework that more explicitly allows for this particular pattern of precedent citation and treatment and can explain this possibility more adequately than my conceptualization of motivated reasoning theory can.

As always develops from a project as major as a dissertation, the implications that I find from my empirical analyses suggest several future directions of worthwhile research. First, there should be additional examination of the possibility that I just mentioned. It might be important to think about whether justices primarily use ideological convergence with the precedents from an attorney's brief as a way to distinguish the type of reasoning process that they use to examine precedents from a brief. While my dissertation addresses this question to a small degree, it might be worthwhile to examine theoretical explanations that can more fully explain discrepancies in precedent citation and treatment patterns. For instance, justices might engage in detailed analysis of precedents from briefs that they oppose, trying to ascertain the legal strength of the opposing side's argument. In contrast, for briefs from sides that the judge

favors, it might be the case that judges instead do not particularly care about the legal strength of an argument from that side.

As an augmentation to this particular project, it would also be useful to obtain more data on other issue areas and across a greater number of states, which would give me greater confidence in the lack of results that I have. Fortunately, since I started this project, significantly more data are available, which will allow for researchers to test additional predictions that are consistent with motivated reasoning theory and to more fully test variation among state institutions in a systematic fashion. In fact, since this project began, it is now possible to obtain state high court briefs for free and on the Internet from approximately twenty states from 2008 onwards. As previously mentioned, taking advantage of these new sources of data should allow more rigorous exploration of motivated reasoning theory, as well as other systematic processing (and psychological) theories that may help to explain precedent citation and precedent treatment patterns more fully than this dissertation is able to do.

Finally, expanding tests of motivated reasoning theory to other courts and to other aspects of the judicial process might be worth exploring. While one may need to use experimental methods if one wants to analyze vote choice in terms of motivated reasoning theory, this may not be an absolute prerequisite. Depending on the particular research question of interest, it may be possible to obtain useful results using observational or quasi-experimental data, such as natural experiments (see Collins and Martinek 2011.) In particular, one innovative manuscript finds evidence that conservative judges react via heuristic cues to stimuli such as the number of *amicus curiae* briefs in

support of a liberal or conservative decision, using highly nuanced theory and observational data (Collins and Martinek 2011.)

Still, other future studies of state high court citation and treatment patterns should focus on arguments made in *amicus curiae* briefs on state high courts. Given the relative paucity (as well as the large variance among states) in the prevalence of *amicus curiae* briefs in state high courts, it might be worthwhile (even starting just descriptively) to examine whether state high court opinion-writers examine *amici* briefs differently from merit briefs, as I test in the dissertation itself (see Songer and Kuersten 1995) . By doing so, it would be possible to get towards a more complete and unified theory as to how and why state high court justices (as well as federal judges) cite, positively treat, and negatively treat particular precedents within the context of a larger case and to create and test fuller explanations and make predictions with respect to the likelihood of precedent citation and the nature of precedential treatment.

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