EVENT HISTORY ANALYSIS OF IN-STATE RESIDENCY TUITION POLICIES FOR UNDOCUMENTED STUDENTS IN AMERICAN HIGHER EDUCATION

by

RACHEL ANNE BURNS

(Under the Direction of James C. Hearn)

ABSTRACT

Approximately 65,000 immigrant students who lack legal documentation to reside in the United States graduate from American high schools each year. Among these students, only about 5-10% persist to higher education, a rate that is far below the attainment of their native-born peers. This discrepancy is due in part to federal and state policies that restrict undocumented students' access to postsecondary institutions. In response to the lack of federal immigration reform, some states have endeavored to influence the policy arena by adopting varying forms of in-state residency tuition (ISRT) policies that have the impact of expanding or restricting access to public postsecondary education among undocumented students.

Guided by the policy frameworks of advocacy coalitions, policy diffusion, and social construction, an event history analysis analyzes the adoption of ISRT policies of both a restrictive and permissive form between 2000 and 2015 across all 50 states. The combined EHA approach includes both internal state characteristics and the effects of diffusion to model the rate of policy adoption among states across the years of analysis. Additional variables measuring citizen and government ideology capture the extent to which undocumented students are socially constructed as worthy or unworthy of public postsecondary benefits.

Results of this study suggest that the internal state dynamics are exceedingly influential in ISRT policy adoption, particularly with regard to population demographics, gubernatorial power, postsecondary governance, and political partisanship of citizens. However, the strength and direction of these relationships is indeterminate, given the competing economic and moral interests of legislators to protect the privileges of native-born students while also promoting attainment for undocumented students. Future research will expand upon these findings to uncover the relationship between policy adoption and the elusive measures of social construction and policy diffusion with the aim of providing policymakers and researchers with models for predicting future policy action.

INDEX WORDS:

Event history analysis, in-state residency tuition policies, undocumented students, public postsecondary education, policy innovation and diffusion, social construction and policy design

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1. INTRODUCTION

Beginning with the invasion and colonization of the North American continent and the subsequent founding of the United States of America centuries later, the country has maintained an identity as an immigrant nation. Early settlers arrived from abroad seeking the promise of opportunity, prosperity, and freedom from oppression in a new land. They founded a nation comprised of immigrants of a diverse assortment of religions, races, ethnicities, and nationalities. Despite its seemingly benevolent origins, however, the country also maintains a tumultuous and contentious attitude towards new waves of immigration and changing demographics of the individuals moving into the country, as well as a volatile history regarding the displacement of indigenous peoples on the continent. Indeed, following its foundation as an independent entity, the U.S. has since endeavored to restrict and control the country of origin and the number of immigrants entering the country through mechanisms such as quotas and visa requirements (Green, 2003).

In 1790, the federal government passed the Naturalization Act in response to accelerated rates of immigration in the country, thereby restricting the benefits of citizenship only to free, white residents. This law governed the influx of immigrants into the U.S. and prevented these individuals from becoming citizens for nearly 140 years, until the passage of the Immigration Restriction Act of 1924 established quotas on the numbers of immigrants arriving from specific countries. In 1954, the Immigration and Naturalization Act removed limitations on citizenship eligibility, but the quotas remained in place until the Immigration Act of 1965, which abolished the system and permitted increased migration flows from Latin American and Asian nations. Government officials enacted these early laws in response to immigration from nations that were

considered "developing" or "non-Western," reflecting the paranoia and fear prevalent among predominantly white, nationalist, often xenophobic citizens (Green, 2003; Espenshade & Calhoun, 1993). Despite later modifications to the legal code, these initial rulings established a legacy that has lasted for centuries and has perpetuated discrimination towards and disenfranchisement of large segments of the immigrant population in the country (Massey, 1995).

Against this historic backdrop of white nationalism, the demographics of immigration into the country have transformed, particularly in the last several decades. Specifically, a greater proportion of immigrants are arriving from Latin American and Asian nations, and a growing number have entered through illicit or illegal mechanisms, without proper authorization for lawful presence in the country. Moreover, the rate of growth in the past thirty years is unprecedented: in 1990, the number of foreign-born residents was 20 million; by 2000 that number had increased to 31.1 million, or roughly 11% of the U.S. population (Passel & Cohn, 2009). In 2014, approximately 42 million foreign-born individuals resided in the country, including an estimated 11.1 million "undocumented" immigrants, defined as individuals without legal authority to live and work in the country (Krogstad, Passel, & Cohn, 2016). Adults in this category have significantly lower educational attainment and economic mobility than native-born residents. Roughly 47% of adults have achieved less than a high school education (compared to 8% of native-born residents), and nearly 33% of children and 20% of adults live in poverty, which is double the rate among native-born residents (Passel & Cohn, 2009). Adding complexity to the attempts to stem unauthorized immigration is the statistic that an estimated 63% of these individuals have entered the country from Mexico, with which the U.S. shares a 6,000-mile, largely unpatrolled border (Hoefer, Rytina, & Baker, 2010).

The population of undocumented immigrants in the U.S. includes roughly 3.2 schoolaged individuals under the age of 24, many of whom immigrated to the country as children and have completed most of their education at American institutions. In addition, roughly 73% of the children of undocumented immigrants were born in the U.S. and live as legal citizens, and they comprise nearly 7% of the population of students in the U.S. educational system (Passel & Cohn, 2009). Consequently, many of these undocumented youths or children of undocumented parents maintain aspirations to attain higher levels of education, including attendance at American colleges and universities. Although the number of undocumented students in the nation's schools is difficult to track accurately due to concerns with privacy and security, researchers estimate that 65,000 undocumented students graduate from U.S. high schools each year (Passel, 2003). This number is anticipated to grow significantly as undocumented youths transition from primary to secondary schooling and seek advanced degrees from postsecondary institutions. Despite the academic excellence of these students, only 5-10% of undocumented high school graduates persist to postsecondary education (Ibarra & Sherman, 2012; Passel, 2003), in comparison to roughly 60-65% of their native-born peers (Perez & Cortes, 2011). This diminished rate of attendance is attributable to a wide array of factors, among them insufficient knowledge of postsecondary opportunities, lack of mentorship and guidance in the college search process, low institutional and familial support, a political and social environment that stigmatizes their undocumented status, and federal and state policies that limit undocumented students' access to postsecondary education (Perez, 2010).

The controversy surrounding the presence of undocumented students in public higher education and their access to postsecondary educational benefits has only heightened in recent years amid an increasingly ambiguous political environment. Although a 2012 executive order

granted undocumented students temporary deferment from deportation through the Deferred Action for Childhood Arrivals (DACA) program, some political leaders have expressed an interest in discontinuing the program under the new presidential administration. President Donald Trump's ten-part immigration plan – a central component of his 2016 election campaign – promised to end DACA and programs intended to protect the undocumented parents of U.S.-born children. In addition, a June 2017 letter from the attorneys general of ten states and one governor threatened legal action against President Trump if he did not move to rescind DACA within several months. In a purported effort to force Congressional action on the matter, Trump and Attorney General Jeff Sessions announced the termination of DACA in September 2017. However, two judges ruled that the plan had no legal justification and that the program was required to be kept in place as the lawsuit from the attorney's general moved through the legal system. The president has since used the status of undocumented students and DACA beneficiaries as a negotiation tactic for extracting desired concessions from opposing political factions, including the construction of a restraining wall along the border with Mexico.

As the population of undocumented students in the country grows with each passing year, it is critical that researchers, policymakers, and practitioners understand the contexts and consequences of public policies for these students, both at the federal and state level. Moreover, as the country becomes increasingly polarized in its attitudes towards immigrants and immigration, as evidenced in recent elections and policy actions (Alba & Foner, 2017), bridging the gap between individuals on opposite sides of the ideological spectrum is becoming exceedingly difficult. Preventing the development of a more ideologically divided public

¹ The home states of these attorney generals include Texas, Alabama, Arkansas, Idaho, Kansas, Louisiana, Nebraska, South Carolina, Tennessee, and West Virginia.

² The two courts include the Eastern District of New York and a U.S. federal district judge in California.

necessitates additional research as well as responsible and responsive policymaking, particularly as it relates to a vulnerable population of prospective members of society. Notwithstanding the timely and contentious debate surrounding the presence of undocumented students in postsecondary education, we know comparatively little about the development, enactment, and implementation of policies that regulate undocumented students' access to higher education. Moreover, we know even less about the unique circumstances that prevail in each state and that significantly influence policy adoption, as well as the direct and indirect implications of these policies for states, institutions, and individuals.

This study seeks to fill the theoretical and empirical gaps through an examination of the contextual circumstances surrounding the development of state policy related to undocumented students' access to public postsecondary education. While the right of undocumented students to access primary and secondary education remains largely unchallenged, opportunities for higher education are limited. Arguments prevail on both sides of the debate regarding whether these individuals should have access to the same educational privileges and benefits as their native-born classmates and peers. The failure among legislators and researchers to address these shortcomings only provokes the debate and exacerbates the tensions among policymakers, institutions, and students. Given this lack of attention to the data and research underlying the issue, the purpose of this study is to employ the tools of quantitative analysis to examine when, why, and how state policies related to undocumented students in higher education emerge.

Research Questions

This study employs an event history analysis (EHA) of the 50 states to determine how internal characteristics, diffusion processes, and the phenomenon of social construction collectively affect state policy adoption. To date, more than half of the states in the U.S. have

developed policies that either expand in-state residency tuition (ISRT) to include undocumented students or restrict in-state tuition only to in-state, U.S. citizens. Despite the saliency of the issue for a growing number of students, however, researchers know very little about how and why such policies emerge. The specific research questions guiding this analysis include:

- 1. What factors influence state policymakers' decisions to adopt ISRT policies?
 Specifically, what role do internal state characteristics, including economic, social, and political factors, play in policymakers' decisions?
- 2. To what extent do these policies spread through the processes of policy innovation and diffusion across states?
- 3. To what extent does the social construction of target groups in society, particularly undocumented students, affect the design and adoption of these policies?
- 4. How can state characteristics, the processes of diffusion, and the phenomenon of social construction be used collectively to generate predictive models for the future adoption or evolution of these policies?

Study Significance

The political and social climates in the country have arguably never been more hostile and unwelcoming to immigrants, particularly individuals who lack legal documentation to reside in the U.S. Although students brought to the country as children are often seen as unwilling participants with little control over their immigration status, the current policy atmosphere rejects appeals for amnesty. Moreover, recent policy priorities and developments suggest that these trends will continue as political leaders seek to limit the opportunities for economic and social advancement among immigrant populations, concerned that any appearance of leniency or the granting of benefits would incentivize "illegal" immigration (Bier, 2017). The policymaking

process, including the design and implementation of public policies in response to perceived social issues, is necessarily closely related to the political, social, and economic environments of each state. Thus, an understanding of the policy process, including why policymakers behave as they do, enables researchers and practitioners to better assess the implications of current policies and to make informed decisions regarding the development of future policies.

This study contributes to the present understanding of the policy process, the effects of state characteristics, the role of social construction and policy design, and the dynamics of policy innovation and diffusion that influence policies for undocumented students in postsecondary education. As such, it retains relevance to a variety of fields, including policy analysis, political science, public administration, and higher education policymaking. Moreover, it seeks to predict the future development, enactment, and implementation of state legislation within this policy arena. Using the data and methods employed in this analysis, policymakers and researchers are better situated to analyze trends in policy fields, forecast the policy actions of state actors, provide recommendations on policy design and implementation, and assess the potential implications of policy activity. More broadly, this research expands upon and contributes to the general literature surrounding policy processes, policy diffusion, and social constructions of target populations, while also providing a more nuanced analysis of the situation confronting the undocumented subset of the postsecondary student population.

The remainder of this introductory chapter provides a brief analysis of the moral and economic arguments for and against the inclusion of undocumented students in postsecondary institutions as groundwork for the remaining chapters of the study. Chapter two covers the historical background of immigration in the U.S. and the recent emergence of the issue of undocumented students in higher education, followed by a review of the literature that covers the

legal landscape, commissioned reports, guidance for practitioners, the student experience, and the development of new modes and methods of inquiry and theory. It concludes with a discussion of the gaps in the literature and how this study responds to those shortcomings. Chapter three presents the three theoretical frameworks that guide the study, expanding and integrating the theories of advocacy coalitions, policy innovation and diffusion, and social construction and policy design. Chapter four describes the research methods, including the design of the event history analysis used to address the four primary research questions. It also describes the sources of data and operationalization of variables used in this study, including descriptive statistics of the independent variables of interest. Chapter five summarizes the outcomes of the analysis and discusses preliminary interpretations of the results as well as the limitations and ethical implications of the study. Chapter six concludes with the implications for theory, policy, and practice, and offers areas for future research.

Arguments for and Against Inclusion

Underlying the arguments surrounding the appropriate place of undocumented students in American society is the fundamental question of the human right to educational equity and equality. Despite attempts to limit undocumented students' access to higher education, beginning with California cases such as Leticia "A" (1985) and Propositions 187 and 227 (1994 and 1996, respectively) in California, undocumented students have remained unwavering in their determination to pursue postsecondary learning, aided by the advocacy coalitions, nonprofit organizations, families, and institutions that support them. The arguments for and against the inclusion of undocumented students in higher education are complex and contentious, covering economic and moral perspectives on both the potential contributions to and the purported burdens on society that undocumented immigrants generate. The situation is problematized,

moreover, by the existence of laws that vary among states and that frequently restrict students' rights, with some regulations entirely excluding undocumented students from public higher education, and others simply prohibiting in-state tuition or state financial aid. The significance of this issue for undocumented students and their families is profound. The financial, economic, and social impacts of state laws are evident but have as-yet-untold consequences for the future academic attainment and career prospects of these targeted student populations.

Economic Arguments

From an economic perspective, the arguments opposing the presence of undocumented students in higher education reflect the notion that undocumented immigrants consume a disproportionate share of public benefits, given their inability to work and earn income legally and their subsequent lack of contribution to federal and state tax revenues. This argument holds, moreover, that due to the cyclical and persistent nature of poverty, many of these individuals are also disproportionately reliant on public benefits such as welfare or subsidized health care, which draw their primary funding from the tax revenues that states and the federal government collect. However, studies have shown that undocumented immigrants (including students and their parents or guardians) contribute significantly to the local, state, and national economies through consumption, property taxes, income taxes, and Social Security and Medicare withholdings (Perez, 2009; Massey, 1995). Moreover, the school-aged children of these immigrants attend local public schools, generating income for institutions that is awarded on a per-pupil basis. Research also suggests that due to social stigmas and discrimination, many families with undocumented members are reluctant to pursue public benefits, as they are fearful of apprehension, deportation, or alienation if their status becomes publicly known (Watson, 2017). Thus, the argument that undocumented immigrants draw a disproportionate share of public

benefits without contributing to the collective generation of such benefits is largely unfounded and based on faulty or misrepresentative data.

Another economic argument against permitting undocumented students to become eligible for in-state tuition or state financial aid suggests that such permissiveness will decrease tuition revenue for institutions, as in-state tuition rates would serve as low-cost substitutes for higher international or out-of-state rates that undocumented students would otherwise pay. However, many students (both undocumented students and U.S. citizens) cite the high cost of attendance as a significant barrier to pursuing higher education, encouraging them to instead attend low-cost, local institutions such as community or online colleges as an affordable alternative (Eagan, et al., 2013). Accordingly, permitting students to pay in-state tuition rates would likely increase the institution's tuition and fees by enabling some students who could otherwise not afford the prohibitively-expensive institution to attend (Rincon, 2008). Moreover, the number of students at any institution that are undocumented is comparatively low, given that only about 65,000 graduate from U.S. high schools each year, not all of whom choose to persist to postsecondary education. In addition, states with small undocumented populations are not likely to experience instances in which these students displace native-born state residents or outof-state residents paying the full cost of tuition; indeed, many institutions have confronted declining enrollments in recent years and welcome the applications and enrollments of additional students (Fitzgerald, 2012). Thus, the potential for lost revenue is not significant, especially considering the high rates of enrollment of international students at most institutions, at roughly 975,000 students in 2015 (Institute of International Education, 2015).

From a workforce perspective, the economic argument against permitting undocumented students to attend institutions of higher education or to access in-state tuition benefits posits that

undocumented immigrants and migrant laborers, including those with advanced degrees, will displace American workers, undercut citizens by electing to work for lower pay, fail to contribute adequately to state and federal taxes, and ultimately harm the U.S. economy. In addition to arguing that undocumented immigrants displace workers, this perspective contends that these individuals will not reinvest in the U.S. economy, but rather will divert compensation and wages to their nation of origin to support family members who remain abroad. Individuals who subscribe to this viewpoint suggest that such activities divert funds away from the U.S. economy and further damage the nation's overall wellbeing. Despite the frequency and apparent plausibility of this contention in the media and popular culture, however, research does not support these concerns (Perez, 2010). Rather, most economic research has found that the opposite is occurring, and that immigrants (both documented and undocumented) stimulate new economic investment and job creation.

Perhaps the most influential economic argument in favor of allowing undocumented students to attend public institutions at in-state tuition rates is the potential positive economic impact of these students on the U.S. economy. Overall, undocumented immigrants represent roughly 5% of the U.S. labor force (Passel & Cohn, 2011), and students that attain higher levels of education have greater average lifetime earnings and generate a more significant financial contribution to the economy, due in part to higher-paying jobs, the generation of tax revenues, and greater consumption (Bureau of Labor Statistics, 2017). Moreover, as the U.S. economy transitions from a traditional economy of industry and manufacturing to a modern economy of knowledge and information, advanced degrees are often necessary to succeed and prosper in a lucrative career pathway. Research suggests that the financial investment associated with permitting undocumented students to attend public institutions of higher education and to obtain

training will be more than offset by the contributions of these students to the social and economic foundations of society (Rincon, 2008; Galassi, 2003). The sheer number of individuals affected by legislation permitting in-state tuition equity public institutions further supports the claim that states would receive an economic boost from such laws. In 2015, for instance, 22% of the population in the U.S. that was eligible for naturalization had obtained a bachelor's degree or higher, and only 15% of the total unauthorized population had done so (Center for Migration Studies, 2017). Passage of immigration reform or state-level ISRT policies could enable a significant percentage of these individuals to access higher education that has previously been restricted or denied.

Moral Arguments

In contrast to the economic arguments for and against undocumented students in higher education that are backed by extensive (if contradictory) research, there also exists a moral argument that reflects opposition to what some consider "illegal" or illicit activity. This line of reasoning holds that undocumented youth, whether brought to the U.S. unknowingly as children or entering of their own accord, are not considered legitimate members of society. Moreover, the Puritan ideals of hard work and self-determination upon which the nation was ostensibly founded often exclude the endeavors of undocumented immigrants, who are publicly construed as exploitative and manipulative, spoiling the principles of nationalism and patriotic virtue. In this regard, permitting undocumented students to attend public institutions of higher education for the same price as in-state citizens or to access public benefits such as financial aid would be tantamount to incentivizing or promoting illegal immigration. Many policymakers contend that these individuals essentially "cut the line" towards a legal pathway to citizenship and receive

benefits not afforded to immigrants who arrive through legal mechanisms (National Immigration Law Center, 2010).

The moral argument against in-state tuition for undocumented students also maintains specific conceptualizations of citizenship and American culture, arguing that naturalized and native-born citizens possess an inherent, established, and thus legally-defensible right to enjoy the public benefits afforded by the government. These opponents argue, moreover, that this right supersedes the rights and privileges of non-native residents. From this perspective, documented students are seen as displacing these deserving and otherwise qualified native-born students from public institutions of higher education, resulting in a reordering of power, authority, and educational attainment among different ethnic and racial groups in ways that contrast with or contradict traditional hierarchies (Gonzalez, 2009; Perez & Rodriguez, 2012). This reconceptualization and reconfiguration of the fundamental power structures that govern the nation's economic and political spheres generates a sense of anxiety and anger among the groups and individuals who have traditionally held much of the political and economic power in society. The reactions to such losses of status often incite retaliatory behaviors such as the denial of public benefits and the ostracization of students and their families from acceptance and assimilation into broader society.

In opposition to these moral arguments that characterize undocumented immigrants as an invasive threat, there also exists among some individuals an ethical standard and a concomitant obligation to provide equitable educational opportunities for the entirety of the nation's youth. The U.S. is a country founded on the ideals of liberty, opportunity, and equality, and as such maintains a moral imperative to provide such promises to all its inhabitants, regardless of race, ethnicity, or country of origin. Moreover, not all undocumented immigrant students have the

same past: some arrived as young children with undocumented parents, while others may have immigrated at an older age or through independent means. The justifications and motivations for immigrating to the U.S. are equally diverse, including economic, political, educational, and social purposes. For instance, some individuals may have left their countries of origin in the hopes of a brighter economic future, while others may have sought to escape religious or political persecution and violence.

Due to the differences that exist both in age of arrival and purposes for immigrating, many individuals who classify as undocumented consider themselves culturally American, often having grown up speaking English and practicing "American" cultural traditions in lieu of or in addition to the traditional practices of their countries of origin (Perez, 2009). Deeming these individuals "un-American", hostile, illegal, or dangerous serves not only to perpetuate the public's apprehension and incite discrimination, but also unfairly targets a vulnerable population of students that seek to advance their career and academic goals, not to take advantage of a system of public benefits or to drain the community's resources. Research suggests that permitting undocumented immigrants to participate in higher education and the accompanying extracurricular activities increases rates of political and civic participation, resulting in the augmented provision of social services, volunteer activities, and democratic politics that benefit the entire nation (DeSipio, 2011). These students also serve as invaluable role models for later generations of undocumented students or the offspring of undocumented immigrants, offering a source of social and communal support that promotes determination despite pervasive structural barriers. From a moral perspective, therefore, the decision to allow undocumented students to obtain educational opportunity equal to that of their native-born peers is not a sign of society's

weakness, but rather one that measures the nation's degree of acceptance, understanding, and amnesty (Perez & Rodriguez, 2012).

Distinguishing Forms of Opposition

It is important to note from the outset that this study does not necessarily measure states' and individuals' opposition to or support of undocumented students attending higher education in general. Rather, this study takes a more nuanced approach, thus avoiding the moralistic and legalistic implications of such a question, and instead considers a single higher education policy that affects undocumented students. More specifically, this study analyzes state opposition to and support for allowing undocumented students or the children of undocumented immigrants to attend public institutions of higher education at in-state tuition rates. These policies are more frequently known as in-state residency tuition (ISRT) policies. The crux of this argument lies in whether undocumented students (or the children of undocumented immigrants) have equal rights to attend public higher education as their native-born, citizen peers, or whether their "unlawful" presence in the U.S. precludes them from enjoying public benefits such as tuition remission. This distinction is important, given that some states or individuals may not outright oppose the presence of undocumented students in public higher education, but may oppose their access to in-state tuition, instead demanding that they pay out-of-state or international tuition rates. Others, meanwhile, may possess a moral opposition to the concept of "illegal" immigration, but are convinced by the economic arguments that allowing undocumented students to attend public institutions of higher education at in-state tuition rates provides benefits to the labor market and broader U.S. economy. Thus, while the economic and moral arguments for and against permitting undocumented students to access public institutions of higher education are complex and varied, they are not the primary consideration of this research.

2. BACKGROUND AND LITERATURE REVIEW

One of the primary foundations for this study is the historical context of the shifting immigration laws and policies that exist in this country. This background – critical to the recent developments in immigration law in the country – is comprised of a variety of components, including the national political atmosphere, state and federal judicial activity, and state and federal legislation and policymaking. Collectively, these contextual factors and manifest activities contribute to a unique environment within which the contentious issue of in-state residency tuition policies unfolds. A second foundational aspect of this study is the expansive literature base that has emerged in the past several decades concerning the presence of undocumented student in postsecondary education and their access to postsecondary financial benefits. The scholarly body of work covers an array of topical areas, issues, and theoretical positions upon which this study builds. The following sections of this chapter detail these two foundations: the background of immigration in the U.S., followed by a brief review of some of the notable scholarly literature.

Background

An understanding of the current controversy and conflict over in-state residency tuition policies stems largely from the country's political and legal history of immigration law and the changing degrees of acceptance and tolerance of immigrants by citizens and the government. Throughout the history of the U.S., these attitudes have transformed, and the laws governing immigration and immigrants' grants have reflected these changing perceptions. Accordingly, a thorough knowledge of the historical underpinnings of the political context, judicial history, state activity, and federal legislation regarding immigration and immigrants' rights is a critical

precursor to grasping the complexities and nuances of the issue of undocumented students in higher education in its current status, and its influence on the adoption of ISRT policies.

Political Context

Although the number of undocumented students graduating from U.S. high schools each year is significant and increasing annually, the degrees and rates of educational attainment of these students fall far below those of their native-born peers. For instance, of the 1.7 million undocumented immigrants in the country between the ages of 18-24, only 49% have attended or are attending some type of college. In addition, 40% of these students do not complete high school, a far higher percentage than the estimated 15% of legal immigrants and 8% of native-born residents who drop out of secondary school (Passel & Cohn, 2011). Children immigrating to the U.S. at a younger age fare better than those who arrive later in life, with 61% of students who arrive before age 14 enrolling in higher education (Perez & Cortes, 2011). The reasons for these low rates of persistence are manifold and complex, reflecting the economic, social, and political contentions that have long characterized the issue of immigration in the country and have prevented both documented and undocumented immigrants from attaining the full benefits of citizenship.

Prior to the rapid growth of immigration in the past fifty years, undocumented youth or the offspring of undocumented immigrants were not regarded or treated differently in the American public educational system. Following the energy crisis of 1974, however, the country experienced a significant economic downturn that stimulated backlash against immigrants as scapegoats for the economic disaster Americans confronted.³ In response, states with large immigrant populations, such as Texas, began in the following year to amend their educational

³ A 1973 oil embargo by the Organization of Petroleum Exporting Countries (OPEC) cut oil supplies to the United States, resulting in steep and immediate increases in oil prices and a subsequent deep global recession.

codes to exclude undocumented children from free public education at the primary and secondary level, arguing that these non-citizen students displaced native-born students and gained an unfair advantage by enrolling in publicly-funded educational institutions. Although these amendments were later challenged and ruled unconstitutional, the message that states' actions expressed resulted in national outrage and discrimination towards undocumented immigrants and generated fear of the presence of undocumented children in public educational institutions.

The nation in the late 1970s and early 1980s was a land divided by different attitudes towards immigration and varying degrees of acceptance of both documented and undocumented immigrants. However, somewhat surprisingly, the legal ethos during this time remained comparatively amenable and judicious. Challenges to the presence of undocumented students in public primary and secondary education escalated through the legal system throughout these decades and eventually reached the U.S. Supreme Court. In 1982, the Supreme Court ruled in *Plyler v. Doe* that all children residing in the country have a fundamental right to attend free public education at the primary and secondary educational levels, regardless of the immigration status of the child or the child's parents or custodians. For the past 35 years, attempts to contradict or undermine this ruling have been largely unsuccessful, allowing free and open access to public primary and secondary education to become ingrained and institutionalized as an unconditional right of students living in the United States (Rincon, 2008).

Judicial History

Prior to the landmark ruling of *Plyler v. Doe* in 1982, other relevant court cases addressed the persistent question of whether and to what degree the United States has the legal capacity and political will to permit undocumented youth or the children of undocumented immigrants to

attend public educational institutions. One of the earliest cases to address the right and ability of all children to access equal education occurred in 1954 in Brown v. Board of Education of *Topeka*, which combined four cases of educational discrimination towards minority students. Specifically, Brown v. Board of Education addressed instances in which African American children had been denied admission to public schools due to laws that permitted educational institutions to segregate based on race. Using these state statutes permitting segregation as their basis, public educational institutions justified the decision to exclude African American citizens from the higher-quality, comparatively wealthy schools that white children attended. The plaintiffs in the case argued that this racial segregation was a violation of the Equal Protection Clause of the Fourteenth Amendment, based on the "separate but equal" doctrine established by Plessy v. Ferguson in 1896. The court declared that "separate but equal" facilities in public education were inherently unequal, and thus any attempts to segregate students violated the Equal Protection Clause. Moreover, the court argued, the separation of students based on race instilled a tremendously detrimental sense of inferiority for African American children that had significant negative implications for their personal growth and development (Brown, 1954).

A case more immediate to the issue of undocumented students' access to higher education arose in 1977 with *Nyquist v. Mauclet*, which challenged a New York statutory provision that barred resident aliens from accessing state financial assistance for postsecondary education. The plaintiffs in the case argued that the provision was a violation of the Equal Protection Clause of the Fourteenth Amendment, in that it discriminated against, was directed solely at, and exclusively harmed alien students. Moreover, the plaintiffs argued, the incentive for an alien to become naturalized was not a proper concern of the State, given that the federal government retained preeminence in issues of immigration and naturalization. By a 5-4 margin,

the court ruled that the statute was unconstitutional in that it violated the Fourteenth Amendment and may have intruded upon Congress' authority for immigration and naturalization (Nyquist, 1977). Although this ruling proved beneficial for undocumented students seeking access to public postsecondary education, particularly those requiring financial assistance, the case was limited in its scope and jurisdiction in that it applied only to educational institutions in the state of New York. Importantly, however, it established a precedent for other states navigating the legal and political complexities associated with undocumented students' access to public financial assistance for postsecondary education.

Following these early judicial conflicts, which laid the groundwork for future challenges, the landmark case that has since proven a critical turning point for the debate occurred in 1982. The U.S. Supreme Court case *Plyler v. Doe* challenged a revision to the Texas education code that enabled the state to withhold funding from local school districts that were educating "illegal" aliens or the children of "illegal" aliens. The court ruled 5-4 that the law was a violation of the Equal Protection Clause of the Fourteenth Amendment, given that illegal aliens and their children are people "in any ordinary sense of the term" and are therefore subject to equal protection under the law. Moreover, the court argued, the state engendered a severe disadvantage to the children of undocumented immigrants through the denial of a right to education, yet was not able to prove that the regulation was required for any "compelling state interest" (Plyler, 1982). Although not necessarily granting unconditional acceptance of undocumented students in public education, these cases have collectively established a groundwork upon which future legislative and judicial considerations rest, and provide an appropriate origination point from which to begin a thorough examination and analysis of the current and anticipated future policy landscape.

State Action

Despite the inalienable right to education at the primary and secondary level that has been established and reinforced through both legislative authority and judicial precedent, undocumented students or students with temporary legal status have historically confronted both structural and psychological barriers to attaining postsecondary education in the U.S. (Erisman & Looney, 2007; Gray, Rolph, & Melamid, 1996; Alexander, et al., 2007). Prior to the influx of immigrants through both legal and non-legal pathways in the 1970s and 1980s, most students attending public institutions of higher education were treated similarly to resident and nativeborn students, much as they were in primary and secondary schools (Perez & Cortes, 2011). As the nation responded to the perceived threat of the "immigrant other" (Maddali, 2014), however, individual state legislatures and higher educational systems refocused their attention on the traditional view adopted by the federal government, which cited political, economic, and social justifications for regulating and restricting immigration and immigrants' rights.

State leaders in policy innovation with large undocumented populations, such as Texas, New York, and California, began to develop, enact, and implement laws regulating the access to and affordability of higher education for undocumented immigrant students residing within the state (Perez, 2009). These policies included state and local statutes along a continuum of permissiveness (from outright denial of access to provision of state financial assistance for attendance) and intensity (from symbolic policies to strictly enforced sanctions) (Olivas, 2015a; b). The development of these policies was slow, however, in that many states faced external pressures to conform to national standards in light of 1979 Supreme Court ruling *Toll v. Moreno*, which established immigration law as an exclusively federal right. The degree of exclusivity set

forth in the ruling generated fear among state policymakers of the potential for conflicting regulations or federal preemption that could result in financial or economic penalties.

One of the earliest state cases that addressed the ability of undocumented students to attend higher education institutions was the Leticia "A" Case of 1985, which arose in response to a University of California System Board of Regents requirement for undocumented students to pay international tuition and fees. The plaintiffs in the case argued that the international tuition rates were exorbitant and burdensome, particularly for undocumented students who had lived in the state for most of their lives and were otherwise classified as state residents. Judges ruled in favor of the students, permitting undocumented residents of California to attend public higher education institutions at in-state tuition rates. Although a 1990 ruling (Bradford) overturned the legal progress these students had achieved, the national attention the case generated set the foundation for later state activity, albeit of both a progressive and regressive nature. Throughout the 1990s, most states elected not to pass any legislation (either permissive or restrictive) regarding undocumented student access to higher education, partially due to the low salience of the issue and the lack of urgency in addressing undocumented students in state institutions of higher education (Rincon, 2008). In the states that did attempt to address the situation during these early years, however, the battles over access to public higher education were often controversial and complex, and have had lasting effects for the policy landscape and for undocumented students today.

Federal Legislation

In contrast to the relatively inactive status of state legislatures in the 1990s, the federal government during these years was proactively aiming to restrict the rights of immigrants on a broad scale, particularly among those without the legal authority to reside or work in the country,

including many children under the age of 18. Some state governments responded to these initiatives with state-level policies and statutes intended either to reinforce or to reject the intolerant political atmosphere generated by restrictive federal laws. The intensified federal activity began in 1996 with the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA), which included Section 505 aiming to increase funding and resources for Immigration and Customs Enforcement (ICE) to deport unlawful residents, secure the border, and prohibit immigrants from accessing public benefits such as health care and free education. The apprehension and intolerance this legislation generated among the public was further exacerbated by the Personal Responsibility and Workplace Opportunity Reconciliation Act (PRWORA) of 1996, which prohibited immigrants from receiving welfare funds in their first five years of presence in the country and generated increasingly prevalent discrepancies in educational attainment and health care for undocumented immigrants.

Throughout this time, undocumented immigrants and their allies among U.S. citizens remained comparatively quiet and underrepresented, lacking both the resources and numbers to mount a sizeable opposition. Moreover, the political atmosphere necessarily dissuaded any immigrants without legal documentation from exposing their immigration status for fear of deportation. Following the terrorist attacks in New York City in September of 2001, the U.S. government further restricted immigrants' rights with the 2001 USA PATRIOT Act, which enabled the Department of Homeland Security to deny due process of law to individuals based solely on immigration status (Olivas, 2004). This practice of disenfranchising immigrants that had become commonplace among the political elite reached its apex in 2005 with the passage of the Border Protection, Antiterrorism, and Illegal Immigration Control Act. Among other notable implications, this statute criminalized illegal immigration and classified the abetting of

immigration by U.S. citizens as a felony. Thus, U.S. citizens who provided safe harbor to known (and perhaps unknown) undocumented immigrants could be liable for criminal proceedings for their willingness to aid an "illegal" immigrant. Advocacy groups comprised of students, families, allies, organizations, and institutions arose in response to the passage of this legislation as well as those preceding it, sparking national protests and rallies on a broad scale throughout the middle part of the decade (Rincon, 2008). Subsequently, the mid-2000's ushered in a period of intense debate between advocates and opponents of undocumented immigrants' rights and their presence in public institutions of higher education.

In 2001, the United States Congress introduced a bill outlining a multi-step process enabling alien minors in the U.S. to obtain conditional residency and became permanent residents upon the attainment of specific qualifications. The Development, Relief, and Education for Alien Minors (DREAM) Act was first introduced in 2001, with subsequent reintroductions after failing to pass several times. The stipulations attached to eligibility for conditional or permanent residency included arrival in the country before age 18, proof of residency, registration with the Selective Service (for males), and graduation from a U.S. high school (or achievement of GED or acceptance to institution of higher education), among others. Conditional residency mandated that the individual either graduate from a two-year community college, complete at least two years towards a bachelor's degree, or serve two years in the U.S. military within a six-year period in order to become eligible for permanent residence. Although the bill did not initially pass during the 107th Congress, amendments to the proposed legislation arose between 2001 and 2012, including modifications to the original eligibility requirements as well as a state-level DREAM Act in California in 2011.

⁴ To date, no DREAM Act has been passed and implemented successfully by the U.S. Congress.

In response to the lack of a Congressional agreement on a DREAM Act and the growing presence of undocumented youth in the country, President Barack Obama announced the Deferred Action for Childhood Arrivals (DACA) program in 2012. This program, implemented through an executive order rather than through federal legislation passed by the U.S. Congress, created renewable two-year periods of deferred action from deportation for children who had entered the country as minors and remained "illegally" without a Visa or lawful U.S. residency. The executive order aimed to address the same social issues and population as those targeted in the DREAM Act, without the need for bipartisan Congressional support. As of January of 2017, nearly 800,000 undocumented youths who arrived in the U.S. as children and had not established permanent residency had enrolled in the program and subsequently become eligible for permits to work legally for U.S. employers (Lopez & Krogstad, 2017). Recent attempts by President Donald Trump's administration to rescind the program have not been successful, and the 115th Congress is expected to consider legislation to extend or modify the program in 2018.

Review of Scholarly Literature

Due to the relatively emergent nature of the presence of undocumented students in public institutions of higher education, comparatively minimal scholarly research has examined the topic empirically or has endeavored to develop new or revised theories or frameworks to guide future research. Moreover, the necessary invisibility of the population renders studies of postsecondary enrollment and attainment as well as student characteristics exceedingly difficult, as many students wish to retain anonymity and secrecy due to fears of apprehension and deportation. However, given the primacy of the topic and the need for better and more extensive research, the body of literature examining undocumented students' experiences in higher education continues to grow. This literature generally falls into at least one of five non-exclusive

categories, including: 1) the historical context of immigration; 2) examinations of the legal landscape; 3) commissioned reports on the status of the issue; 4) documentation of student experiences and subsequent guidance for practitioners; and 5) general educational research and theory development. Collectively, these works provide researchers, analysts, policymakers, and the public with a more comprehensive understanding of the characteristics of undocumented students, their postsecondary enrollment and attainment patterns, and the potential implications of legislation regulating their access to higher education.

Historical Context of Immigration

Providing an historical viewpoint of the transformations in immigration flows, immigration law, and the rights of immigrants in the U.S. is an important contribution to the scholarly literature surrounding undocumented students in higher education. This work establishes the framework for examining patterns of immigration, understanding the actions of state and federal governments, and assessing the opinions and attitudes of the public towards immigrant students. Espenshade (1995) studies the changes in the flows and patterns of migration, documenting the rising tide of immigration from Latin American and Asian nations in response to "push and pull" factors that implicate the governments of both the origin and the destination countries. The "push factors" that Espenshade identifies include characteristics and contexts of individuals' home countries that generate the motivation to immigrate, namely economic misfortune, political unrest, religious persecution, or social injustice. Importantly, his research confirms that scarce evidence exists to support the myth that undocumented immigration has negative implications for the U.S. labor market. Moreover, his historical assessment of the legal and political environment in the U.S. suggests that despite multiple attempts, the federal government has largely failed to curb the growth in what it defines as

"illegal" immigration (i.e., immigration that does not followed standardized protocols and processes for arrival and attainment of permission to remain in the country conditionally for economic or social purposes).

Massey (1995) extends Espenshade's historical account into present and future contexts and contends that the observed influx of Latin American immigrants will engender significant social, cultural, and linguistic changes in American society, including the increased prevalence of the Spanish language and more diverse conceptualizations of ethnicity and race. He predicts future changes in the rates of immigration from other nations, particularly developing countries in Asia, suggesting that immigrants could further alter the meaning of ethnicity and ethnic composition in the U.S. The author, along with other historians and immigration scholars, argues that these transformations in immigration necessarily entail consideration of the perceptions of immigration and immigrants among the nation's citizens. Espenshade and Calhoun (1993) conduct such assessments of the public, testing five hypotheses regarding attitudes towards immigration. Their study concludes that symbolic politics and associated assessments of ethnicity are more important determinants of the acceptance of immigrant populations than are economic arguments related to labor market outcomes. Individuals with higher degrees of cultural affinity as well as additional years of schooling are more likely to have permissive and welcoming attitudes towards undocumented immigrants. Thus, private citizens are influenced by their direct and personal associations with immigrants rather than the economic arguments espoused by politicians and policymakers.

Chapa (2008) contributes to the literature with an examination not only of demographics, but also the sociological perspectives of undocumented students, including racialization and racial misunderstandings among policymakers and the public. She finds that despite the end of

the guest worker programs in 1964, the industrial and agricultural economies of some states continue to recruit and employ undocumented immigrants as though they are "guest workers." Chapa also argues that heightened economic integration due to the North American Free Trade Agreement (NAFTA) has increased the Mexican government's imports of U.S.-subsidized agricultural goods. These changes in economic incentives have damaged the economic vitality of Mexican farms and contributed in part to the rise in immigration to the U.S. among impoverished farmers. Particularly in the Midwest, states with large agricultural sectors have recruited undocumented immigrant workers to staff factories and farms, but have systematically undermined their civil rights and those of their children. Collectively, these exploitations of undocumented migrant workers and the school-aged children that immigrate with them have heightened the urgency for rethinking immigration, labor, and educational policies.

In addition to shorter studies, some authors have compiled full-length texts that include a thorough history of the background of immigration law and the implications for the current policy landscape as well as future developments in the legal sphere and the effects on targeted individuals. Perez (2012) studies the psychosocial stressors associated with immigration, particularly the modes of arrival in the country that are not legally authorized or recognized by the federal government. He highlights the potential negative implications of immigration for the mental health of immigrant youth, including fear of deportation, feelings of isolation and alienation, systemic disenfranchisement and institutionalized racism, unfamiliarity with the English language and American culture, and loss of friendships and family members from the home country. These emotions, coupled with a frequently unwelcoming and inhospitable political environment, can engender severe psycho-social disorders in youth who lack adequate

⁵ "Guest worker" programs allow foreign workers to temporarily reside and work in a country until another group of workers is available to replace these individuals.

peer and mentor support and resources. Perez's ethnographic study of the immigrant students at risk of such negative outcomes, meanwhile, suggests that they prosper and succeed at astonishing rates despite these circumstances, often excelling academically and remaining civically engaged in the local community.

Perez and Cortes (2011) expand on the socioemotional health of undocumented students, finding that the general public's negative conceptualizations of undocumented students contribute to their feelings of helplessness and futility. These sentiments of inadequacy and unworthiness often have the further detrimental consequence of preventing these students from accumulating the reserves of social capital that are necessary for academic and career advancement. However, notwithstanding these externally-imposed shortcomings in both social and economic capital, the authors contend that the students in their study are academically motivated to excel and to pursue postsecondary learning, thereby overcoming the socioemotional barriers that would otherwise stifle their long-term prospects for success. Within a similar literary vein, Perez (2009) conducts a series of interviews with sixteen undocumented and four formerly-undocumented students in secondary and postsecondary education, confirming anecdotally the findings of Perez and Cortes and suggesting that many undocumented students persist despite significant structural and social barriers to academic and career attainment. The characterization of undocumented students that emerges from these texts is one of resilience and determination in the face of discrimination and disenfranchisement. The authors argue, therefore, for the inclusion of undocumented students in postsecondary education as a means for advancing not only the educational and vocational achievements of these students but also for enhancing and strengthening the broader U.S. economy and academic market.

Examination of the Legal Landscape

The issue of permitting undocumented students to attend public institutions of higher education is particularly compelling for legal scholars in the fields of immigration and education, considering the potential for conflict among state and federal statutes and the frequent reinterpretation of influential court cases. In contrast to much of the literature that maintains a moral or ethics-based quality stemming from the authors' conceptualizations of social justice or human rights, the legal literature adopts an approach that privileges objective analysis and research over appeals to ethical or emotional arguments. Due to the complexity of the issue, which implicates questions of both immigration and educational law, the topics that these legal scholars cover are diverse and intersectional. At the core of the literature, a group of scholars provides a broad overview of the policy landscape, discussing future implications of current and past policies, statutes, and rulings, and providing a framework for understanding the legal status of undocumented students in higher education. Another line of legal research focuses on specific legislation and reinterpretation at the state level, such as bills in California or the patchwork of policies across the country, while others consider federal legislation such as the Development, Rehabilitation, and Education for Alien Minors (DREAM) Act or the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA). Still others address the reinterpretation of landmark court cases such as Plyler v. Doe, engaging in a form of legislative activism that promotes a particular – often contentious – viewpoint based on legal precedent.

The scholars that lay the groundwork for a legal perspective on the issue (Frum, 2007; Drachman, 2006; Romero, 2002) do not readily promote an activist perspective, instead providing an objective view of the relevant laws and cases that may assist in predicting future challenges and conflicts for both sides of the ISRT debate. Their work is largely foundational for

the increasingly nuanced legal arguments that follow, providing a background on the current legal status of students that seek access to higher education. Among the scholars that build upon this foundation and offer a more focused approach through the reinterpretation of landmark court cases, Yeats (2004) attempts to apply the case of *Plyler v. Doe* to the issue of higher education, reasoning that the same ideals that govern primary and secondary schooling also hold at the postsecondary level. While his findings have not yet permeated popular legal literature, he argues convincingly for a broader application of the permissions in *Plyler* to students in other levels and types of educational institutions. Lopez (2004) agrees, but finds that the right to free public education is not fundamental and instead requires additional justification to be appropriately applied to the contentious question of whether undocumented students have the right or the privilege to access public institutions of higher education, particularly at in-state tuition rates. Moreover, his research suggests that although education is a fundamental aspect of membership in a community and the eventual abolition of social castes that preclude equality, the prevailing interest of most citizens is the maintenance of a lower class of undocumented workers receiving paltry remuneration despite integral contributions to the nation's economy.

In another vein, scholars focusing on the DREAM Act cite its ability (if passed) to undermine the IIRIRA (Garcia, 2010), arguing that it would not incentivize illegal immigration – despite what some detractors have suggested – and that it would improve higher education attainment, reap external societal benefits, and permit undocumented children to transcend the perpetual cycles of poverty and "illegality." Other legal scholars examining the DREAM Act argue that it is the most effective mechanism for providing a legal pathway to citizenship in both the U.S. and in other developed, educationally-progressive nations (Connolly, 2005; Ragan, 2005). Passage of such a broad-based federal act would enable eligible students to more readily

integrate into society from a legal, economic, and social standpoint, and would serve as the first step towards comprehensive federal immigration reform. By providing undocumented students with opportunities to advance educationally, the DREAM Act could improve the national economy through increasing access to higher-paying jobs, generating a larger and more affluent taxable workforce, and producing additional revenues for the provision of public benefits for underprivileged individuals (Galassi, 2003; Olivas, 1995).

The focus on specific states such as California (Abrego, 2008; Seif, 2004) and Texas (Salinas, 2006) complements the work on the broader state policy landscape, which echoes the patchwork-like arrangement of policies and the confusion and conflicts it can engender (Ruge & Iza, 2005; Fung, 2007). In California, the passage of AB 540 resulted in the immediate relief of social and economic stigmas, enabling immigrants to adopt identities that empowered their mobilization as students. Moreover, the fight for the passage of AB540 permitted undocumented Latino youth in California to create a network of grassroots organizing to address the nationwide challenges undocumented students confront in their pursuit of higher education. A similar situation exists in Texas, which has stood with California as one of the early adopters of tuition equity and a model for further legislative and judicial activity. A five-state comparative report of the members of the Achieving the Dream Initiative (Florida, New Mexico, Texas, North Carolina, and Virginia) finds that divergent views on the rights of undocumented students to access public higher education have resulted in discrepant policies among these states. The complexity and interconnectedness of educational policy with labor and immigration policies suggests that they cannot be considered in isolation, particularly in states with large undocumented populations (Biswas, 2005).

Because of the inability of the federal government to pass comprehensive tuition equity laws that apply across the country, however, some authors have suggested that the public would benefit from the repeal of several of the most exclusionary policies contained in the IIRIRA. This move, which would require significant support to overcome opposition, would enable undocumented students to obtain lawful status as state residents provided they had been present in the country for a prescribed period. Specifically, Salsbury (2003) argues that the provisions of IIRIRA were not designed with restrictions on postsecondary education in mind, and that enabling undocumented students to qualify for in-state tuition would not represent a hindrance to or contradiction of congressional objectives related to immigration control. The collective contribution of these legal commentaries is both symbolic and instrumental, providing a background for understanding the potential implications of legislation that restricts the rights of undocumented students to attend institutions of higher education.

Commissioned Reports on Issue Status

In keeping with the primarily objective viewpoint of legal documents, commissioned reports provide an additional source of information on the undocumented student population, receiving sponsorship from diverse groups such as nonprofit institutions, philanthropic organizations, professional associations, university research institutes, and various private forprofit industries. These reports generally avoid a partisan or political tone, instead documenting the background on the demographics, context, or historical development of a policy or subpopulation. The resultant nature, intended purpose, targeted audience, and dissemination of these reports thus depend largely on the purposes of the sponsors as well as the objectives of the authors, and vary across the topics covered and the type of entity that commissioned its creation. Although the stated goals are largely informational, the details contained within these documents

can support or undermine the agendas of some special interest groups or state governments.

Many of these reports maintain a broad view of the issue (Erisman & Looney, 2007), finding that significant barriers exist that have major implications at the institutional, state, and federal levels. The low rate of educational attainment among undocumented immigrants, meanwhile, is attributable to work and family responsibilities, financial need, lack of knowledge of the higher education system, inadequate academic preparation, and limited English proficiency.

Unsurprisingly, the subject matter, tone, presentation, dissemination, and ultimate use of these reports depend to a significant degree on the reputations, purposes, and agendas of the organizations that commission and fund their publication. Some policy research agencies, such as the Institution for Higher Education Policy (IHEP), maintain an objective, policy-based, approach that surveys the issue and provides actionable, realistic policy solutions (Erisman & Looney, 2007). Other advocacy-based organizations, such as the Center for American Progress and the Institute for Immigration, Globalization, and Education, adopt a more critical tone highlighting a clear distinction between the perceived "right" or "wrong" policy responses (Perez, 2014; Teranishi, Suarez-Orozco, & Suarez-Orozco, 2015). Other outlets for the publication of reports, such as the *Journal of College Admission* and the Institute for Research on Labor and Employment, allow the authors to determine their ultimate form and function (Amaya, et al., 2007; Perez, 2010).

Some reports focus on the status of a specific group, such as low-income immigrant populations (de la Rosa & Tierney, 2006; Oliverez & Tierney, 2005), and the compounded challenges these students face. Undocumented students from a low socioeconomic status confront the doubly challenging realities of decision-making based on misinformed perceptions of financial aid availability, lack of college-going culture during secondary schooling,

heightened need for accurate and timely information as well as additional support and counseling, and scarce information for parents and family members to support the student's pursuit of higher education. Indeed, access to accurate information about financial aid is a critical determinant of whether and where a student chooses to continue in postsecondary education. Moreover, an ethical argument can be made that undocumented students should not be unnecessarily penalized through the denial of educational benefits as a means of reparation or penance for the illegal activities of their parents or guardians. Rather, financial assistance for these students could have positive external effects for students, their families and communities, the institutions that serve and educate them, and the national economy overall. Some reports have acknowledged this effect on institutions and adopted an institutional perspective (Gray, Rolph, & Melamid, 1996), including suggestions for improvements and strategies for recruitment, retention, and completion of immigrant students, including offering financial aid, implementing progressive policies, and removing institutional and cultural barriers that prevent student success.

Some commissioned reports have a more specific audience in mind, such as a single state that may serve as an important battleground or the front lines of advancing undocumented students' rights. For instance, undocumented Latino students in California have limited options in the college choice process, given their "illegal" status and the limiting factors of financial aid and socioeconomic status (Perez, 2010; Fortuny, Capps, & Passel, 2007). Many of these reports include personal testimonies from students detailing stories of perseverance and hope, sharing experiences with overcoming these obstacles and their belief in eventual reform on a broad scale (Amaya, et al., 2007). Others consider the effects of a particularly contentious legislative action, such as federal or state-level DREAM Acts and higher education policies related to financial aid

and tuition assistance. Ethnographies and interviews enrich these reports, confirming the significance of legal barriers in contributing to declines in student motivation and hopelessness regarding future cultural and social assimilation that some students desire (Abrego, 2006).

In a related but divergent approach, other authors remind readers that undocumented students are not only Latino; rather, they come from a diverse array of backgrounds and countries of origin, which can lead to confusion and apprehension among counselors and advocates (Chan, 2010). Although frequently drafted with a specific audience in mind, these reports are particularly useful for comprehending the current state of immigration law, the implications for affected students, and the potential for future legislative developments or judicial interpretations. They highlight the predicted conflicts that will arise as more undocumented students aspire to advanced degrees, and offer guidance and insight on the previous legislative attempts to regulate this population, including both failures and successes to improve the political and legal standing of undocumented students in their pursuit of higher education.

Student Experiences and Guidance for Practitioners

Researchers who study the undocumented student population from a distance often fail to capture the lived experiences of students as they navigate the postsecondary landscape and confront persistent and pervasive barriers to educational advancement. This in turn prohibits the development of nuanced understanding of the sources of social capital and individual strength from which students draw to overcome these systematic obstacles. As a result, researchers and practitioners have difficulty identifying and implementing the most appropriate mechanisms for supporting students in their endeavors. To remedy these shortcomings, some ethnographic researchers aim to gain privileged access to the otherwise invisible population of students and to

publish studies of students' individual experiences from the first-hand, qualitative perspective. This research can assume many forms, including interviews (Teranishi, Martin, & Suarez-Orozco, 2013), case studies (Dozier, 2001; Gonzales, 2008; Munoz, 2009; Olivas, 1995), surveys (Gleeson & Gonzales, 2012), life histories and narratives (Gildersleeve, 2010; Gonzalez, 2010), and emergent methods of analysis that combine various qualitative methods (Hernandez, et al, 2010; Diaz-Strong & Meiners, 2007).

In addition to providing valuable insight into the lived experiences of students from the first-person narrative perspective, these works are important for their development of new theories and methods for examining the intersection of race, gender, poverty, and immigration status. Munoz (2013) analyzes the stress factors associated with college persistence using a Chicana feminist epistemological technique, enabling the author and readers to understand the experiences of undocumented Mexican women from a New Latino Diaspora site. Moreover, she incorporates hypotheses of how both popular media and ideology can shape higher education policy, which in turn has significant material implications for students within institutions. Similarly, Diaz-Strong and Meiners (2007) incorporate educational oral histories from students to explore the lived experience of identifying as "undocumented" in higher education. Their illuminating oral historical work illustrates the common factors across students that promote their attainment of academic success despite educational and immigration policies that criminalize their existence and categorize them as extraneous to the educational system (and yet critically important to the nation's service economy). Amplifying these students' voices to the attention of policymakers, politicians, and institutional leaders emphasizes the critical linkages among social policies that address a variety of issues, including poverty, incarceration, healthcare, economics, immigration, and education.

By permitting students to recount their personal stories from their own perspectives, voices, and languages, these authors capture the complex and competing perspectives of a population that is otherwise silent and subjugated, rarely the nexus of attention for institutions, politicians, or policymakers. The uncovering of these voices can in turn assist with the development of effectual guidance for practitioners, namely student affairs professionals within institutions that work with undocumented students on the ground level. The advice contained within these documents (Gildersleeve & Ranero, 2010; Gildersleeve, Rumann, & Mondragon, 2010; Ortiz & Hinojosa, 2010; Chan, 2010) offers both practical recommendations and best practices that not only create an inclusive and welcoming environment for all students at the institution, but also assist undocumented students in their efforts towards persistence and graduation despite formidable barriers. Officials are encouraged to consider such pre-college contexts as family and schooling environment in addition to direct measures of educational achievement, and are urged to serve as social justice advocates in the crusade for undocumented student access and success. Moreover, these authors remind policymakers and the public that lack of legal documentation is not a purely Latino issue, but rather that undocumented students come from a variety of ethnic and cultural backgrounds.

Educational Research and Theory Development

Arguably the most productive and substantial segment of the literature base on undocumented students in higher education is the emergent and rapidly growing field of higher education research and theory development, which covers a diverse and broad range of topics, approaches, and theories. This work is an amalgam of research in the more general field of higher education, incorporating elements of theory development and the formulation of new frameworks for studying undocumented students in higher education and new modes of

understanding students' experiences. Due in large part to the diversity of the issue and the interdisciplinary nature of the subject of study, this research covers a wide range of methodological approaches, theoretical frameworks, and specific content areas, such as the frameworks of LatCrit and Critical Race Theory, the importance of students' social capital in communal and family settings, the processes of assimilation and acculturation, and the role of financial aid and tuition policies in promoting educational equality. Collectively, these studies advance researchers' understandings of the issue from a multidisciplinary perspective, allowing scholars from a variety of fields to contribute their knowledge and insight to the contentious yet timely topic, which will undoubtedly expand in relevance as ever greater numbers of immigrant students seek out postsecondary opportunities.

Some new methodologies that have recently emerged from research on undocumented students in higher education include LatCrit and reinterpretations of Critical Race Theory. These frameworks address the intersectionality of a student's status a marginalized undocumented individual as well as a Latino/a, which results in unique challenges implicating race, ethnicity, and socioeconomic status (Huber, 2010; Huber & Malagon, 2007). Critical race testimonies of Chicana students can promote an agenda to interrogate and challenge the racist, nativist framing of undocumented students as problematic, burdensome, and illegal (Huber, 2009). These studies incorporate the narratives of students and challenge the power structures of society, questioning the prevailing social order and promoting a reinterpretation of the current structure of society and the pervasive disenfranchisement of certain segments of the population (Abrego, 2006; Chan, 2010). Research that implements the theory of LatCrit or Critical Race often incorporates a qualitative technique known as the life history methodology, which allows students to narrate their immigration stories self-reflexively. Two complementary theoretical approaches –

feminism and critical theory – combine with these emergent perspectives to provide a more comprehensive understanding of the native viewpoint of students struggling to conform to American culture, language, and society. (Abrego, 2011) A significant contribution of this work is its relevance in the construction of increasingly realistic and nuanced conceptualizations of the characteristics of undocumented students, particularly those from a Latino/a background. Importantly, it establishes a framework for developing new theories and methods for studying students from a critical point of view that challenges normative ideas of student development and academic attainment, thus advancing the field towards a more inclusive interpretation of student voices and narratives.

Other research has sought to uncover the role of social capital in both familial and communal settings, arguing that it is an exceedingly vital source of support for students as they navigate the transition to postsecondary education, particularly if they lack adequate economic, political, or financial capital (Oliverez, 2006; Gonzales, 2010). Research suggests that social capital in communal settings can serve as a protective factor that enables students to draw upon significant stores of strength and resilience despite formidable obstacles and setbacks (Perez, et al., 2009; Enriquez, 2011), offering solace in a familiar community in opposition to the often alienating and unwelcoming campus of a higher education institution. Some of these students, through reliance on social and other forms of capital, do successfully assimilate and integrate into society, becoming productive and contributing members through their educational attainment and unique contributions (Nora & Crisp, 2009). Research on the processes of assimilation and identity formation (Abrego, 2006; Ellis & Chan, 2013), however, highlights the potential negative reactions from the public and the corresponding implications for undocumented students, including violent or angry backlash towards undocumented student

advancement, and regression towards less generous social policies for otherwise deserving and capable students (Stevens, 2004; Massey, 1995). This literature provides researchers with a background from which to advance future studies, with the knowledge that seemingly benevolent attempts to acculturate can indeed have unintended and unanticipated consequences for students who are seeking or who are coerced into cultural assimilation.

Other research in the field of higher education and theory development adopts a more instrumental approach, including work on the role of financial aid and tuition policies in promoting the enrollment and academic attainment of undocumented students. Empirical research using national datasets on the geographic locations of students and the existence of instate tuition policies suggests that states with more permissive legislative environments (i.e., those with in-state tuition residency policies) experience higher rates of enrollment among undocumented students and higher levels of academic achievement among these students at both the secondary and postsecondary levels (Flores, 2010; Flores & Chapa, 2008). This in turn has positive implications for the local and national economy, including investment in the education of its citizens and increased opportunities for career advancement (Oseguera, Flores, & Burciaga, 2010; Tienda & Haskins, 2011). Other researchers (Perry, 2006; Olivas, 2009) find that the discrepancies in tuition and financial aid policies that exist across states generate conflict and confusion, and that the passage of federal legislation such as the DREAM Act could resolve this tension and provide uniform regulations for all students, regardless of state of residence (Gonzalez, 2010; Drachman, 2006). This research confirms that the exclusion of undocumented students from the pool of students eligible for federal or state-based financial aid has negative implications for their short- and long-term educational achievement, with many students dropping out of school due to financial hardships (Diaz-Strong, et al., 2010; Oliverez, 2006).

Other empirical research employs quantitative methodologies and policy theories to understand both the conditions for and implications of ISRT policies. Flores and Horn (2009-2010) examine the outcomes of ISRT policy enactment in Texas and find that beneficiaries of the policies remain in college at rates similar to their peers who have legal citizenship or permanent residency. McLendon, Mokher, and Flores's (2011) study of the demographic, economic, political, and policy-related conditions that promote ISRT legislation suggests that descriptive representation, population demographics, higher education governance, and laborforce conditions are all associated with states' likelihood to consider ISRT policies. Using an event history analysis of policy development and emergence, the authors find that states with more female legislators and more foreign-born residents are more likely to pass policies that provide opportunities for undocumented students to attend public state institutions at in-state tuition rates. Moreover, they suggest that a variety of mechanisms may serve as influential factors in this legislative activity, including interstate diffusion, postsecondary policies, systemic political factors, economic forces, and representativeness. The research presented in this study differs from the work of McLendon, et al. in several respects; first, it expands the years of data collection beyond 2007 to 2015; it considers variables not included in the authors' model, such as gubernatorial power and total state financial aid; and it approaches the research design from alternative theoretical frameworks, namely social construction and policy design as well as the advocacy coalition framework.⁶

Whereas considerable amounts of research have examined the role of financial factors in educational attainment, these studies are some of the first to examine the impact on

⁶ Despite these differences, many of the findings of these studies are similar, including the significant effects of governance structures, unemployment rate, and the percentage of the population that is foreign-born on ISRT policy adoption. Both studies also found limited (and uncertain) effects of diffusion.

undocumented students, which represent a particularly vulnerable and marginalized population. Furthermore, these emergent research findings and agendas are among the first attempts to uncover the indirect connections between the educational environment for undocumented students and their long- and short-term outcomes in mental, psychological, and physical health (Tienda & Haskins, 2011; Belanger, 2001; Perez & Rodriguez, 2012). Perhaps of greater importance to policymakers and institutional leaders, moreover, is the elucidation of hypothesized direct links between permissive policies and student persistence (Flores & Horn, 2009-2010). Additional research and insight are necessary to uncover the potential positive outcomes for students who are afforded both the educational and financial opportunity to persist in higher education and to obtain the skills and training necessary to achieve success post-graduation.

Gaps in the Literature

Despite the growth in the literature base examining the presence of undocumented students in higher education and the transformations of state higher education policy, significant work remains to be done on the immediate causes and long-term implications of such policies for this unique subset of the immigrant population. Specifically, additional work is required in the methodologies that researchers have used to study undocumented students directly, including more robust understandings of the intersectionality of race, gender, and immigration status in higher education. Developments in LatCrit and Critical Race Theory have initiated this trend, with promising developments for greater comprehension of the lived student experience from a first-person narrative perspective. However, undocumented students remain historically understudied, including those from non-Latino nations or nontraditional backgrounds, particularly in comparison to the stereotypical "average" college students (i.e., white, middle-

class, 18- to 24-year old students). Researchers that can identify and develop an affinity with such students are in the ideal position to connect with undocumented students and to tell their stories from an insider's point of view, enabling those without such privileged access to observe and perhaps grasp the experiences and emotions of this complex and diverse population of students. Moral and ethical issues will undoubtedly arise, especially with regards to which researchers are best situated and privileged to obtain access without the danger of exploiting students or sensationalizing their stories. However, it is only through in-depth analysis of students lived experiences that researchers and policymakers can better conceive of how to study, address, and assist this vulnerable population.

Additional research on some of the instrumental policies related to undocumented student access, such as the provision of state financial aid through loans and scholarships, will also assist researchers and policymakers seeking better conceptualizations of the student experience and the rates of persistence and graduation among systematically underrepresented populations. While anecdotal evidence and some limited studies confirm that undocumented students who have access to financial assistance are more likely to persist and graduate, strong empirical research in this area is lacking, due in part to the relatively recent passage and limited diffusion of such policies. A more thorough assessment of the quantitative effects of a tuition-equity or financial aid policy that also considers rates of student enrollment, persistence, and degree attainment could provide valuable and verifiable evidence for researchers seeking to influence the policy decisions of legislators, governors, institutional officials, and other state and federal government actors. Indeed, rigorous quantitative research is lacking in many of the topics related to undocumented students in their pursuit of higher education, including accurate counts of student enrollment, as well as the number of students who choose not to enroll – despite being

academically qualified – due to an unwelcoming policy environment or lack of sufficient financial aid. Given the need for reliable research on the causes and effects of policymaking at the federal and state level, it is exceedingly critical that researchers develop methods for empirical measurement of the implications of policies for students in both the short and long term.

Most importantly, as more states welcome an influx of undocumented students into their jurisdictions and public educational systems, is it likely that these state legislatures will confront the issue of how to treat undocumented students in public institutions of higher education. Given the relatively recent passage of legislation related to this matter, however, only minimal research exists examining the long-term implications of postsecondary policies for undocumented students, including the potential positive or negative impacts of legislation that establishes or prohibits in-state tuition residency. These laws also have important consequences for state economies, including the ability of undocumented students to contribute financially, socially, and politically to society as legal and legitimate citizens. Whereas some of the arguments that oppose the presence of undocumented students in higher education underscore the belief that immigrants do not contribute sufficiently to the economy, research confirms the inverse: immigrant workers enhance the service economy and the local tax base, particularly in states with a predominantly agriculturally-based economy. Accordingly, better research on the economic implications associated with permitting or denying access to higher education could assist states in the formulation of more appropriate policies for their specific economic and social contexts.

Relatedly, the rate of adoption of in-state residency tuition policies across states has not been studied systematically, and little attention has been given to the state context and characteristics that determine whether and how state governments choose to pursue a permissive

or restrictive form of legislation. These characteristics can include a state's political ideology, economic vitality, demographics, legislative and gubernatorial structures, and makeup and governance of the higher education system. A longitudinal assessment of the specific contextual circumstances of the state could assist policymakers and researchers with predictive models that forecast the future status of undocumented students in higher education across the country. Additional factors that have been largely understudied but that are hypothesized to contribute significantly to the development and dissemination of policies include the processes of policy innovation and policy diffusion among states. Accordingly, this study addresses a critically important research question that has not received adequate attention or rigorous analysis within the policy arena concerning undocumented students in higher education. Given the pressures that states confront to compete with one another economically, politically, and socially, combined with the normative pressures to conform to national standards, it is hypothesized that states exert some form of pressure on one another to adopt policies of a specific nature, including those related to undocumented students in higher education. As the U.S. continues to welcome evergreater numbers of immigrants, including a proportion of whom are undocumented, it is critical for researchers to maintain an appreciation for and understanding of the opportunities and challenges that await these individuals.

3. THEORETICAL FRAMEWORKS

Generating a more comprehensive and nuanced understanding of the emergence of state policies on undocumented students in higher education necessitates approaching the topic from a theoretical conception of how and why states choose to pass or block certain forms of legislation. Generally, policy theories and conceptual frameworks were developed to provide order and organization to the processes of policy consideration, formation, adoption, and implementation. Ultimately, theories of policy development seek to describe "who gets what, how, and why," and to examine how policy can be viewed or conceived in a variety of modes, including as text, as values-laden action, as processes, and as discourse (Jones, 2013). These theories and frameworks can uncover the content, purposes, and extent of specific policies, including the unintended or unanticipated consequences that diverge from the policy's stated goals and objectives. In this way, policy theories not only explain how or why a policy emerged within a state at a specific point in time, but also the extent to which these policies are successful in achieving their proposed purposes, and whether additional motivations may underlie their development and enactment.

When an issue is particularly complex or covers a variety of political issues, often more than one theoretical framework is necessary to describe and explain the phenomenon and capture the features of governmental action that have political significance (Lowi, 1972). The integration of multiple theoretical frameworks allows for the strengths of one approach to account for and redress the weaknesses of another, thereby filling the gaps of a theory that cannot adequately explain anomalous or seemingly irrational patterns of behavior and decision-making. A focus on the dynamic nature of policy implementation through the integration of a variety of frameworks

also enables researchers to consider the broader, macro-level political and socioeconomic variables that influence the policy process (Sabatier & Mazmanian, 1980). Moreover, the inclusion of more than one framework generates a nuanced and comprehensive analysis of all the components of the policy process, including the framing of the issue and the target population, the emergence of policy solutions, and the effects of the policy on the targeted population as well as the broader society (Linder & Peters, 1984). For a study of undocumented students in higher education, the research questions explored herein cover a wide array of policy arenas and problems, rendering the use of more than one framework necessary for discussing its framing, emergence, and effects. Collectively, these theories provide a framework for answering the research questions of this study, which include:

- 1. What factors influence state policymakers' decisions to ISRT policies? Specifically, what role do internal state characteristics, including economic, social, and political factors, play in policymakers' decisions?
- 2. To what extent do these policies spread through the processes of policy innovation and diffusion across states?
- 3. To what extent does the social construction of target groups in society, particularly undocumented students, affect the design and adoption of these policies?
- 4. How can state characteristics, the processes of diffusion, and the phenomenon of social construction be used collectively to generate predictive models for the future adoption or evolution of these policies?

Given the objectives set forth in these research questions, this study of the emergence of in-state residency tuition (ISRT) policies employs three complementary frameworks: the advocacy coalition framework, the framework of policy innovation and diffusion, and the theory

of policy design and social construction.⁷ Each of these approaches will be considered in turn to assess and analyze their contributions to understanding if, how, and why states pass legislation relating to undocumented students in public higher education.

Advocacy Coalition Framework

The advocacy coalition framework (ACF) was developed in 1988 by Sabatier and Jenkins-Smith to account for the behaviors of individuals who coalesce into groups based on shared ideological, political, economic, or social beliefs. The framework seeks to uncover individuals' and groups' strategies for influencing a variety of facets related to the policy process, including the actions of governments, the rules of institutions, the outcomes of legislative decision-making, and the effects of policies. The earliest uses of the framework in scholarly research sought to uncover how and why different alliances form on either side of a contentious public policy issue, and how the formation and evolution of such groups contributes to the fluctuations between policy change and policy stasis. The framework posits that groups of advocates and opponents form coalitions based on three levels of beliefs: shared deep core beliefs, which are bound by the policy subsystems and are often normative or empirical; policy core beliefs, which reflect values and priorities of policy systems; and secondary beliefs, which are concerned with the instrumental mechanisms for addressing the policy issue. The framework also suggests that individuals and groups in advocacy coalitions operate within a policy subsystem, which contains the stable external parameters – including the nature of society, the

⁷ A fourth theory, the median voter theorem, is considered in the choice of covariates to include in the research design but does not stand alone as its own theoretical approach. This is due to the overly-burdensome assumptions that are necessary for the theorem to hold. Rather, approximations of this theorem appear in the measures for citizen and state government ideology, citizen votes for gubernatorial candidates, and partisan control of the legislature and governorship. For additional information on the median voter theorem, see Downs (1957).

structure of government, and the political environment – as well as exogenous shocks such as economic or political change.

Although groups are constrained by short-term resource allocations and the limited ability of policy actors to enact change, they often take advantage of long-term investments such as dedication to a cause, shared core beliefs, and cleavages in the social order that provide windows of opportunity for policy change (Jenkins-Smith, et al., 2014). In this regard, the most important components of the ACF are the dialogues and policy conversations that occur among groups interacting within the demarcated boundaries of the policy subsystem. Policy changes and transformations occur through the development, maintenance, and evolution of advocacy coalitions that engage in strategic interactions to pursue their policy goals and to influence governmental decision-making. Significant changes in the core or secondary beliefs of a coalition can also promote policy change, with the beliefs of groups manifesting as policy proposals that reflect normative and subjective conceptualizations of the policy problem (James & Jorgensen, 2009). These changes generally occur in response to exogenous shocks and fluctuations in the policy environment, including electoral changes or transformations in public opinion due to significant external events (Jenkins-Smith, et al., 2014).

The advocacy coalition framework is particularly useful for understanding complex public policy debates in which two or more sides of a policy issue hold incompatible fundamental beliefs about the nature of the issue or the target of the policy proposal. Some specific policy contexts and issues are particularly suited to the framework of ACF, with clear delineations among opposing groups based on shared beliefs or when examining a small number of states from a qualitative perspective (Deupree, 2013). However, rarely does the ACF stand as a single adequate framework for explaining all aspects of the policy process, including framing,

emergence, and implications. Indeed, the ACF provides minimal contributions to the study of policy framing, aside from the potential for some groups to draw on core beliefs about the nature of the targeted population or the policy solution to frame the public and political discussion of its consideration for enactment. Rather, the ACF is most useful for understanding how policies emerge through the interaction of coalitions advocating for the passage or prevention of a policy proposal through strategies of collective action.

Some researchers have applied this theoretical approach to issues in higher education, including the formation of alliances and the use of information in tuition assistance programs (Shakespeare, 2008) or the consideration of merit aid eligibility criteria (Ness, 2010). However, despite its contributions to the analysis of policy emergence, the ACF does have some shortcomings that prevent it from accounting for the role of individual policy actors or the prominence of other state or political factors that are more influential in determining policy outcomes. A primary weakness of the ACF is its tendency to prioritize the collective at the expense of the individual, often overlooking the effects of influential actors and policy entrepreneurs (Ness, 2010; Smith & Larimer, 2009).

One of the limited number of scholarly works that applies the advocacy coalition framework to the issue of undocumented students in higher education confirms that ACF has some explanatory power, particularly for the emergence of discrepant policies in two states with large undocumented immigrant populations. Dougherty, Nienhusser, and Vega's (2010) comparison of state policies in Texas and Arizona effectively captures the role of advocacy coalitions in accounting for the passage of a tuition equity law in Texas and the prohibition of tuition equity in Arizona. In both states, advocacy coalitions formed based on shared deep core beliefs about the fundamental human rights afforded to (or denied from) undocumented students.

The coalitions in each state operated within a specific policy subsystem, including the stable contextual factors of the societal perspective, the governmental structure, and the characteristics of the state higher education system. In Texas, the strength of advocates and the relative weakness of the opposition permitted special interest groups to use economic and moral arguments to convince the state legislature to pass ISRT policies. In Arizona, meanwhile, the existence of a citizen referendum and the history of anti-immigrant sentiment resulted in restrictions on undocumented students' rights to access higher education in the state. By examining the roles of coalitions in the respective states, the authors provide a thorough explanation of how and why each state adopted different policies, and how these processes of policy consideration and outcomes have affected undocumented students in the ensuing years.

Reich and Barth (2012) also conduct a case study of the influence of coalitions on immigration policy, arguing that the rise of the "restrictionist agenda" has sought to contradict federal policies and has enabled states to employ arguments of states' rights to restrict immigration nationally. Although most state governments are cautious of violating the norms of federalism by interfering in policy arenas in which they lack jurisdictional authority, the direct democracy that characterizes the American system of government does facilitate the diffusion of state-level innovations across states. Given that most states also maintain a balance of restrictive and permissive immigration policies, two competing coalitions have emerged that inform state immigration policy. The first is based upon the framework that immigrants and migrant laborers reflect the logic of the free market, in which employers and laborers are matched based on the supply and demand of the market economy. This perspective views immigration as morally neutral and understands immigration policy as a mechanism for breaching the disconnect between the demands of the market and the existing restrictions on immigration. A second

perspective (the opposing coalition) views immigrants and immigration through the notions of law and order and is undergirded by racial and ethnic preconceptions that characterize unauthorized immigrants as criminals reaping the benefits of U.S. citizenship. Proponents of this conceptualization of immigration emphasize identification and punishment of unauthorized immigrants and the restriction of future immigration. Between these two competing frameworks and coalitions exist the political factors that engender their beliefs: the first is an ideological struggle within the Republican party between a conservative restrictionist agenda and a pro-labor business coalition, while the second is direct democracy that contributes to the ability of restrictionist legislation to develop and diffuse.

Another study that provides positive evidence for the applicability of ACF is Deupree's (2013) dissertation, which implements a multiple case study approach to examining the use of research in undocumented student policy decisions. The study investigates and compares policy development in North Carolina, South Carolina, and Georgia, and ultimately concludes that technical information does influence policymaking and negotiation in North Carolina and Georgia, wherein policymakers engage in a "professional forum" that privileges research and knowledge in the policy process. However, her research also suggests that political factors are exceedingly critical and often outweigh the use of research and evidence, thus highlighting politicians' interest in maintaining the political and socioeconomic status quo. She concludes, ultimately, that the ACF provides insight into the development of coalitions around value-based decisions and deeply-held core beliefs, but that the framework alone is not sufficient for explaining the significant overarching influence of politics and power in the policy process.

Similar work conducted by these and other authors is increasingly insightful given the contentiousness of the issue of undocumented immigration and the likelihood that similar

tensions and coalitions currently exist and will continue to emerge within and between states across the country. Application of the ACF to other state contexts could thus prove illuminating in determining the existence of restrictive or permissive tuition policies in other states and could provide predictive power for researchers studying the potential emergence of such policies in other jurisdictions. A related, and important component of state policy-making within the framework of competing advocacy coalitions is the role of information sources and the political structure in determining how legislators develop laws. Mooney (1991) identifies three macrolevel subprocesses that comprise the model of lawmaking, including the development of legislation, the act of persuasion, and the voting decision. Each subprocess demands differentiated forms of information, including legislative insiders with extensive political knowledge, outsiders with professional experience but little intimate knowledge of the political process, and middle-range interest groups and representatives invested in the outcomes of public policymaking. Webber (1987) also contends that the propensity to use information includes four main factors, including individual worldview and attitude toward sciences, perception of policy consideration, perception of legislative structure, and legislative orientations. Research suggests that legislative orientation is more important in determining how and why legislators develop or support a particular public policy.

One potential shortcoming of the advocacy coalition framework is its overreliance on the role of collective action in strategic behaviors and decision making, coupled with a limited explanation of the theories and mechanisms underlying collective action. The ACF prioritizes the activities of the group over those of the individual, arguing that group dynamics are a strong force for policy change and action. However, the ACF is a primarily descriptive approach, describing the existence and status of coalitions, noting when they form, maintain, or evolve, and

connecting these coalitions to policy change (Smith & Larimer, 2009). What the framework fails to capture, therefore, is the process by which coalitions emerge, the strategies of collective action they implement, and the ultimate implications of these evolving relationships. Incorporation of theories of collective action, such as the institutional analysis and development (IAD) framework, could allow ACF to account for why and how coalitions form, persist, and transform over time in response to interactions with other coalitions, changing stable parameters, shifting internal beliefs, or exogenous shocks to the policy subsystem (Schlager, 1995). Awareness and acknowledgment of this shortcoming and the need for corrective policy approaches is particularly important in the case of undocumented students in higher education, as it is a relatively nascent issue that is likely to evolve and intensify in the coming years as more students immigrate to the country, graduate from U.S. high schools, and demand access to affordable postsecondary education.

Policy Innovation and Diffusion

Another approach that informs the analysis of the public policy process is the theoretical framework of policy innovation and diffusion, which was developed by Walker in 1969 to account for the processes by which states emulate and compete with one another in the public policy arena. Drawing on theories of human behavior and organizational decision-making, the policy innovation and diffusion framework posits that policymakers look for situations analogous to their own circumstances, often turning to geographic and regional peers that have confronted similar situations for guidance. States thus contemplate and consider the experimentation that has occurred in other states to determine the approaches that have been most effective and choose to adopt or reject policies based on prior successes or failures. As units in a federal system, states are also subject to normative pressures to conform to national

standards, and are in competition with one another for economic, social, and political advancement. In this regard, innovation is not the invention of a new policy, but rather the adoption of an approach that is novel to the state in question, though it may have been previously developed and implemented elsewhere. The propensity to innovate is thus conceived of as a combination of the motivation to innovate, the barriers to innovation, and the existence of resources to overcome these barriers (Mohr, 1969).

Researchers seeking to understand how policies diffuse across states will consider both the mechanisms of diffusion, such as coercion, policy learning, emulation, and competition, as well as internal state characteristics that may influence the consideration and adoption of the policy. These internal characteristics and contexts may include a diverse array of factors such as political ideology, social structure, and economic environment, as well as ecology of the higher education system in the cost of postsecondary policies. A unified model of policy adoption thus considers the roles of both forms of influence, including the interactive effects of time and state characteristics and how such interactions may contribute to policy development alongside processes of diffusion. A significant body of literature employing this unified model of policy development confirms that analyses of each factor of policy adoption cannot be conducted in isolation, but rather that a combinatory and holistic perspective is critical to understanding the nuances of policy development related to contentious or conflictual issues (Berry & Berry, 1990; 2014).

While a large portion of the public policy development literature explores the interactions among diffusion processes and internal state characteristics, few empirical studies have examined immigration law and the specific implications of ISRT policies. Boushey and Luedtke's (2011) assessment of state innovation in immigration policy suggests that the factors

leading to the introduction and adoption of state immigration policy include cultural and economic incorporation of immigrants as well as the control and regulation of immigration flow and settlement. The internal characteristics hypothesized to influence these policy decisions include fiscal federalism, ethnic contact, and ethnic threat, as well as economic conditions, dynamics of immigration, population demographics, and political control and structure. The study confirms that the variations in immigration dynamics across the country are in part responsible for engendering the discrepancy in state approaches and contributing to the patchwork of ISRT policies that currently characterizes the policy landscape. Specifically, states with larger foreign-born populations, more professionalized legislatures, and a higher rate of immigration flow and settlement are more likely to pass policies related to integration and regulation. Despite this work, questions remain as to whether the proliferation of state immigration laws is due to internal state experimentation (policy innovation) or coercion from the federal government (vertical integration). In an analysis of over 500 immigration bills between 2006 and 2008, Newton (2012) finds little evidence of policy innovation at the state level in immigration laws related to drivers' licenses, law enforcement, and regulations. Rather, the findings suggest that overall, states experience top-down pressures from the national government to comply with federal immigration laws and national standards of practice.

Unlike the ACF, the policy innovation and diffusion framework can provide some explanation for the framing of policy issues, in that states can borrow and learn from one another regarding the most effective approaches for framing an issue to achieve the desired policy outcomes. This process occurs prior to the development and passage of a public policy, when legislators, special interest groups, and other stakeholders engage in a process of policy framing, discussion, and consideration of policy solutions. Some states with small undocumented

immigrant populations or highly independent state systems of higher education may disregard the issue of undocumented students seeking access to higher education due to low salience or fear of federal preemption. However, these states may seek guidance from the analogous situations of their geographic and regional peers for examples of how best to frame the issue in a manner that promotes a policy solution with the desired social, political, or economic effects. Thus, these states engage in a form of emulation and policy learning, seeking independently to predict and perhaps avert the emergence of the issue and to develop a predetermined approach to framing both the nature of the issue and the public perception of the students who are the target of the legislation.

In addition to providing some explanatory power to issue framing, the policy innovation and diffusion framework is highly effective for understanding the emergence of public policies within a state context. The framework has been applied most frequently to issues of environmental and health policy, given the likelihood for states to adopt national standards through normative pressures to conform, as well as federal coercion to uphold minimum standards of practice. Several researchers have examined topics parallel to ISRT policies, such as the adoption and diffusion of cooperative immigration enforcement through 287(g) programs (Bozovic, 2012). In addition, some researchers have applied the framework to issues in the field of higher education, such as financial policy (Lacy & Tandberg, 2014), merit aid programs (Cohen-Vogel, et al., 2008; Ness & Mistretta, 2010; Doyle, 2006), and performance accountability standards (McLendon, Hearn, & Deaton, 2006). The 2017 chapter by Hearn, McLendon, and Linthicum provides a broad review of research on policy adoption in political science and sociology to develop a conceptual framework for understanding how diffusion and

⁸ 287(g) Programs provide local governments with additional resources that encourage state and local policy officers to collaborate more closely with the federal government in the enforcement of federal immigration laws

contextual factors are relevant to state postsecondary policies. The authors develop a four-part framework that incorporates socioeconomic, organizational/policy, political/institutional, and policy diffusion contexts.

The results of these studies in both postsecondary education and in topics relevant to immigration and immigrants' rights suggest that the processes of diffusion occur to some degree in higher education policy as well as in other policy arenas, including dynamic and regional shifts in the strength of diffusion processes as well as the presence of state-level characteristics and the actions of individual policymakers that may supplement or undermine the diffusive pressures. However, these studies also confirm that the theory of policy innovation and diffusion is most effective when combined with alternative frameworks or is amended to account for the role of individual actors known as policy entrepreneurs. These individuals can serve as instigators of policy change through creative innovation, mobilization of support, and spanning of boundaries to gain momentum for a policy solution. They can contribute during several phases of the policy process, namely policy framing and emergence, by serving as mediators of interests and catalysts for action (Mintrom, 1997).

Another important component of the policy innovation and diffusion framework that explains how states adopt policies in a diffusive pattern is the theory of social learning. Social learning occurs when states looks to the successes and failures associated with policy experimentations in other jurisdictions, drawing on the lessons that state policymakers have learned in the adoption of a variety of public policies. Policymakers engage in such imitative processes as a means of satisficing, thus limiting the expenditures of time and resources required to research the potential outcomes of policy proposals and the most effective mechanisms for implementation. State policymakers turn to the examples of their neighbors based on the

perceptions of convenience, political or geographic similarities, political networking, or shared media outlets (Boehmke & Witmer, 2004). The degree to which legislators choose to adopt and implement policies depends largely on their individual assessment of the success of the policies in other locations.

States engaging in policy learning employ a strategic activity known as the gametheoretic approach, choosing either to invest in experimentation and examine the potential
implications of a policy before complete implementation, or to shirk and allow other states to
engage in experimentation and learn from their successes and failures. States thus maintain a
balance between ideological proximity to their peers and assessments of instrumental
effectiveness (Volden, Ting, & Carpenter, 2008). Some public policies may be more suitable to
the processes of social learning than others, with moral policies often confronting more
contention and conflict from the public than purely economic policies. Public policies addressing
controversial moral issues (such as abortion laws or immigration policies) display a truncated
learning curve (i.e., states encounter barriers to both learning and adoption that prevent action)
due to political and social apprehension towards implementation. Thus, the rate of diffusion
across states may be limited by internal state characteristics such as political or social ideology
(Mooney & Lee, 1995).

Analysis of the geographical distribution of in-state residency tuition policies (as well as prohibitions on the practice) for undocumented students suggests that some form of diffusion may be responsible for the current pattern of adoption. Clusters of permissive policies occur in the Northeast, Southwest, and Northwest of the country, while restrictive policies exist in the Southeast and the Midwest (uLead Network, 2016). These clusters likely indicate that some degree of diffusion occurs among states that are geographical neighbors. Policymakers within

one state seek out analogous situations in neighboring states for guidance on how to frame, develop, and implement policies with a specific, intended, and desirable outcome. In addition to convenience due to geographical proximity, it is also possible that states within demarcated and distinctive geographical regions have shared internal state determinants, such as political culture, gubernatorial power, legislative professionalism, economic conditions, population demographics, governmental structure, and ecology of the state higher education system (Gray, 2013). These geographic trends in economics, politics, and social issues have persisted throughout time and continue to influence the ideologies, institutions, and systems that emerge within a region (Elazar, 1984). A unified model of policy emergence accounts for these internal state determinants as well as the hypothesized processes of diffusion, including such mechanisms as competition for students and coercion to maintain national standards and societal norms. In the case of undocumented students, the restrictive policies in the Southeast and Midwest may be due to the political ideology of the citizens and elected officials in the region, which reflects the belief that undocumented immigrants are not rightful residents of the country and are therefore ineligible for public benefits. Alternatively, the permissive policies in the Northeast and Western states may reflect a political ideology that prioritizes the fundamental right to a free education and a belief in amnesty and pathways to citizenship for undocumented immigrants.

Policy Design and Social Construction

In contrast to the two aforementioned policy theories, the theory of policy design and social construction can elucidate all phases of the policy process, including the framing of the issue, the emergence of policy solutions, and the effects of the policy on targeted students and the broader society. The theory of policy design and social construction was developed by Schneider and Ingram in 1993 to account for the social construction of targeted populations in

society and the resultant policies that address public policy issues related to these populations. The theory posits that reality is inherently socially constructed through the processes of language, communication, and interaction among subjective individuals with their own interpretations and meanings of reality. Individuals engage with one another and their existential worlds, forming interpretations of occurrences and phenomena that they communicate to other individuals; these interpretations become an integrated part of the social fabric and influence the perceptions of other individuals. Reality is thus both subjective and intersubjective, constructed through individual as well as communal mechanisms, and lacking any foundation in an objective notion of truth (Stein, 2001).

Regarding targeted populations, including marginalized or underrepresented individuals such as immigrants and undocumented students, the process of social construction occurs through a cyclical series of actions. Individuals interacting within the social order engage in both conscious and unconscious value distribution, which in turn elicits emotional responses that generate the tendency to name and label groups in society based on positive or negative conceptualizations of their inherent natures and tendencies. Individuals are thus categorized in one of four mutually exclusive groups: the advantaged, the contenders, the dependents, or the deviants. This classification process, over which marginalized individuals maintain little if any influence, is informed and influenced by the degree of individuals' political power and their positive or negative portrayal in society. Policymakers frame, construct, and implement public policies with these social constructions as their guide, engaging in a process of strategic assessment of the distribution of benefits and burdens among these four groups. The emergent policies thus balance economic, political, and social power to determine the actions and activities that will generate the most desirable outcomes for political risk and opportunity. Ultimately, the

policies will reward benefits to the individuals within society that are deemed most worthy and will distribute costs upon those deemed most unworthy; these determinations reflect the internal characteristics of states that influence policy development and adoption (Schneider, Ingram, & deLeon, 2014).

The theory of policy design and social construction emphasizes the centrality of policy design as well as the attention to policy social constructions. It thus focuses on the normative ends of social inquiry and provides significant insight and explanatory power for the framing of vulnerable populations, many of whom lack political and economic power and may be the object of positive or negative portrayals in society (Schneider & Sidney, 2009). For instance, in the field of healthcare, preconceptions regarding race, gender, and class have been shown to have significant effects on society's judgments of the individual-level versus societal-level factors contributing to diseases such as obesity (Hawkins & Linvill, 2010), as well as determinations regarding which groups of individuals deserve public health benefits such as subsidies (Gollust & Lynch, 2011). Some research has applied the theory to the field of education and the framing of students, including the categorization and characterization of students based on the labels that are inherently associated with or explicitly attributed to a public policy. Stein (2001) uses this approach to conduct an interpretive policy analysis assessing how the perceptions of educational practitioners are informed by the policy language that is symbolically and metaphorically mapped onto students. The preconceptions that instructors develop to assess their students exist regardless of and independent from the observed individual attributes of students, due largely to subconscious social and cultural norms that have become institutionalized in modern society. Specifically, the use of symbolic language and the connotations that such language evoke

contribute to the pervasive tendency to frame students as either deserving or undeserving of the benefits or burdens of a policy proposal.

Given their lack of political and economic power, most low-income and minority students would qualify as "dependents" in the four-part categorization of target populations, exhibiting weak political power and positive social constructions. Schneider and Ingram (1993) characterize such individuals as lacking control and overburdened by policy implications, and they include mothers, children, and the disabled within this category. However, the labeling of students based on the emotional responses associated with a public policy could categorize some students, particularly those without legal documentation or whose parents and guardians lack legal documents, as "deviants" unworthy of the benefits of public policies. According to Schneider and Ingram, these individuals possess low political power and have negative social constructions, and typically include such social outcasts as criminals, drug addicts, political dissidents, and gang members. For undocumented immigrant students seeking access to higher education, their framing as deviants rather than dependents could have implications for the emergence and ultimate implications of policies regulating their access to higher education. Moreover, the framing of the issue itself (i.e., "illegal" undocumented students seeking access to state benefits preserved for the country's citizens) is also an important component of the policy process. In addition to framing the targeted populations, policymakers can frame the nature of the public policy issue as worthy or unworthy of attention or redress through political actions and policy solutions (Smith & Larimer, 2009). Reich and Mendoza's (2008) analysis of Kansas demonstrates the importance of language and attitudes in policy implementation, arguing that framing ISRT policies as responses to equal educational opportunity enabled the legislature to pass legislation expanding in-state tuition to undocumented students.

Building on the framing of target populations through social constructions and emotional responses, public policies emerge that reflect these conceptualizations and aim to preserve the prevailing social order. The designs of "policies with publics" reflect environments in which the political context, political considerations, and political factors have significant and material implications for the policies that emerge (May, 1991). Policymakers engage in a process of analysis that begins with examination of the distribution of burdens and benefits among individuals within society, as well as how these distributions can or should change in response to the implementation of a public policy. The result is the conscious and deliberate articulation of policies that are intended to maximize political opportunities for society's most deserved populations and to simultaneously minimize the potential for political risk to individuals in power. Employing the tools of social construction and symbolic language, policymakers develop a targeted, strategic public policy that perpetuates the dominance of some populations and maintains the subjugation of others in order to institutionalize the distribution of wealth and prosperity to the "advantaged," while systematically denying the same benefits to the "deviants." The policy emergence phase of the policy process is thus itself a form of social construction, in which the preconceived notions that inform the framing of the target populations produce policies that rationalize these perceptions. To justify such actions, policymakers often rely on purportedly objective scientific research that seemingly rationalizes and institutionalizes not only the development and implementation of the policy, but also the treatment of socially constructed groups that function as the targets of these policies (Schneider, Ingram, & deLeon, 2014).

Although the application of policy design and social construction in empirical studies has been limited, recent trends suggest that scholars are beginning to employ the theoretical lens more frequently in order to understand the causal mechanisms leading to changes among

individuals in advantaged, contender, dependent, and deviant populations (Pierce, et al., 2014). Limited research on the role of social construction in the development of in-state residency tuition policies for undocumented students suggests that powerful symbolic meanings underlie the content and context of controversial public policies. Research by Reich and Barth (2010) on the emergence of ISRT policies in Kansas and Arkansas confirms the power of social constructions to result in positive or negative perceptions of undocumented students and correspondingly permissive or restrictive state policies governing their access to higher education. The authors find that the social construction of students as either potential citizens or illegal deviants is a critical phase in the policymaking process and contributes to the eventual passage of legislation that regulates the eligibility of such students to access in-state tuition rates at public institutions of higher education. The actions of state policymakers thus reflect not only the social construction of target groups in the framing phase of the policy process, but also the strategic consideration of risks and opportunities for students based on their characterization as either deserving or undeserving of power, influence, and equal opportunity from the view of state and federal governments.9

Unlike the theoretical approaches of ACF and policy diffusion, which do not encompass mechanisms to account for the effects of public policies on the target populations or on the totality of society, the theory of policy design and social construction does lend explanatory power to assessing the ultimate implications of the enactment of a public policy. In this regard, public policy can be considered in one of several orientation frameworks, including as discursive text that mobilizes discourse across its contexts and processes (Jones, 2013). Moreover, one

⁹ Given the choice of variables to represent social construction in this study (outlined in Chapter 4 below), it is not possible to assess the degree to which states socially construct undocumented students as "deviants" or "dependents" through the adoption of certain forms of immigration or postsecondary policy. Future research using techniques such as content analysis of legislative language and coverage in the media could provide further nuance to this issue.

unique contribution of the theory of policy design and social construction is its ability to elucidate and illuminate the full cycle of the policy process and the generation of a feedback or feed-forward loop in which policy outcomes influence both policy framing and policy emergence (Schneider & Sidney, 2009). Research supports this assertion, demonstrating that the labels associated with a policy are metaphorically mapped onto students' identities and are reified through practice and the perceptions of policymakers and practitioners. Thus, when students are characterized in a negative manner, the policies that emerge have deleterious effects, further subjugating and disenfranchising these students and erroneously justifying their initial classification as unworthy and undeserving (Stein, 2001). Empirical studies in non-educational arenas related to immigration policy find similar results, suggesting that race and ethnicity play significant roles in public perceptions of disobedience; specifically, individuals from out-group immigration populations are more likely to confront pejorative language and discrimination in areas such as traffic violations (Short & Magana, 2002). Other research on marginalized populations (individuals with AIDS) finds that the construction of target populations borrows meanings from historical accounts, technical definitions, and cultural stereotypes that have an objective connection to the policy problem; this often results in constructions that undermine the deservedness of the population and result in restrictive public policies (Donovan, 1993).

In light of this hypothesized and observed feedback loop that occurs among policy framing, policy enactment, and policy implications, the policy process is conceived of as dynamic: in the policy emergence phase, social constructions inform the development of public policies that produce substantive and significant effects for students as well as societal perceptions of the targeted population of the policies; in subsequent phases of policy framing, these perceptions have become engrained into the social fabric and inform future perceptions of

target populations and the framing of approaches and new policy solutions that emerge (Straus, 2004). Moreover, the effects of policies are more than merely symbolic; they also have material and substantive implications for the targets of the policy, including economic, political, and social consequences. Lowi's (1972) taxonomy of the systems of public policy suggests that such socially-constructed policies are thus both distributive and redistributive, granting material and immaterial benefits and burdens to targeted individuals. Although this cycle is seemingly intractable and promotes the continued subjugation of marginalized populations, social constructions can change with time and with the acknowledgement of injurious outcomes and effects. Accordingly, the theory of social construction offers hopeful opportunities for policy change through the reframing of targeted populations (Schneider, Ingram, & deLeon, 2014).

Applying the theory of policy design and social construction to the issue of undocumented students in higher education is particularly illuminating, in that it highlights and examines all phases of the policy process. Given that the presence of undocumented immigrants in the country and their attendance at public institutions of higher education are such contentious issues, and that this population of students is exceedingly vulnerable, is critical to understand the ways in which students and the issue itself are framed and conceived of by the public. This includes the social construction of reality based on emotional responses and the projection of the social and political values of those with policy-making influence and political power. Whether undocumented students are framed as dependents or deviants, and whether the issue is framed as an opportunity or a risk, has significant implications for the ultimate emergence of a policy regulating their access to higher education. Policymakers will consider the potential for a policy to provide benefits or burdens both to the undocumented students that are a part of the targeted population as well as the institutions that serve them and the broader society that benefits or is

weakened by their presence in higher education. Moreover, the policies that do emerge will have both substantive and symbolic effects on students, resulting either in the promotion of upward social mobility and their acceptance as legitimate members of society, or their continued subjugation to poverty and low educational attainment as well as stigmatization and discrimination as illegitimate and illegal intruders in the country.

Synthesis of Theoretical Frameworks

As has previously been suggested, the most effective analysis of a public policy incorporates more than one theoretical framework, enabling the different approaches to account for all the phases of the policy process and to fill in gaps or overcome weaknesses and shortcomings present in other theoretical approaches. Particularly in the case of undocumented students in public higher education, the use of more than one theory is critically important and can provide more nuanced and comprehensive understandings of how and why some states have chosen to adopt permissive policies, while others have sought to restrict opportunity or have neglected to consider the issue at all. Each of the policies considered herein has some contribution to the study, including the phases of policy framing, emergence, and effects.

The advocacy coalition framework accounts for the formation of alliances on both sides of this issue, including nonprofit organizations, student groups, industry sponsors, and institutions that support undocumented students. On the other side of the issue, some governmental entities, special interest groups, or concerned citizens have arisen in opposition to the presence of undocumented students in higher education. The interactions of these advocacy coalitions within the political, social, and economic subsystems results in the development of policies that reflect the beliefs of the prevailing coalition and the contextual factors of the state. The policy innovation and diffusion framework lends further explanatory power, examining how

these contextual factors interact with the processes of policy learning and diffusion, with states emulating or competing with their regional neighbors and peers by developing and implementing policies consistent with the perceived successes or failures of other policy solutions.

The theory of policy design and social construction, meanwhile, fills in the gaps in the theories of advocacy coalition and policy diffusion, which do not explicitly address the framing of the issue and the target population as well as the ultimate outcomes and long-term implications of the enactment of the policy. Politicians, interest groups, and other coalitions will frame both the population of undocumented students and the issue of their presence in higher education in a manner intended to advance a policy agenda, whether inclusive or exclusive. The framing of these individuals and the issue in turn influences the emergence of policies that reflect a socially constructed reality and serve to perpetuate the dominance of a social or political order. The outcomes of these enacted policies have implications for undocumented students, resulting in either their acceptance in higher education or their systematic exclusion from institutions based on discriminatory perceptions and practices regarding their worthiness as beneficiaries of governmental benefits.

Collectively, these three frameworks can improve understanding of state policies on undocumented students throughout all phases of the policy process, and can assist interest groups, advocacy coalitions, policymakers, institutions, students, and researchers as they navigate the evolution of the issue in the coming decades amidst growing numbers of undocumented immigrants and high-achieving undocumented students. As an issue of tremendous political, social, economic, and moral magnitude, it is necessary to advance the issue both substantively and symbolically through the application, refinement, and improvement of relevant theories of public policy.

4. RESEARCH METHODS

The emergence of state policies regulating undocumented students' access to higher education has not been uniform or without contention, and a multitude of factors have contributed to the resultant patchwork of policies and patterns of adoption and implementation across the country. However, given the likelihood that the salience of the issue will increase, as well as the critical nature of addressing the rights of undocumented students in public institutions, it is necessary that institutional officials and policymakers understand the processes by which states develop, adopt, and implement such programs. Moreover, identifying the determinants of policy adoption and the contextual factors that promote or hinder policy emergence can assist with the development of predictive models for individual states as well as the nation. Doing so can enable prediction of future legislative and system-level action while also promoting better research and practice, using empirical studies of implications and impacts to guide future policy actions. These predictive models not only provide best practices to policymakers, but also forecast the future status of undocumented students in higher education, including their access to state institutions and their eligibility for in-state tuition rates or state financial aid. The methodological approach to studying the emergence of such policies can take a multitude of forms, including a variety of quantitative analytic methods to examine the determinants of governmental policies and the factors that contribute to the specific patterns of policy adoption.

The quantitative approach to studying the emergence of state policies seeks to develop objective perspectives of the causes, correlations, and subsequent effects that are not contingent upon subjective interpretations on the part of the researchers or the targeted populations of the

policies. The quantitative method thus aims primarily to describe an event, determine the cause of an occurrence, and predict future occurrences or variations of an event of interest. By examining the contextual factors of a specific state that correspond to the emergence of policy, the quantitative approach can provide a demonstrated estimate of the empirically-assessed factors that are predicted to be significantly associated with a future occurrence of an event. Indeed, the quantitative method is particularly useful when researchers are aiming to determine which factors are most strongly and efficiently predictive of a specific outcome, and to uncover how this knowledge can be applied to situations with systematically similar or measurably different contexts. In this study, therefore, the quantitative approach to studying policy emergence seeks to capture and comprehend the range of state contexts that contribute to the emergence of governmental policies regulating the presence of undocumented students in public postsecondary education. These policies can assume several different forms – permissive or restrictive – towards student access and can include a wide array of provisions and requirements that affect their implementation as well as their ultimate implications for targeted populations.

Variables and Sources of Data

The sources of data for this study derive directly from the four main research questions, which include:

- 1. What factors influence state policymakers' decisions to adopt ISRT policies?
 Specifically, what role do internal state characteristics, including economic, social, and political factors, play in policymakers' decisions?
- 2. To what extent do these policies spread through the processes of policy innovation and diffusion across states?

- 3. To what extent does the social construction of target groups in society, particularly undocumented students, affect the design and adoption of these policies?
- 4. How can state characteristics, the processes of diffusion, and the phenomenon of social construction be used collectively to generate predictive models for the future adoption or evolution of these policies?

With these questions as a guide, the outcome of interest in this study is the emergence of state policies regulating the ability of undocumented students to access public institutions of higher education and to benefit from in-state residency tuition (ISRT) equity that grants in-state tuition to state residents. Accordingly, the measure of interest is the point at which a policy was adopted by a state and the categorization of the policy as permissive or restrictive and strong or weak. These policies are categorized in this study in one of five ways: no policy, permissive policy (granting ISRT), restrictive policy (denying ISRT), weak policy (affecting a limited number of students), and strong policy (affecting a large number of students).

The data on state ISRT policy development can be obtained through several publiclyavailable sources, including the online data repositories of the National Conference of State

Legislatures (NCSL), the National Governor's Association (NGA), and the State Higher

Education Executive Officers Association (SHEEO). In addition, several third-party entities

collect data on the issue as a matter of maintaining transparency and accountability in

governmental policymaking; the uLead Network, which consists of organizations and institutions

committed to the rights of undocumented students, is another reliable source for data on

governmental activity related to this issue. Moreover, these repositories all maintain archival

records that permit examination of the change in policies across time, including failed attempts

to pass legislation, conflicting forms of legislation, or legislation that repeals or overrides

previous action. Given the frequency with which contentious proposals arise in the legislature and fail to advance past various points along the pathway to becoming a bill, it is critical to examine the introduction of policies as symbolic indicators of states' general attitudes towards undocumented students in public institutions of higher education. These timelines of activity are particularly useful given the dynamic nature of state policymaking and the contentiousness of the issue, especially in a political environment that frequently demonizes and stigmatizes both legal and "illegal" immigration. It is likely that states have cycled between periods of greater and lesser permissiveness towards students depending on the partisanship of the legislature, the federal policy landscape, the ideology of the electorate, and other state contexts and circumstances.

As the first research question in this study suggests, an assessment of policy adoption should not stand in isolation without consideration of the state-level contextual factors that account for or contribute to policy development (Berry & Berry, 1990; 2014). Accordingly, the covariates and control variables in this study include state-level characteristics that reflect the demographic, economic, educational, political, and social contexts of the policymaking process, especially in the case of policies relevant to immigration and immigrants (Bousey & Luedtke, 2011). These factors may include the general political culture (Elazar, 1984), the degree of legislative professionalism and activity (Hamm & Moncrief, 2013), the role of special interest groups and lobbying (Rosenthal, 2001), gubernatorial power (Ferguson, 2013), the ecology of the higher education system (Lowry & Fryar, 2013), state funding for higher education, the status of the economy and the labor market (Boushey & Luedtke, 2011), the political ideology of citizens (Gray, 2013), social ideology and culture of the state (Gollust & Lynch, 2011), partisanship of the state legislature and the federal government (Ferraiolo, 2008), demographics

of the population, the degree of poverty among both the general and youth population, the level of educational attainment, and measures of economic and social stratification. Each of these characteristics can be conceived as either a binary indicator, a continuous measurement, or an indexed measure generated from a variety of data sources.¹⁰

Sources for these data include the aforementioned NCSL and the Council of State Governments for qualities related to the governmental structure, the U.S. Census Bureau for population and demographics information, the Bureau of Economic Analysis for economic characteristics, and SHEEO, the Education Commission of the States, the Digest of Educational Statistics, the Integrated Postsecondary Education Data System (IPEDS), and the National Association of State Student Grant and Aid Programs (NASSGAP) for higher-education related data. These characteristics naturally vary across states and regions; however, some characteristics may display patterns related to the social, cultural, political, and economic norms and traditional structures of distinct regions of the country, particularly in the instance of political culture and citizen ideology. The inclusion of these variables is thus critical to control for the differences among states and to allow for meaningful comparisons of policy adoption processes in states with discrepant approaches to governmental control and policymaking. In addition to serving as control variables, the models employed in this study assess whether these variables are significantly associated with policy adoption, and whether the analysis of these relationships can provide predictive power to foretell future policy developments.

Two independent variables in this study are exceedingly difficult to measure, yet critically important to the adoption and spread of ISRT policies across the country. As the second research question of this study suggests, state policies relating to an issue that is relevant

¹⁰ A detailed list of variables with definitions and data sources appears in Table A1 in Appendix A.

nationwide may spread from one state to another via mechanisms such as policy diffusion, wherein states learn from one another and adopt or adapt policies that exist in other states. This hypothesis is based on the theoretical framework of policy innovation and diffusion, which posits that the adoption of a public policy is significantly influenced by the adoption of the same or similar public policies in surrounding jurisdictions. As detailed in the following sections, the conceptualization and operationalization of policy adoption and the effects of diffusion are challenging, yet it is critical to incorporate these measures into a study of visible, substantive public policies relating to a contentious and prominent issue. Accordingly, this study includes a measure of policy diffusion to account for the likelihood that states will emulate their geographical as well as economic and social peers in the adoption of ISRT policies.

The second independent variable that is equally if not more challenging to operationalize emerges directly from the third research question of this study, which seeks to uncover the extent to which the design of public policies is correlated with the social construction of targeted groups in society. In accord with the internal state characteristics that measure cultural and social ideology, one potential operationalization of social construction considers the state's political culture (Elazar, 1984) or the partisan voting records of citizens. Another operationalization of social construction instead conceives of policy design as itself a discursive tool for expressing society's culture and values (Jones, 2013). Accordingly, an examination of the language of the adopted policy can serve as an indicator of the symbolic and implied material constructions of target groups in society. A detailed content analysis of the legislation that has been proposed, adopted, and implemented over the time period of the study can reflect some of these constructions. However, given the statutory nature of many of these policies and their adoption by the state legislature, it is likely that legal and formal language will outweigh any symbolic

language and its underlying meanings in the text. A more appropriate measure of social construction is thus whether the policy has restrictive or permissive purposes and whether it possesses strong or weak regulatory powers. Thus, the approach used in this study is an indexed measurement that combines multiple perspectives and measures, including state government ideology, citizen ideology, and voting behaviors.

Challenges of Operationalizing Data

Despite the ready availability of the data concerning historical measures of state characteristics as well as the legislative history of the consideration, adoption, and enactment of policy related to undocumented students in higher education, a number of challenges remain in measuring the outcomes of interest as well as the relevant covariates that may be associated with state activity. In particular, the outcome of interest measuring state activity is difficult to define and capture given the wide array of policy positions states can adopt in response to undocumented students and their access to public postsecondary institutions. Several conceptualization and operationalization options exist and cover a variety of intensities and intentions. In addition, the phenomena of social construction as well as policy diffusion present challenges in operationalizing, measuring, and including these unobservable occurrences in the models presented herein. The following sections explore each of these challenges in turn.

Operationalization of State ISRT Policies

While the federal government was acting to restrict the rights and privileges of both documented and undocumented immigrants through the 1980s and 1990s, state legislatures engaged in a variety of activities – including those that were both permissive and restrictive towards immigrants' rights – reflecting the circumstances and contexts of each state. The earliest successful attempts of state legislatures to secure in-state tuition for undocumented students at

state institutions of higher education occurred in 2001 with the passage of HB 1403 in Texas and AB 540 in California. Both bills responded to the demands among state residents for equal educational opportunity through access to higher education, as well as to the broader societal expectations for equitable treatment of undocumented students (Kaushal, 2008; Ferraiolo, 2008). Since the passage of the first in-state residency tuition (ISRT) bill fifteen years ago, a total of twenty states have passed, implemented, and maintained legislation permitting undocumented students to attend public institutions at in-state tuition rates. 11 These bills include eligibility requirements for students to ensure that the policy remains targeted and tailored, including such restrictions as residence in the state for at least two years, attendance at and graduation from a state high school, and expressed intention (through a signed affidavit) to apply for legal residency at the earliest opportunity. Some states, particularly those with large populations of undocumented immigrants and a growing number of undocumented students aspiring to higher education, also enable students to access state financial aid to assist with tuition payments. Table 1 reports the legislative mechanism and year of implementation for all states that have adopted permissive policies.

¹¹ This data is accurate through the final year of this study (2015). Changes in state policy activity may have occurred in the ensuing years.

Table 1
Permissive State Policies and Statutes

| State | Enforcement | Bill/Resolution Name | Year of |
|-----------------------|----------------------------------|--|-----------|
| In-State Tuition & S | Mechanism State Financial Aid | | Enactment |
| California | State legislation | AB 540 | 2001 |
| Camorina | State legislation | AB 130 | 2012 |
| | State legislation | AB 131 | 2013 |
| Minnesota | State legislation | SF 1236 | 2013 |
| | State legislation | SF 1236 | 2013 |
| New Mexico | State legislation | SB 582 | 2006 |
| | State legislation | SB 582 | 2005 |
| Texas | State legislation | SB 1403 | 2001 |
| | State legislation | SB 1403 | 2001 |
| Washington | State legislation | HB 1079 | 2003 |
| | State legislation | SB 6523 | 2014 |
| Colorado | State legislation | SB 33 | 2013 |
| In-State Tuition (Sta | ate Level) | | |
| Connecticut | State legislation | HB 6390 | 2011 |
| | State legislation | HB 6844 | 2015 |
| Florida | State legislation | HB 851 | 2014 |
| Illinois | State legislation | HB 60 | 2003 |
| Kansas | State legislation | HB 2145 | 2004 |
| Maryland | State legislation | SB 167/HB 470 | 2011 |
| Nebraska | State legislation | LB 239 | 2006 |
| New Jersey | State legislation | SB 2479 | 2013 |
| New York | State legislation | SB 7784 | 2002 |
| Oregon | State legislation | HB 2787 | 2013 |
| Utah | State legislation | HB 144 | 2002 |
| In-State Tuition (Sy | stem Level) | | |
| Hawaii | Board of Regents | Statute 304A-402 | 2006 |
| Michigan | Governing Boards | Michigan Board of Education Policy | 2013 |
| Oklahoma | Board of Regents | HB 1804 | 2008 |
| Rhode Island | Board of Governors | Board of Governors for Higher Education Policy | 2011 |

In contrast to the progress in these twenty states, eleven states have undertaken a more obstructionist approach, passing legislation that restricts enrollment opportunities through the outright denial of attendance or the requirement that undocumented students pay out-of-state or

international tuition and fees at public institutions of higher education. Some states permit students with Deferred Action for Childhood Arrivals (DACA) protections to attend state institutions at in-state tuition rates, while others treat these students similarly to students without these protections (Hesson, 2012; Fitzgerald, 2012). Table 2 reports the legislative mechanism and year of implementation for all states that have adopted restrictive policies.

Table 2
Restrictive State Policies and Statutes

| State | Enforcement Mechanism | Bill/Resolution Name | Year of Enactment |
|-------------------------|-----------------------------------|---|----------------------|
| No In-State Tuition & R | estricted Enrollment | | |
| South Carolina | State legislation | HB 4400 | 2008 |
| | | VP 2420 | 2005 |
| | State legislation | НВ 3620 | 2007 |
| Alabama | State legislation | HB 56 | 2011 |
| | State legislation | HB 56 | 2011 |
| | Community College System | Alabama State Board of Education Policy | 2008 |
| Georgia | State legislation | HB 492 | 2008 |
| | Board of Regents | BOR Policy 4.1.6 | 2010 |
| No In-State Tuition | | | |
| Arizona | State legislation | Proposition 300 (SCR 1031) | 2006 |
| New Hampshire | State legislation | HB 1383 | 2012 |
| Wisconsin | State legislation | AB 40 | 2011 |
| Indiana | State legislation | HB 1402 | 2011 |
| North Carolina | Community College System | Policy 23 NCAC 02C.0301 | 2010 |
| Ohio | State legislation | HB 153 | 2011 |
| Virginia | Status quo (no state legislation) | n/a | 2015 |
| Wyoming | Status quo (no state legislation) | n/a | 2011 |

The remaining nineteen states have either failed to mount adequate support to pass legislation or have chosen not to address the issue due to low salience or fear of federal preemption. Table 3 reports the most recent attempts (if any) of the states that have not successfully adopted ISRT policies.

Table 3
States Lacking Statutes or Policies

| State | Most Recent Prior | Policy | Year of |
|------------------------|-------------------|----------------------------|---------------|
| | Legislation | • | Consideration |
| Potentially Permissi | ve | | |
| Delaware | SB 183 | In-state tuition | 2014 |
| Mississippi | HB 445 | In-state tuition | 2012 |
| Alaska | HB 39 | In-state tuition | 2003 |
| Arkansas | SB 799 | In-state tuition | 2009 |
| Pennsylvania | SB 697 | In-state tuition | 2015 |
| Tennessee | SB 612/HB 675 | In-state tuition | 2015 |
| Iowa | IOWA Act | In-state tuition | 2014 |
| Potentially Restrictiv | ve | | |
| Kentucky | HB 112 | No in-state tuition or aid | 2011 |
| Montana | HB 638 | No in-state tuition | 2012 |
| Missouri | HB 1637 | No in-state tuition | 2014 |
| Nevada | SB 415 | No in-state tuition | 2007 |
| Massachusetts | HB 1053 | No in-state tuition | 2015 |
| No Legislation Cons | sidered | | |
| North Dakota | None | n/a | n/a |
| South Dakota | None | n/a | n/a |
| Vermont | None | n/a | n/a |
| West Virginia | None | n/a | n/a |
| Idaho | None | n/a | n/a |
| Louisiana | None | n/a | n/a |
| Maine | None | n/a | n/a |

The Higher Education Act of 1965 and the inability of the federal government to pass comprehensive, bipartisan immigration reform have collectively precluded undocumented students from accessing federal financial aid, including grants or loans, to pay for postsecondary education (Tienda & Haskins, 2011; Belanger, 2001; Boushey & Luedtke, 2011; Bozovic, 2012).

The resultant patchwork of policies across the nation frequently generates confusion and contention for students and institutions, further exacerbating educational disparities and the threat of discrimination and alienation from peers, instructors, and political leaders. Figure 1 provides a geographical mapping of the policy developments across the states. (uLead Network, 2016)

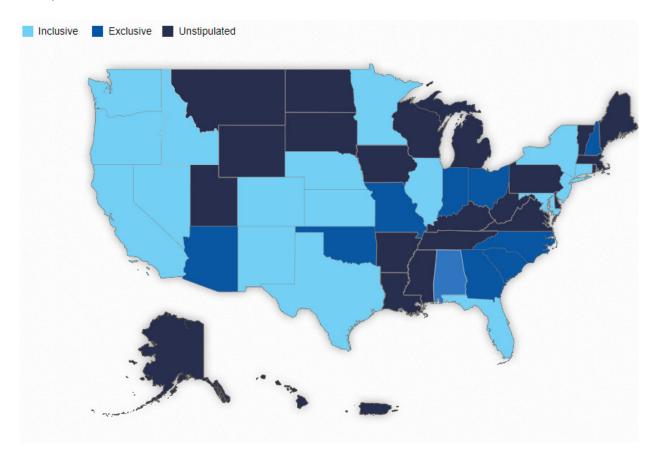


Figure 1.

Map of ISRT Policies

Based on the data contained in these preceding tables, one simplistic method for measuring state activity considers only policy adoption versus non-adoption, regardless of whether the policy is weakly or strongly enforceable and whether it is permissive or restrictive towards in-state residency equivalence for undocumented students. Mathematically, this approach employs a simple 0/1 binary coding system, with a "1" indicating policy adoption and a

"0" indicating otherwise. This coding system captures the relevancy of the topic overall to states as well as the ability of the state legislature or state system of higher education to generate enough political interest and support to successfully pass legislation, whether it has the purpose of expanding or restricting postsecondary access. This binary assessment of state activity is useful when the sole interest of the research study is determining which state characteristics are most conducive to stimulating legislative responses to a perceived social issue, as well as which states legislatures are the most active.

An alternative approach to the binary coding system is also somewhat simplistic, yet provides additional detail regarding the intentions and desired outcomes of the adopted policy. A multinomial coding system based on policy intent categorizes a policy in one of three ways: 1) permissive policies that mandate in-state tuition equivalence for undocumented students residing in the state; 2) restrictive policies that prohibit in-state residency equivalence for undocumented students; or 3) the lack of any explicit policy at the state or higher education system level. This 0/1/2 coding system does not necessarily account for the intensity of the restrictions or permissions granted within the legislation; however, it does provide a more nuanced perspective of which states are most likely to adopt a restrictive policy, a permissive policy, or no policy to address undocumented students in public institutions of higher education. In addition, this coding system can offer insight into the specific state characteristics and contexts that are associated with state activity aimed either to expand or restrict educational opportunity for a subset of the population, thus allowing different covariates to emerge as significant predictors of the various forms of policy activity. The use of a simple binary coding system would fail to capture the distinctive differences among states that pass permissive versus restrictive policies and would threaten to undermine the richness of data available on state policy adoption.

While an attempt to capture a state's intentions for policy adoption is certainly necessary in a study of ISRT legislation, another scale of interest concerns the intensity, severity, and enforceability of the policy both in its conceptualization and implementation. For instance, some states may have similar policy intentions (i.e., expanding in-state tuition eligibility to undocumented students) but may exhibit variance in the language of the legislation and the degree of rule-making that accompanies its passage and dictates its effectiveness in achieving the desired ends. Indeed, some states may pass legislation that is purely symbolic and figurative as a means for expressing support for a particular political or social perspective, purposefully failing to provide guidance on policy implementation or mechanisms for enforcement. While the mere consideration within the legislature of proposing or adopting ISRT legislation is in itself an important consideration, further elucidation of state intentions can provide additional nuance to the determination of which factors are associated with state activity, while also aiding predictions regarding future developments.

Given that ISRT policies can lie along continuums of both permissiveness (from restrictive to permissive) as well as intensity (from symbolic to material), a system designed to measure state activity should necessarily account for such differences in state policies, which are hypothetically due to differing state circumstances and contexts. Incorporating this measure into the design does introduce challenges, given the low number of new policy adoptions that have occurred in each year of analysis and the subsequently small degrees of variance in the possible outcomes. This lack of statistically-discernable differences in policy intensity translates to models that may also fail to ascertain these nuances, thus potentially biasing conclusions about the contexts and causes of policy adoption. However, enough differences exist in the number of "weak" versus "strong" policies in this dataset to merit inclusion as different model outcomes.

The results of these models (which appear in Chapter 5), however, suggest that the statistical power may be weak and that the conclusions from these models should be weighed carefully and not generalized to other contexts.

In addition to the consideration of intent and intensity, some research has suggested incorporating policy proposals (in addition to policy adoptions) as indicators of state interest in a social issue. For instance, some states with especially partisan legislatures may frequently raise proposals to address undocumented students in postsecondary education, aiming either to restrict or expand access to in-state tuition rates for undocumented students residing in the state. However, due to factors such as political polarization, legislative professionalism, or other contextual circumstances, these states may never prevail in adopting and implementing legislation despite persistent attention to the issue. Expanding the scope of the policy adoption metric to include policy proposals enables researchers to capture this form of state activity that does not otherwise manifest in public legislation, thus providing additional insight into the state characteristics that are associated with any form of ISRT policy.

A typology of this nature categorizes state activity in one of a variety of policy categories (coded as a "0" through "8") for each year of measurement in the study: 1) no policy; 2) restriction of ISRT for all undocumented students; 3) restriction of ISRT with exception of DACA students; 4) restriction of ISRT only at certain public institutions; 5) adoption of ISRT for all undocumented students; 6) adoption of ISRT and institutional scholarships for all undocumented students; 7) adoption of ISRT and state financial aid for all undocumented students; 8) legislative attempt to adopt permissive ISRT policy; 9) legislative attempt to adopt restrictive ISRT policy. However, this method of measuring state activity is not necessarily ordinal, as there are not equal differences between each interval that have meaningful units of

measure or comparison. Moreover, each legislative session within a state includes the proposal of dozens of bills that never reach debate or a legislative vote; whether to include these proposals in the measure of state activity is a question that remains unresolved. It is possible, therefore, that a permissive policy exists in the state despite powerful protestations and attempts in the state legislature to reverse or override that policy. Failure to account for this debate in the legislature and the ideology of citizens that reflects similar sentiments could unfairly characterize the state as permissive to undocumented students when in fact the environment is predominantly unwelcoming or hostile. While this is certainly an important consideration from a qualitative perspective (similarly, from a quantitative perspective of mere counts), this study does not accommodate an all-encompassing measure of this sort due to some specificities of the data as well as the relatively vague definition of what constitutes policy "consideration" as opposed to policy adoption. Thus, this study does not incorporate instances of state policy proposals into the continuum of state policy activity.

Given these possible alternatives for measuring state policy activity, this study pursues a variety of measurement options, compares results among the differing outcomes, and provides implications and conclusions based on the findings. The three primary forms of measurement include:

- 1. Binary coding of no policy activity ("0") or any policy activity ("1"), hereafter referred to as "any policy adoption";
- 2. Multinomial coding of no policy activity ("0"), restrictive policy activity ("1"), or permissive policy activity ("2"), hereafter referred to as "restrictive policy adoption" and "permissive policy adoption"; and

3. Multinomial coding of no policy activity ("0"), weak/symbolic policy ("1"), or effectual/material policy ("2"), hereafter referred to as "weak policy adoption" and "strong policy adoption".¹²

Operationalization of Diffusion

In addition to the difficulties measuring the outcome variable of interest, challenges remain in operationalizing several critical independent variables that have hypothetical significance in this study. One these independent variables is the diffusion of policies across and between states through mechanisms such as competition, imitation, learning, or coercion. Diffusion is itself an unobservable activity that is most readily identified in the months or years following the adoption of the policy among leader and laggard states, often not becoming evident or effectual until well after adoption. In addition to the need for sufficient time to elapse and enable the policy to spread to neighboring and peer states, it remains difficult to discern whether the adoption of a policy in one state is attributable partly or entirely to diffusion mechanisms, rather than to independent invention or adoption within states responding to similar public policy issues. Moreover, it is also possible that two states are instead emulating the policy activities of a third, unidentified entity that may not be captured within the bounds of the study. There are several approaches to accounting for these issues and attempting to determine why and by which mechanisms policies spread across the country.

First, an important component of diffusion is the time between policy adoption in one state and emulation in another; thus, the timing of policy adoption across states is crucial and serves as the primary motivation of the decision to employ a longitudinal modeling approach in

¹² Although these coding approaches are multinomial, they appear as binomial outcomes in the failure models. This is because each specification of the failure model with a different outcome variable is only measuring the failure of one particular type of outcome at a time. Thus, although the coding for the variable is multinomial, the actual outcome is itself binomial. This occurs for options 2 and 3.

this study. Although the time of policy enactment can serve as a de facto measure for determining a timeline of adoption as well as the direction of diffusion, it is also possible (and perhaps likely) for lags to occur between conception, adoption, and implementation. For instance, due to contextual circumstances such as state resources and governmental competency and professionalism, some states may advance through the stages of adoption more quickly than others. Questions also remain as to whether diffusion is a binary outcome (it either occurs or does not occur) or exists along a spectrum, with some states exerting more influence than others, or some states more susceptible to influence than others. Indeed, it is possible for multiple states with competing or similar policy solutions to the same policy issue to influence a third state in unequal or opposing degrees, either through intentional mechanisms or purely imitative processes.

One way to conceive of diffusion is to measure the policy activity of geographical neighbors at various points in time, and to assume that the policy status of neighboring states will have a direct and identifiable influence on the other states in the region. An accepted approach to determining geographical neighbors is the use of Bureau of Economic Analysis (BEA) regional classifications incorporating eight separate geographic categories of unequal size. This enables researchers to determine states' neighbors based not necessarily on shared borders, but rather on geographical boundaries that encompass similar economic, demographic, and political characteristics due to regional and intra-state influences. States grouped within one region thus all share the same neighbors, allowing the researcher to generate a measure of the percentage of neighboring states that have adopted the policy of interest. The hypothetical outcome of this

¹³ The eight BEA divisions include: 1) New England: CT, ME, MA, NH, RI, VT; 2) Mid East: DE, MD, NJ, NY, PA; 3) Great Lakes: IL, IN, MI, OH, WI; 4) Plains: IA, KS, MN, MO, NE, ND, SD; 5) Southeast: AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV; 6) Southwest: AZ, NM, OK, TX; 7) Rocky Mountains: CO, ID, MT, UT, WY; 8) Far West: AK, CA, HI, NV, OR, WA. A ninth category including outlying areas is excluded from this study.

approach to diffusion anticipates that as more states within the region adopt the policy, the likelihood of diffusion to other states within the region will increase until the point at which all states within a region have either adopted a policy or have generated some other appropriate response to the issue. One drawback of this approach, however, is the illogical inclusion of states that do not have geographic neighbors, such as Hawaii and Alaska (in the Pacific region). Often, researchers simply exclude the states that do not conform. Although the decision to omit such states may hold intuitively for public policy issues with a directly identifiable pattern of diffusion, excluding any states from subsequent analyses heightens the likelihood that the research will overlook or misinterpret the important contextual circumstances operating within those states.

An alternative to the BEA regions suggested above is the employment of geographical grouping that does not identify the same set of neighbors for each state within the region. Rather, each state has a unique set of neighbors based on shared borders, thus limiting the processes of diffusion only to those states with direct and frequent physical transfer across boundary lines. This approach is unique in that it enables states within the same BEA region to possess their own set of distinctive neighbors and to transcend potentially arbitrary regional groupings, thus identifying a more readily-comparable set of theoretically influential peers. As with the first mechanism for determining a state's peers, however, this technique can exclude Alaska and Hawaii. A third alternative for identifying peers does not consider geographical proximity, but rather matches states on characteristics such as demographics, economic conditions, and political structure. In this approach, states that are similar, despite not sharing a border or geographic proximity, are considered peers based on their likelihood for economic competition and their similar governmental structures. While this technique enables states such as Hawaii and Alaska

to remain within the pool of states eligible for analysis, it is possible that this approach could result in too few or too many states being grouped as peers, as some states may have a large number of matches, while others have very few.

A fourth option, while not suggested, is to consider all other 49 states as peers, thus calculating a percentage of the total number of states in the nation that have adopted a policy. While this approach is the most straightforward and simple to implement, it ignores the regional differences and heightened likelihood of contact among neighboring or competitive states. Finally, a fifth option for conceptualizing policy diffusion conceives of states in sets of dyads, or pairs, comprised of policy leaders and laggards. In this instance, the effect of policy diffusion is not multi-state, but rather exists only between a pair of two states who frequently turn to one another for competitive or collaborative inspiration on policy developments (Volden, 2006; Hearn, McLendon, & Linthicum, 2017). Although this approach can prove illuminating by offering an alternative conceptualization of the processes by which diffusion occurs, the identification of single pairs of states requires additional knowledge and information regarding the patterns of state relations and the historical trends of policy adoption (including policy emulation) among these proposed peer groups. Future research should incorporate this method and compare the results of a dyadic approach with the multi-state approaches that are more commonly cited in the literature.

Given the drawbacks and advantages associated with each of these options, this study implements the U.S. BEA geographical grouping, which has significant overlap with the approach that considers only state borders, and potentially with the other approaches due to regional trends that exist. This method for determining state neighbors in turn informs the development of an index of the potential for diffusion effects, which accounts for the number of

neighbors that have adopted ISRT policies by a particular point in time. Given that each region contains a different number of states, this total number of policy adoptions is then divided by the total number of states in that region, thus generating a proportion of states that have adopted the policy by a time. The hypothesis follows that states that have a larger percentage of peers that have adopted an ISRT policy are more likely to adopt an ISRT policy in the ensuing years.

Conversely, states with a low number of peers engaging in ISRT policy activity are less likely to adopt policies due to low salience and minimal economic competition or coercive pressures.

Operationalization of Social Construction

A second critically important concept in this study that exhibits operationalization issues is the phenomenon of the social construction of target populations and the subsequent designs of policy aimed to address social issues confronting these populations. Schneider and Ingram's (1993) typology offers a simplified view of the construction of social classes through symbolism and language that results in the creation of four categories of individuals (advantaged, contenders, dependents, and deviants). The feed-forward mechanism that this theoretical approach proposes suggests that these social constructions not only inform the design of public policy, but are also reinforced through the adoption and implementation of such policies, thus becoming institutionalized and normalized in society. Given that ISRT policies deal explicitly with a group that has historically confronted marginalization and stigmatization (i.e., undocumented immigrants, who are often categorized as "deviants"), it stands to reason that any assessment of the policy process must account for the social status of these individuals. While social constructions do have some manifest components such as language and discourse, the attitudes and opinions that motivate policy design are frequently unspoken and unobserved. Thus, an attempt to measure the concept of social construction or to trace its role in policy

development and design is exceedingly complex. Because it is not within the purview of this research design to explicitly measure how undocumented students may be constructed as "deviants," this study makes no suggestions as to whether the policy outcomes studied herein are indeed reflections of a state's propensity to ascribe "deviancy" to undocumented students.

Rather, this study employs alternative measures that seek to uncover whether these students are portrayed through positive or negative constructions, and how these constructions could influence the adoption of policies addressing their inherent rights or privileges in society.

Some proxy measures do exist that can conceivably capture not only social construction, but also the use of such constructions in policy development. One such measure is directly identifiable through the literal text of the policy documents, including the specific language used to define and describe groups and to permit or prohibit key activities or privileges. A document analysis of the language in policy texts can provide more information regarding the terms and underlying meanings that are used to describe a population or policy. While this approach has some benefits, including the direct assessment of the policies themselves, it does present several methodological and theoretical challenges, chiefly the need for extensive analysis of policies across the fifty states and 16 years of data collection. In addition to the significant amount of coding and categorization necessary to dissect the policy documents, there also remains the difficulty in discerning the underlying meanings and subtexts contained within racially- or emotionally-charged words. For instance, the use of the word "illegal" to describe an immigrant student can stem either from deeply-engrained beliefs regarding the legitimacy of a student's presence in the country or may simply reflect the language of the broader state or national policy arena. It is difficult, therefore, to ascribe meanings to policy language without a more thorough

understanding of how or why legislators decided to employ the terms and definitions, including the intended meanings and implications of the words and the policy document as a whole.

Another approach to measuring social construction and its role in policy design does not explicitly examine policy documents and the text and language contained within, but rather the political, economic, and social environments surrounding the policy's development and adoption. While this study provides a significant amount of detail regarding the broad state context and includes these characteristics in subsequent analyses, two other measures are important for attempting to capture the more ephemeral concept of social construction and ideological beliefs. The first is a measure of citizen ideology, which considers the ideological positions of congressional districts based on the partisanship of incumbents, challengers, and electoral results. The second is a measure of state ideology, which considers the ideology scores for congressional delegations based on rating organizations such as the AFL-CIO Committee on Political Education (COPE) and Americans for Democratic Action (ADA), as well as observed party delegation ideology scores (Berry, et al., 1998). These measures of ideology and their link to the social construction of target populations operate on the assumption that political ideologies are reliable measures of citizen and state attitudes towards targeted groups of individuals in society. A more nuanced approach to determining the societal conditions that influence the social construction of targeted groups would consider factors in addition to political ideology, such as educational attainment, nativity, and economic health, which have already been incorporated into this study as control variables for the differences that exist among state contexts. Collectively, these approximations of state and citizen levels of tolerance and acceptance towards diversity and difference can serve as proxy measures for the ideological factors that contribute to social constructions of target populations in public policy arenas.

Given the methodological challenges associated with policy document analysis and the inability to measure some unobservable characteristics of ideology, this study employs pre-existing measurements of citizen and state government ideology developed by Berry, et al. (1998) using data from congressional districts, voting records, and party delegation ideology scores. These indices, while not perfect estimations of the extent to which citizens and state governments socially construct marginalized populations, are the best proxy variables for capturing the mechanisms by which the beliefs of citizen-voters and policymakers influence the proposal and subsequent adoption of public policies. It is important to note, however, that due to the lack of information on the specific content of legislative documents and the symbolic language legislators employ, these results do not specifically capture the potential for undocumented students to acquire labels connoting "deviance" or "illegitimacy."

Analytic Method: Event History Analysis (EHA)

The quantitative approach to studying policy emergence considers the adoption of policies throughout time as states respond to the demand for higher education from undocumented students residing within their jurisdictions. Given the essential function of the time component in a study of this nature, a longitudinal data analysis consisting of panels of data is critical to capturing the point in time at which states adopt a particular policy, and the associated state context that could influence the policy positioning. While a cross-sectional study could capture the covariates associated with the existence of policy from a binary perspective (i.e. the policy has been adopted or has not been adopted by a certain observation point), this approach to regression-based analysis does not account for the exact time at which the policy was adopted (which varies across entities in the dataset), the interactions among covariates and time, or the potentially significant main effect of time on the outcome of interest. The benefit of

longitudinal (panel) data over cross-sectional data, therefore, is its ability to retain critical information on the time of adoption, to account for the interactive effects between time and covariates, and to include covariates whose values vary over time (time-varying covariates).

An alternative and preferred approach to the cross-sectional regression analysis is a longitudinal analysis that measures the outcome variable of interest at various points and correlates these outcomes to covariates in the model that also change over time as states evolve. In this study, the event of interest is somewhat unique compared to other longitudinal analyses in that it can occur more than once (states can adopt a policy in more than one year) and that it has a variety of possible outcomes (states can adopt permissive or restrictive policies and weak or strong policies). Moreover, all of the entities in this panel (states) have the same initial status (no policy) and progressively more states adopt policies over time. As a result, the most appropriate form of a longitudinal approach is the event history analysis (EHA), which aims to understand why some entities observed in the longitudinal panel are more likely than others to experience the occurrence of an event of interest (Vermunt, 2009). The EHA also accounts for the timing of the event occurrence, seeking to understand not only why the event was more likely to occur for one entity than for another, but also the covariates and contexts associated with its occurrence in one time period rather than in another.¹⁴

The EHA approach to modeling event occurrence evolved out of the work of Hareven (1986) on life course analysis and the cycles of survival and death of various units (individuals)

¹⁴ The EHA approach assumes that all entities in the panel have the same starting point (i.e., no ISRT policy) and that over time some states exhibit contexts and characteristics that are more conducive to event occurrence (i.e., policy adoption). However, the caveat remains that some states may be predisposed to behave in a particular manner due to the circumstances of the state as well as the processes of diffusion. Thus, although all states start at theoretical zero, some states may have more inclination towards policy activities than others. In other words, the "status quo" in every state may not be identical. However, this is an accepted characteristic of the EHA model and presents an issue that cannot be remedied through the mechanisms of this modeling approach; therefore, this study does not attempt to (nor can it) account for these unobserved baseline propensities that may vary across states.

in medical studies. The purpose of this approach is to explain why certain entities are more likely to experience the occurrence of a particular event (or "fail") than some other entities, as explained by the unique characteristics of each entity at both the time of failure and during the times of survival. The five most important components of the EHA are the state, the event, the duration, the risk period, and the phenomenon of censoring. State refers to the current status of the entity in the study and indicates whether it has or has not experienced the event of interest at the time of measurement; in a longitudinal study, entities have a state recorded for each unit of time during which the entities are observed. The state can be referenced and categorized in several ways, but the purpose is generally to indicate if the entity has or has not "failed." The event is the occurrence of interest in the study, also referred to as the "failure" that an entity experiences in the model. The event represents the entities' movements from survival to death, or from nonoccurrence to occurrence. The number of times that an entity can experience an event, as well as the number of different types or categories of the event of interest can vary based on the circumstances and purposes of the study.

The duration is the time period during which the entity has not yet experienced the event (the survival time), while the risk period indicates the time period during which the entity is at risk of experiencing the event of interest. In many EHA studies, the risk period and the duration are equivalent and interchangeable; this occurs when all entities are at risk of experiencing an event at all points in time up until the time of failure. In some instances, it is also possible for entities to experience an event on more than one occasion, in which case the entity remains in the risk pool even after the first occurrence of the event of interest. Censoring occurs when an entity has not experienced an event by the conclusion of the data collection period; in this case, the risk of experiencing an event is unknown, but can be imputed with appropriate methodological

techniques. Generally, studies with a large number of right-censored observations (entities that have not failed before the conclusion of the study) are more interested in the rate of failure (the risk of event occurrence) rather than the likelihood of survival, as it is the failure event that is less frequent and thus the target of the analysis. In this study, the event of interest is the adoption of in-state residency tuition (ISRT) legislation that regulates undocumented students' access to public higher education.¹⁵

For the purposes of this study, ISRT legislation can manifest at the state or higher education system level and can appear in a restrictive form (banning ISRT equity) or a permissive form (expanding ISRT equity). The risk period of the study is the time during which states have or could have adopted ISRT legislation, and the duration time is equivalent. In this analysis, the observation period is limited to the years between and including 2000 and 2015, as the first incidence of state ISRT legislation directly addressing this issue was passed in 2001, and reliable demographic and political data is not available post-2015. Within this 16-year time frame, nineteen of the fifty states in the dataset have right-censored observations, indicating that they have not adopted permissive or restrictive legislation on the issue by the conclusion of the study in 2015. Alternatively, several states have experienced the event of interest on more than one occasion, passing additional legislation or overturning prior legislation in the years following initial event occurrence. As a result, each state in the panel maintains a unique status, duration, and risk period depending on the occurrence or nonoccurrence of the event of interest.

Because of the longitudinal nature of event history analyses, time is an exceedingly important component in the model, and can be expressed in the model either discretely or

¹⁵ The exact form of this activity can vary, and different outcomes are employed in this study to model the adoption of different forms of ISRT policy. In all cases, however, the failure (or event) is the state's engagement in policy adoption of some form (i.e., "activity").

continuously. In a discrete EHA, states are observed at particular points in time to determine whether the event has or has not occurred, as is typically done with events that can only occur at a specific time and at the same time for all units in the study (such as an election, for instance). Alternatively, in a continuous model, states can experience an event at any time throughout the period of observation. Because the data for this study is collected once a year, and each state can only have one observation for each year, the most appropriate model is a discrete-time EHA. In a discrete-time EHA model, the measurement of interest is a discrete-time hazard function, which estimates the probability that an entity experiences an event during a time interval, given that no event has occurred prior to the start of that interval.

Most event history analyses have difficulty accounting for "tied" event failures, or the simultaneous occurrence of the event of interest in two or more entities; in such a case, the longitudinal dataset generally records only the ordering of events rather than the duration of time between the occurrences of events. However, due to the structure of the dataset employed in this analysis and the characteristics of the event of interest (i.e., policy adoption), which occurs simultaneously across multiple states for several panels of data, a further modification of the EHA known as the Exact Discrete Method is required. The Exact Discrete Method, which is functionally equivalent to a conditional logit model (also known as a fixed effects logit model for panel data), does not assume that a meaningful sequencing of events is present, but rather that the probability of an event occurring is conditional on the composition of the risk set at the time. In this case, entities in the dataset are grouped together by the time period during which they are at risk of experiencing an event, and the probability of event occurrence is calculated conditional on the other entities in the group. The probability of the response pattern (\mathbf{y}_k) of the group is given by:

$$Pr(y_{k}|\sum_{i=1}^{J} y_{ki} = n_{1k}) = \frac{\exp(\beta' \sum_{t=1}^{J} x_{ki} y_{ki})}{\sum_{d_{k} \in R_{k}} \exp(\beta' \sum_{t=1}^{J} x_{ki} d_{kt})}$$

where R_k represents all the possible combinations of case occurrences and controls (coded as "1" and "0"), k is the risk period, J is the observation, n_{1k} is the number of events or cases in the risk period, \mathbf{x}_{ki} is the vector of covariates, and \mathbf{d}_k is the set of possible density distributions (Box-Steffensmeier & Jones, 2004, pp. 58).

In addition to accounting for the continuous versus discrete nature of event occurrence, the EHA can also include repeatable and multistate events, both of which apply in ISRT policy adoption. Repeatable events are those that occur more than once during the data collection period, meaning that states who "fail" by experiencing an event are not removed from the pool of entities at risk of failure in future time periods. Rather, these states are able to fail more than once by passing new legislation that repeals or overrides previous statutes, serving to effectively eliminate or reverse prior policies. In addition, the events in this model are multistate rather than binary, meaning that the characterization of the event can take multiple distinctive forms.

Policies regulating student access can be permissive or restrictive (ranked along the spectrum of permissiveness), and can regulate only attendance or can also address financial aid and different forms of legal status (ranked along the spectrum of intensity). Thus, there is not a binary notation that can adequately account for all the possible iterations of a policy outcome (Vermunt, 2009).

One variation of the EHA that captures this distinction among alternative outcomes in an efficient way is the competing risks model, also known as the multinomial logit (MNL) approach to competing risks. This model allows for a variety of possible outcome variables and estimates (k-1) models that calculate the probability of one particular outcome (from among several alternatives) in comparison to the baseline category, which usually assumes a value of zero (thus representing the non-occurrence of the event of interest). In this study, the events of interest are

not different types of events, but rather different possibilities of the same event (i.e., permissive or restrictive policies with varying degrees of intensity). The hazard probability, which is the probability of an event occurring with one specific outcome from a variety of possible outcomes, for a multinomial logit is given by:

$$\lambda(ik) = \frac{\exp \beta'_{k} x}{\sum_{k}^{K} \exp(\beta'_{k} x_{i})}$$

where *k* is the number of possible values of the dependent variable and the arbitrarily-chosen baseline category is taken as zero (Box-Steffensmeier & Jones, 2004, pp. 173). The MNL model is a variation of the binary logit model, and is thus estimated by maximum likelihood, resulting in parameter estimates that are reported as logit coefficients (odds ratios) to ease interpretation.

One challenge with the multinomial logit approach to the competing risks model is the assumption that after an entity has failed, or experienced the event of interest, it is no longer included in the pool of potential entities that are at risk of failure; rather, these entities are removed from the dataset and the risk pool and thus cannot experience subsequent events. In some EHA studies, this assumption may prove not only valid but also necessary for accurately assessing the hazard function for entities at risk of competing events. However, in the case of legislative activity, particularly in an area related to a contentious topic, this assumption is tenuous and can lead to the erroneous removal of states that have remained active in the legislative policymaking arena and can thus result in incorrect conclusions regarding the risk of event occurrence. Accordingly, a different modeling approach is recommended.

An alternative EHA approach is the stratified Cox model, which is a technique for assessing competing risks that enables entities to remain in the risk set even after the first incidence of failure, or event occurrence. In a stratified Cox approach, therefore, all entities are at risk of failure at all points of time, including after each occurrence of the event of interest for

an entity. The structure of the dataset in this study includes multiple records for each observation time period, with each observation point possessing a record for each possible event and each entity. Although there is only one event of interest for each model (i.e., the adoption of legislation), this outcome can assume multiple forms based on the activities of the observed entities. Given this structure, it is possible to stratify the entities based on different kinds of events, and to subsequently generate a unique baseline hazard function for each of the k risks, or types of events (Box-Steffensmeier & Jones, 2004).

The stratified Cox competing risks model is useful when it is assumed that the covariate effects will not vary significantly across time, or that there are fixed effects for each entity across each observation point. However, given the possibility of diffusion effects from one state to another with regard to the adoption of ISRT policies, it is anticipated that the relationship between the occurrence of the event and the covariates of interest will change across time. This is particularly likely in the case of states whose legislative activities and behaviors are antithetical to the hypothesized outcomes that are anticipated based on the political or social demographics serving as predictor variables. ¹⁶ In this situation, the risk of event occurrence may be dependent, thus requiring a model that accounts for the probability of dependent risks.

Dependent risks are probabilities of event occurrences in which unobserved frailty (or the likelihood of experiencing an event at a high rate of risk), or unmeasured covariates that are correlated with the risk but do not appear in the model, influence the occurrence of events within entities (Box-Steffensmeier & Jones, 2004). ¹⁷

¹⁶ For instance, some states with conservative legislatures and governors – which would be expected to pass more restrictive forms of ISRT policies aimed at limiting the presence of illegal immigrants in public institutions – may instead have unexpectedly permissive policies for reasons relating to economic market and labor-force concerns.

¹⁷ In light of the difficulty estimating the dependent risks, analytic solutions either do not exist or are overly cumbersome to estimate. Moreover, the large number of possible competing outcomes requires the use of numerical methods of Gibbs sampling techniques or the Han and Hausman model (1990), which many statistical software

Two critically important components of the EHA that simple cross-sectional regression analysis cannot capture are the existence of time-varying covariates and the interactions between predictor covariates and the time variable. Throughout the data collection period, some of the covariates that serve as controls or predictor variables in the model may change due to transformations within the entities in the study or in the external environments within which entities operate. For the states included in this study, the covariates of interest are chosen and designed to measure changes over time, whether due to internal dynamics of state demographics and politics or as a result of exogenous shocks in the broader national context. Allowing these covariates to change with time and recording updated measurements of the variables for each point of observation provides more accurate inferences of parameter estimates and avoids incorrect specifications or spurious relationships. In addition to changing across time, covariates may also have significant interactions with the time variable, a phenomenon that simple regression analysis does not inherently capture without the creation of interaction terms. The EHA model may therefore include interaction terms that reflect how the covariate measures change across time in ways that are not consistent across all time periods or units of analysis.

The state-level covariates of interest in the model include economic, political, and social characteristics as well as the ecology and governance of the higher education system. Several of these independent variables naturally change over the course of the study due to alterations in migration patterns, changes to the political parties in power, developments in the labor force, and economic shocks both within and outside of state borders. In addition to the changing values of the independent variables over time, the covariates may also have a direct association with (and

programs do not support. Accordingly, it is more appropriate to assume that all the covariates that explain dependency are observed and known (Box-Steffensmeier & Jones, 2004).

therefore an interactive effect with) the passage of time for the duration of the study. ¹⁸ Thus, the passage of time is significantly and directly correlated with the observed changes in covariate estimates. In such instances, researchers must remain diligent to avoid drawing direct causal associations between natural, time-driven changes in these covariates and subsequent changes in the outcome of interest (i.e., policy adoption). The inclusion of covariate-time interaction terms in the EHA allows for assessment of the potential interactive effects and consideration of such relationships in evaluating the causes and correlates of policy change. ¹⁹

An essential caveat to note in the use of the Cox proportional hazards model regards the distinction between discrete-time and continuous-time analyses. Although the structure of the data in this study suggests the need for a discrete-time hazard function, there are several alternatives to dealing with discrete-time data, including treating the data as continuous, implementing interval-censored model commands, and estimating a discrete hazard function mathematically. The simplest and most acceptable approach when the differences across discrete time points are small is to treat the data as continuous and to employ continuous-time models such as the Cox proportional hazards model. The section below identifies the specifications of the EHA model employed in this study, including approaches to mathematical estimation of the discrete hazard function as well as methods for estimating the proportional hazards rate through employment of the Cox proportional hazards model.

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¹⁸ For instance, some states may experience changes in migration patterns in alignment with the general national trend towards increased geographic mobility across the country due to improved transportation infrastructure and competitive economic and labor force markets.

¹⁹ For the purposes of simplicity and clarity, interaction terms between covariates of interest and time are not included in this analysis. However, future studies should consider the inclusion of these covariates as warranted.

Specifications of EHA Model

Given some of the noted challenges with differing approaches to the EHA, this study employs the Cox proportional hazards model, thus avoiding the need to specify a functional form of the data. The most important calculation in a discrete-time EHA with time-varying covariates and time-covariate interactions is known as the hazard function, which estimates the rate at which entities in the model are predicted to fail (in this case, to adopt ISRT legislation). In a continuous EHA, the hazard function assumes the form of a log-linear model, or a proportional hazards model, indicating that the relationship between the event occurrence and the covariates of interest is multiplicative and proportional. Thus, the change in a time-varying covariate in the model has a proportional and multiplicative effect on the likelihood that the entity will experience the event of interest (Tekle & Vermunt, 2012). Several approaches exist for determining the hazard function for a discrete-time panel, including mathematically estimating the hazard function, employing interval-censored data commands, or treating the data as continuous.²⁰

A mathematical estimate of the discrete-time hazard function approximates the continuous hazard function for data that have a discrete-time format. In a panel analysis with discrete-time observations, the survival function measures the probability of the survival of an entity beyond a particular point in time, or the probability that the time of failure (t) is greater than a specific time point (T). The discrete-time survivor function is defined as:

$$S_t = S(t) = Pr(T > t) = Pr(T \ge t - 1)$$

The hazard function for a discrete-time EHA measures the probability of failure of an entity conditional upon it not having already failed, and is defined as:

²⁰ The interval-censored command approach is not included in this discussion. For additional information, see Mills (2011).

$$h_t = h(t) = \Pr(T = t|T > t) = \Pr(T = t|t > t - 1)$$

Since the hazard rate and the survival rate measure opposing outcomes, and since the probability of two mutually-exclusive events must sum to one, it follows that the survival function is equivalent to one minus the hazard function. This can be expressed as:

$$S_t = \prod_{s=1}^t (1 - h_s)$$

Intuitively, therefore, the hazard function represents an estimation of the number of entities that have failed at time t over the number of entities that have survived up until time t minus one (the immediately-previous time period), or the proportion of failed entities to nonfailed entities. This assumption of proportional hazards is a critical component of the Cox model, as it requires that the survival functions for entities in the dataset have hazard functions that are proportional and constant over time. This assumption asserts that changes in the explanatory covariates in the model change only the probability that an entity will fail, rather than the timing of the periods during which a larger number of entities are likely to fail. Put simply, explanatory covariates have a direct effect on the baseline hazard function, but do not affect the failure time and remain constant over time. This enables researchers to estimate the effects of these parameters without the need to specify or account for the functional form of the model.

The measure of the proportional hazard rate has important implications for predicting the likelihood that entities will experience an event. A higher proportional hazard rate indicates that the entity has a shorter survival function and is therefore more likely to experience the event within a short period of time. Alternatively, a lower proportional hazard rate indicates that the entity has a longer survival function and is less likely to experience the event within the same time period (Singer & Willett, 1993). A hazard rate can thus be calculated for each entity in the

model and at different points in time, allowing the rate to change throughout the data collection period. This is important for enabling policymakers and politicians to determine the likelihood of event occurrence within neighboring states as well as their own jurisdictions, particularly as more states adopt a policy in response to the actions of their peers. In addition to individual rates, a cumulative hazard rate can be calculated that represents the overall probability of any state in the risk pool experiencing an event (adopting a policy). This calculation is useful from a global viewpoint of discerning and predicting the future policy landscape and the relative prominence of policies that are permissive or restrictive for undocumented students seeking access to postsecondary education.

Rather than mathematically estimating the hazard function, this study treats the discretetime panel data in the dataset as continuous. Some continuous-time models are particularly suited
to estimating discrete-time data and provide close approximations to the logit estimates for
discrete-time analysis. As the hazard function decreases over time, the estimates obtained from
the continuous-time models become closer in value to the estimates obtained from the discretetime logit analysis. Indeed, a discrete-time model with a log-log link is a direct approximation of
the Cox proportional hazards model, meaning that the coefficients are on a log scale and are
therefore comparable. Accordingly, the Cox proportional hazard model is the most appropriate
method to study the likelihood that states will adopt either a permissive or restrictive and weak or
strong ISRT policy between 2000 and 2015. In the first year of the study (2000), no states had
adopted a policy; by the conclusion of the study (2015), 31 states had adopted either a permissive
or restrictive ISRT policy. Because all states are at risk of adopting a new policy at every time
point in the study, all states remain in the risk pool, even after a state has experienced the first
incidence of the event of interest. This non-parametric approach to modeling does not specify a

functional form for the hazard rate, and thus allows the hazard rate to assume any form dictated by the characteristics of the data. Although some estimations of the Cox model assume that the effects of the covariates of interest are constant over time, this study relaxes that assumption allows for time-covariate interactions. The specific form of the Cox model is given as:

$$h_i(t) = h_0(t) \exp(\beta x_i)$$

Where $h_i(t)$ is the hazard rate for individual i, $h_0(t)$ is the baseline hazard rate when the vector of covariates is equal to zero, and \mathbf{x}_i is the vector of covariates for individual i, with coefficients $\boldsymbol{\beta}$.

The equation of the Cox model suggests several important characteristics of this approach to EHA modeling. First, the covariates of interest have a multiplicative effect on the hazard rate; that is, a one-unit increase in the covariates increases the hazard rate by $\exp(\beta)$. It follows that $\exp(\beta)$ is the ratio of the hazard for x=1 to x=0, also known as the relative risk or hazard ratio. Second, if the value of $\exp(\beta)$ is equal to one, there is no effect of the covariate on the hazard; if the value of $\exp(\beta)$ is greater than one, this implies a positive effect of the covariate on the hazard, thus greater values of the covariate correspond to greater likelihood of event occurrence and shorter duration periods; if the value of $\exp(\beta)$ is less than one, this implies a negative effect of the covariate on the hazard rate, thus greater values of the covariate correspond to lower likelihood of event occurrence and longer duration periods.

Descriptive Statistics

Having established the case for implementation of the EHA approach to longitudinal modeling, this section now turns to the specifications of the model with regard to data and variables included in the analysis. As previously indicated, this study aims to understand the contexts and causes of state ISRT policy adoption, accounting for internal state characteristics

²¹ The specific forms of these models, including the independent variables that are estimated, appear in the section entitled "Outcome Variables" in Chapter 4.

such as economic conditions, political ideology, and population demographics, as well as the processes of social construction and policy diffusion. A critical first step in understanding the specific contexts of each of the fifty states is a descriptive analysis of the covariates of interest across the states and throughout time. Table A1 in Appendix A provides detailed descriptions and data sources for all the covariates of interest. Table A2, also in Appendix A, reports the pooled mean values of the covariates across all states for all years of analysis, including the mean, standard deviation, minimum, and maximum values for both the continuous and the categorical variables. Table A2 includes additional covariates that are not included in the models but are reported to provide a comprehensive description of the characteristics and contexts of the states. Table 4, which appears below, reports only the covariates that appear in the EHA models, and provides yearly pooled estimates across all states to illustrate the trends in the covariates across time.

Table 4. Annual Mean Values for Covariates of Interest²²

| Year | % Non-White | % Foreign Born | % Metro Area ²³ | % Under 15 | % GDP from Agriculture | GDP per Capita (Thousands) | Gini Coefficient |
|------|-------------|----------------|----------------------------|------------|------------------------|----------------------------|---------------------|
| 2000 | 17.53 | 7.66 | 50.80 | 20.85 | 1.5 | \$42.80 | 40.52 |
| 2001 | 17.5 | 7.64 | 51.30 | 20.87 | 1.49 | \$42.93 | 42.03 |
| 2002 | 17.55 | 7.68 | 51.07 | 20.83 | 1.33 | \$43.39 | 42.16 |
| 2003 | 17.46 | 7.6 | 51.38 | 20.91 | 1.62 | \$44.24 | 42.09 |
| 2004 | 17.64 | 7.76 | 51.57 | 20.75 | 1.84 | \$45.38 | 42.33 |
| 2005 | 17.66 | 7.81 | 33.22 | 20.42 | 1.54 | \$46.30 | 42.41 |
| 2006 | 17.77 | 8.05 | 33.02 | 20.12 | 1.38 | \$47.16 | 42.82 |
| 2007 | 17.98 | 8.37 | 33.14 | 20.15 | 1.56 | \$47.44 | 42.96 |
| 2008 | 18.09 | 8.26 | 33.10 | 20.14 | 1.76 | \$47.08 | 42.07 |
| 2009 | 18.18 | 8.18 | 33.21 | 20.11 | 1.54 | \$45.71 | 42.26 |
| 2010 | 18.49 | 8.29 | 33.08 | 20.2 | 1.6 | \$46.25 | 45.22 |
| 2011 | 19.53 | 8.75 | 33.13 | 19.93 | 2.08 | \$46.67 | 45.68 |
| 2012 | 19.72 | 8.89 | 29.03 | 19.73 | 1.87 | \$47.05 | 45.77 |
| 2013 | 19.92 | 8.85 | 29.11 | 19.59 | 2.14 | \$47.11 | 46.29 |
| 2014 | 20.05 | 8.98 | 29.12 | 19.46 | 1.84 | \$47.75 | 46.25 |
| 2015 | 20.45 | 9.25 | 29.22 | 19.32 | 1.53 | \$48.46 | 46.43 |

²² All financial variables reported in 2009 dollars.
²³ Reporting standards for urbanicity changed between 2004 and 2005 and may not be comparable across all years of this study. See tables in Appendix B.

| Year | Poverty Rate | Income per Capita | Unemployment Rate | % BA | Tax Approp. to HE per Capita | Financial Aid per Capita | Consolidated Governance (0/1) | HSIs per 1,000,000 |
|------|-----------------|----------------------|----------------------|-------|------------------------------|--------------------------|----------------------------------|--------------------|
| 2000 | 10.89 | \$36,540.38 | 3.91 | 17.96 | \$259.91 | \$13.62 | 0.48 | 0.84 |
| 2001 | 11.28 | \$36,642.26 | 5.1 | 17.92 | \$262.00 | \$14.73 | 0.46 | 0.88 |
| 2002 | 11.67 | \$36,507.72 | 5.37 | 18 | \$263.87 | \$15.75 | 0.46 | 0.91 |
| 2003 | 11.88 | \$36,698.71 | 5.44 | 17.83 | \$258.54 | \$17.76 | 0.48 | 0.97 |
| 2004 | 12.23 | \$37,820.71 | 5.03 | 18.17 | \$247.55 | \$18.26 | 0.48 | 1.01 |
| 2005 | 12.95 | \$38,481.44 | 4.81 | 18.39 | \$246.62 | \$19.17 | 0.48 | 1.09 |
| 2006 | 12.94 | \$39,030.34 | 4.35 | 18.63 | \$246.49 | \$19.34 | 0.48 | 1.07 |
| 2007 | 12.63 | \$40,110.39 | 4.55 | 19.18 | \$260.34 | \$20.66 | 0.48 | 1.16 |
| 2008 | 12.75 | \$40,138.18 | 6.47 | 19.63 | \$268.23 | \$21.02 | 0.48 | 1.23 |
| 2009 | 13.79 | \$38,672.98 | 8.96 | 19.91 | \$270.26 | \$22.32 | 0.48 | 1.31 |
| 2010 | 14.7 | \$38,361.00 | 8.51 | 20.04 | \$261.33 | \$31.04 | 0.48 | 1.42 |
| 2011 | 15.21 | \$40,067.42 | 7.78 | 20.57 | \$255.57 | \$29.98 | 0.5 | 1.58 |
| 2012 | 15.16 | \$40,436.07 | 7.09 | 21.09 | \$230.35 | \$29.09 | 0.5 | 1.76 |
| 2013 | 15.07 | \$40,127.53 | 6.3 | 21.49 | \$229.12 | \$29.41 | 0.5 | 1.93 |
| 2014 | 14.81 | \$40,904.41 | 5.36 | 21.85 | \$231.83 | \$29.09 | 0.5 | 2.07 |
| 2015 | 14.13 | \$42,347.38 | 4.79 | 22.26 | \$239.84 | \$30.47 | 0.5 | 2.20 |

| Year | Student Tuition Share | Need-Based Aid per Capita | Republican Legislature (0/1) | Republican Governor (0/1) | Split Legislature (0/1) | Legislative Professionalism | % Vote for Rep. Gov. |
|------|--------------------------|------------------------------|---------------------------------|------------------------------|-------------------------|--------------------------------|----------------------|
| 2000 | 32.6 | \$9.72 | 0.36 | 0.64 | 0.3 | 0.59 | 50.91 |
| 2001 | 33.28 | \$9.84 | 0.36 | 0.64 | 0.3 | 0.59 | 50.91 |
| 2002 | 34.08 | \$10.18 | 0.44 | 0.62 | 0.24 | 0.64 | 49.25 |
| 2003 | 36.41 | \$10.30 | 0.44 | 0.6 | 0.24 | 0.64 | 50.02 |
| 2004 | 38.96 | \$10.57 | 0.42 | 0.62 | 0.2 | 0.61 | 49.83 |
| 2005 | 40.14 | \$10.76 | 0.42 | 0.58 | 0.2 | 0.61 | 50.23 |
| 2006 | 40.51 | \$10.38 | 0.34 | 0.52 | 0.2 | 0.6 | 49.88 |
| 2007 | 40.28 | \$10.66 | 0.34 | 0.54 | 0.2 | 0.6 | 45.71 |
| 2008 | 39.65 | \$10.84 | 0.3 | 0.56 | 0.16 | 0.62 | 46.1 |
| 2009 | 41.61 | \$11.28 | 0.28 | 0.58 | 0.16 | 0.62 | 45.72 |
| 2010 | 43.97 | \$11.02 | 0.3 | 0.48 | 0.16 | 0.61 | 46.09 |
| 2011 | 46.37 | \$10.87 | 0.5 | 0.58 | 0.16 | 0.61 | 49.52 |
| 2012 | 50.42 | \$10.16 | 0.56 | 0.58 | 0.14 | 0.61 | 50.13 |
| 2013 | 51.34 | \$10.40 | 0.52 | 0.6 | 0.08 | 0.61 | 49.6 |
| 2014 | 51.23 | \$9.97 | 0.54 | 0.58 | 0.08 | 0.6 | 49.57 |
| 2015 | 51.08 | \$10.15 | 0.54 | 0.62 | 0.16 | 0.6 | 51.84 |

| Year | Change in Gov. Party (0/1) | % Lobbying for Education | Gubernatorial Power | State-Federal Party Difference | State Ideology | Citizen Ideology |
|------|----------------------------|--------------------------|------------------------|-----------------------------------|----------------|------------------|
| 2000 | 0 | 1.79 | 0.81 | 0.28 | 38.39 | 43.76 |
| 2001 | 0.18 | 1.79 | 0.81 | 0.08 | 60.05 | 56.4 |
| 2002 | 0.02 | 1.81 | 0.81 | 0.08 | 42.25 | 54.57 |
| 2003 | 0.06 | 1.81 | 0.8 | 0.10 | 48.89 | 51.48 |
| 2004 | 0.04 | 1.81 | 0.81 | 0.16 | 42.67 | 41.07 |
| 2005 | 0.4 | 1.81 | 0.82 | 0.18 | 65.9 | 60.93 |
| 2006 | 0.06 | 1.82 | 0.82 | 0.20 | 55.57 | 56.23 |
| 2007 | 0.06 | 1.83 | 0.83 | 0.20 | 35.6 | 46.12 |
| 2008 | 0.54 | 1.84 | 0.83 | 0.24 | 57.46 | 55.31 |
| 2009 | 0.34 | 1.84 | 0.81 | 0.26 | 51.46 | 57.95 |
| 2010 | 0.34 | 1.86 | 0.82 | 0.18 | 46.7 | 47.95 |
| 2011 | 0 | 1.78 | 0.82 | 0.40 | 41.11 | 58.9 |
| 2012 | 0.02 | 1.79 | 0.82 | 0.44 | 27.68 | 42.46 |
| 2013 | 0.04 | 1.77 | 0.82 | 0.46 | 66.9 | 60.62 |
| 2014 | 0.12 | 1.71 | 0.84 | 0.46 | 52.18 | 48.94 |
| 2015 | 0 | 1.72 | 0.82 | 0.40 | 52.18 | 48.94 |

| Year | Percent Any Policy | Percent Restrictive Policy | Percent Permissive Policy | Percent Weak Policy | Percent Strong Policy |
|------|--------------------|-------------------------------|------------------------------|---------------------|--------------------------|
| 2000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2001 | 4.00 | 0.00 | 4.00 | 2.00 | 2.00 |
| 2002 | 8.00 | 0.00 | 8.00 | 6.00 | 2.00 |
| 2003 | 14.00 | 0.00 | 14.00 | 12.00 | 2.00 |
| 2004 | 16.00 | 0.00 | 16.00 | 14.00 | 2.00 |
| 2005 | 18.00 | 0.00 | 18.00 | 14.00 | 4.00 |
| 2006 | 24.00 | 4.00 | 20.00 | 16.00 | 8.00 |
| 2007 | 26.00 | 6.00 | 22.00 | 16.00 | 10.00 |
| 2008 | 30.00 | 10.00 | 20.00 | 18.00 | 12.00 |
| 2009 | 32.00 | 10.00 | 22.00 | 20.00 | 12.00 |
| 2010 | 34.00 | 12.00 | 22.00 | 22.00 | 12.00 |
| 2011 | 44.00 | 20.00 | 24.00 | 24.00 | 20.00 |
| 2012 | 46.00 | 20.00 | 26.00 | 28.00 | 22.00 |
| 2013 | 54.00 | 20.00 | 34.00 | 30.00 | 24.00 |
| 2014 | 56.00 | 20.00 | 36.00 | 30.00 | 26.00 |
| 2015 | 62.00 | 22.00 | 40.00 | 30.00 | 32.00 |

The event history analysis approach to modeling event occurrence provides estimates of the probability of event occurrence in the form of the hazard ratio. Figures C1 through C3 illustrate various approaches to operationalizing the hazard rate of an EHA analysis using a binary indicator for ISRT policy activity ("1"=policy adoption; "0"=otherwise): the Kaplan-Meier failure estimate, the Nelson-Aalen cumulative hazard estimate, and the smoothed hazard estimate. Figures C4 through C6 illustrate the same calculations for the adoption of restrictive ISRT policies, while figures C7 through C9 illustrate the adoption of permissive ISRT policies. On the intensity scale, figures C10 through C12 illustrate the adoption of low-intensity (weak) policies, while figures C13 through C15 illustrate the adoption of high-intensity (strong) policies. The Kaplan-Meier estimator is a non-parametric estimation of the failure function used to measure the proportion of entities that have failed before a certain point in time. The Nelson-Aalen approach is an alternative method for estimating the hazard function to examine how risk pools change over time. The smoothed hazard estimate is simply a kernel-smoothed illustration of the Nelson-Aalen estimator, often used to show a continuous-time hazard rate with discretetime data.

Several tables provide the numerical representations of the aforementioned graphs. Table C1 provides the mathematical equivalence of the graphs illustrating the binary failure function, with the adoption of restrictive and permissive policies coded as "1." Table C2 provides the mathematical failure functions of the adoption of restrictive policies, while table C3 reports the mathematical failure functions of the adoption of permissive policies. Tables C4 and C5 report the mathematical failure functions of the adoption of low-intensity (weak) and high-intensity (strong) policies, respectively. These tables show the number of failures at each time point (year) and calculate the failure function based on the number of failed entities as well as the number of

entities remaining in the risk pool. As expected, the failure function increases in value across time, as more states adopt policies.²⁴

Outcome Variables

The preceding discussion concerning the difficulty with conceptualizing and operationalizing both independent and dependent variables in this study suggests the need for a variety of model specifications in order to adequately assess the relationship among state characteristics, diffusion processes, social construction of target groups, and ISRT policy adoption. Although all models considered herein use the Cox proportional hazard technique, five main models examine five different outcomes: 1) the adoption of any ISRT policy; 2) the adoption of restrictive ISRT policies; 3) the adoption of permissive ISRT policies; 4) the adoption of low-intensity ISRT policies; and 5) the adoption of high-intensity ISRT policies. As expected, different covariates of interest also show different degrees of association with the outcomes, thus the models also differ in the specific covariates hypothesized to significantly influence policy adoption. Despite this, all models do include some combination of economic, demographic, political, educational, and social construction variables. Another set of models incorporates various measures of the process of diffusion in an attempt to measure how the adoption rates of surrounding states influence neighboring states. The specific forms of the models appear below:

Models 1-5:
$$h_i(t) = exp[\beta_1(\% non-white) + exp[\beta_2(\% foreign born) +$$

$$exp \beta_3(\% metropolitan) + exp \beta_4(\% under 15) +$$

$$exp \beta_5(\% GDP from agriculture) + exp \beta_6(GDP per capita) +$$

$$exp \beta_7(Gini coefficient) + exp \beta_8(\% unemployed) + exp \beta_9(\% BA or higher) +$$

²⁴ Figures C1-C15 and tables C1-C5 appear in Appendix C.

```
exp\ \beta_{10}(state\ financial\ aid) + exp\ \beta_{11}(conslidated\ governing\ board) + \\ exp\ \beta_{12}(student\ share\ of\ tuition) + exp\ \beta_{13}(state\ need\ based\ aid) + \\ exp\ \beta_{14}(HSIs\ per\ capita) + exp\ \beta_{15}(Republican\ legislature) + \\ exp\ \beta_{16}(Republican\ governor) + exp\ \beta_{17}(legislative\ professionalism) + \\ exp\ \beta_{18}(\%\ vote\ for\ Republican\ governor) + exp\ \beta_{19}(gubernatorial\ power)]^{25} \\ \underline{Models\ 6-10}:\ h_i(t) = exp[\beta_1(\%\ non\ white) + exp[\beta_2(\%\ foreign\ born) + \\ exp\ \beta_3(\%\ metropolitan) + exp\ \beta_4(\%\ under\ 15) + \\ exp\ \beta_5(\%\ GDP\ from\ agriculture) + exp\ \beta_6(GDP\ per\ capita) + \\ exp\ \beta_7(Gini\ coefficient) + exp\ \beta_8(\%\ unemployed) + exp\ \beta_9(\%\ BA\ or\ higher) + \\ exp\ \beta_{10}(state\ financial\ aid) + exp\ \beta_{11}(conslidated\ governing\ board) + \\ exp\ \beta_{12}(student\ share\ of\ tuition) + exp\ \beta_{13}(state\ need\ based\ aid) + \\ exp\ \beta_{14}(HSIs\ per\ capita) + exp\ \beta_{15}(legislative\ professionalism) + \\ exp\ \beta_{16}(\%\ vote\ for\ Republican\ governor) + exp\ \beta_{17}(gubernatorial\ power) + \\ exp\ \beta_{18}(diffuse)]^{26}
```

Analytic Alternative: Multinomial Logit (MNL)

Given some of the challenges associated with event history analysis and the requirement for most of the entities in a dataset to "fail" in order to calculate a hazard rate with any meaningful predictive power, one proposed alternative to the EHA is the multinomial logit (MNL) for panel data. The MNL is a specification of the generalized logistic regression that applies to more than two possible discrete outcomes; it seeks to predict the probabilities of the potential outcomes conditional upon a vector of independent variables. The underlying logic of

²⁵ The outcomes for models 1-5 include any policy adoption, restrictive policy adoption, permissive policy adoption, weak policy adoption, and strong policy adoption, respectively. These first five models do not include a measure for diffusion in an effort to isolate the effects of the state characteristics.

²⁶ The outcomes for models 6-10 include any policy adoption, restrictive policy adoption, permissive policy adoption, weak policy adoption, and strong policy adoption, respectively. This next set of five models includes measures of diffusion for each specific outcome variable of interest.

the model is the construction of a linear predictor function that generates a set of weights, which are then linearly combined with exploratory variables of the observation (Greene, 2012). In the MNL, the dependent variable must be categorical and nominal, without any specific, meaningful ordering of the potential outcomes (i.e., non-ordinal). One of the unique characteristics of the MNL is that data are case specific; in other words, the independent variable can only be expressed as a single value for each case that is constant across the data panel. Thus, the covariates in the MNL cannot vary with time. This is a critical difference from the EHA, which includes both time-varying covariates and interactions between the covariates and time. Moreover, the MNL does not effectively capture the phenomenon of repeated, multi-state events such as the subsequent adoption of ISRT policies in respective years of observation. In some respects, therefore, the MNL operates more as a cross-sectional approach to modeling the outcome of interest rather than a longitudinal approach that incorporates time-varying covariates and repeated event occurrences.

Despite some advantages, including a degree of relative simplicity, the MNL does not provide the level of nuance and discernment necessary for more rigorous assessment of ISRT policy adoption over time. Moreover, the heightened complexity of the EHA modeling approach does not prove overly burdensome, particularly given the additional power gained through the adoption of a more functionally-accurate methodological technique. Moreover, prior research suggests that the EHA model is a recommended technique for overcoming many of the analytic problems associated with studying longitudinal events that require precise measurements of the timing of event occurrence (DesJardins, Ahlburg, & McCall, 1999). To determine degree to

which these approaches differ, this study does include several multinomial logit regression outputs as comparison points for the outcomes of the EHA.²⁷

²⁷ The results of this model appear in tables B3, B4, and B5 in Appendix B.

5. RESULTS AND DISCUSSION

This chapter presents the results of the event history analysis models for various conceptualizations of the relationships among ISRT policy adoption and internal state characteristics, policy diffusion, and social construction of target populations. Due to the challenges and complications associated with operationalizing and measuring several of the outcomes variables and covariates of interest, multiple specifications of the model are necessary to explore the potential effects of hypothesized covariates on policy adoption. Two main tables present the outcomes of these models. Table 5 reports the results of five Cox proportional hazards models with five different outcome variables of interest, excluding the covariate for diffusion effects. Table 6 incorporates the effects of diffusion for the five models using different measures of diffusion based on the five outcome variables of interest. In addition to these main models, Tables B3, B4, and B5 provide a comparison using the multinomial logit (MNL).²⁸

Interpretation of the coefficient estimates in a Cox proportional hazards model is not intuitive, given that estimates must be exponentiated in order to provide information on the likelihood of failure. For Tables 5 and 6, therefore, hazard ratios are reported along with the standard error and significance level.²⁹ Tables B3, B4, and B5 report results as odds ratios, which are the exponentiated values of the coefficient estimates, and indicate the risks of the outcomes relative to the referent groups.

²⁸ Tables B3, B4, and B5 appear in Appendix B.

²⁹ In order the obtain the percentage change in the output per one-unit change in the input, one is subtracted from the hazard ratio; this value is then multiplied by 100%. If this value is positive, the effect of the covariate is positive and increases the hazard rate by this calculated percentage. If this value is negative, the effect of the covariate is negative and decreases the hazard rate by this calculated percentage.

Models 1 through 5: Binary and Multinomial EHA

Table 5 reports the results of the Cox proportional hazards model using: 1) a binomial measurement of any policy adoption; 2) a binomial measurement of restrictive policy adoption; 3) a binomial measurement of permissive policy adoption; 4) a binomial measurement of low-intensity (weak) policy adoption; and 5) a binomial measurement of high-intensity (strong) policy adoption.³⁰ These first five models exclude any measures of diffusion effects in order to isolate the impacts of internal state characteristics and proxy measurements of the phenomenon of social construction. An initial round of modeling included several hypothesized variables of interest that showed no significant effects on the outcomes of interest in any of the five models; these variables did not serve as control variables and were thus removed from subsequent analyses to enable isolation of the variables most relevant to policy adoption.³¹

³⁰ Although these coding systems are multinomial, the outcomes appear binomial in the models. This is because the EHA is only predicting the failure of one event at a time, thus generating a binary outcome.

³¹ These omitted variables include: poverty rate, income per capita, state tax appropriations for higher education per capita, split legislative chambers, gubernatorial party change, percentage of state lobbying funds spent on educational issues, federal-state partisan division, state government ideology, and citizen ideology.

Table 5. Event History Analysis Results for Models 1-5

| Variable | | Haz | ard Ratio (Std. Er | ror) | |
|----------------------------|------------|-------------|--------------------|----------|----------|
| | Model 1: | Model 2: | Model 3: | Model 4: | Model 5: |
| | Any Policy | Restrictive | Permissive | Weak | Strong |
| % Non-White | 0.989 | 1.017 | 0.968* | 0.984 | 0.976 |
| | (0.008) | (0.016) | (0.012) | (0.011) | (0.018) |
| % Foreign-Born | 0.994) | 0.838** | 1.026 | 1.063 | 0.906* |
| C | (0.024) | (0.046) | (0.032) | (0.045) | (0.035) |
| % Metro Area ³² | 1.016** | 1.006 | 1.031*** | 1.020** | 1.001 |
| | (0.005) | (0.012) | (0.007) | (0.008) | (0.009) |
| % Under 15 | 1.349*** | 1.173 | 1.528*** | 1.373*** | 1.315*** |
| | (0.066) | (0.103) | (0.107) | (0.098) | (0.108) |
| % GDP from | 0.917 | 0.556** | 1.036 | 1.008 | 0.583*** |
| Agriculture | (0.052) | (0.121) | (0.069) | (0.069) | (0.092) |
| GDP per Capita | 0.937*** | 0.964 | 0.957* | 0.911*** | 0.957 |
| 1 1 | (0.013) | (0.026) | (0.018) | (0.019) | (0.023) |
| Gini Coefficient | 0.809*** | 0.799** | 0.888* | 0.811*** | 0.888 |
| | (0.036) | (0.066) | (0.050) | (0.047) | (0.075) |
| Unemployment | 1.072 | 1.786*** | 0.863* | 1.008 | 1.244** |
| 1 7 | (0.048) | (0.179) | (0.052) | (0.059) | (0.101) |
| % BA or Higher | 1.119** | 1.174* | 1.049 | 1.164** | 1.009 |
| C | (0.039) | (0.086) | (0.048) | (0.058) | (0.059) |
| Financial Aid per | 0.981*** | 0.978* | 0.967*** | 0.994 | 0.930*** |
| Capita | (0.005) | (0.009) | (0.008) | (0.007) | (0.014) |
| Consolidated | 0.259*** | 1.126 | 0.148*** | 0.275*** | 0.442* |
| Governance | (0.055) | (0.508) | (0.043) | (0.081) | (0.166) |
| Student Share of | 0.952*** | 0.994 | 0.936*** | 0.945*** | 0.962** |
| Tuition | (0.008) | (0.016) | (0.011) | (0.011) | (0.014) |
| Need Based Aid | 1.026* | 1.002 | 1.038* | 1.010 | 1.119*** |
| per Capita | (0.012) | (0.025) | (0.015) | (0.015) | (0.029) |
| HSIs per | 1.010 | 1.140* | 1.000 | 0.758*** | 1.237*** |
| 1,000,000 | (0.026) | (0.068) | (0.033) | (0.062) | (0.054) |
| Republican | 1.196 | 3.325** | 0.639 | 1.155 | 1.740 |
| Legislature | (0.235) | (1.348) | (0.169) | (0.346) | (0.575) |
| Republican | 0.946 | 2.020 | 0.739 | 1.035 | 0.585 |
| Governor | (0.178) | (0.902) | (0.175) | (0.239) | (0.202) |
| Legislative | 1.360 | 0.559 | 0.683 | 2.417* | 0.541 |
| Professionalism | (0.350) | (0.369) | (0.220) | (0.837) | (0.291) |
| % Vote for | 1.018*** | 1.063*** | 0.999 | 0.994 | 1.041*** |
| Republican | (0.007) | (0.017) | (0.008) | (0.009) | (0.011) |
| Gubernatorial | 0.033*** | 0.228 | 0.079*** | 0.033*** | 0.149 |
| Power | (0.019) | (0.315) | (0.059) | (0.026) | (0.161) |
| N | 712 | 712 | 712 | 712 | 712 |

* p<0.05

** p<0.01

***p<0.001

 $^{^{32}}$ Given the issues associated with the measure for urbanicity, results for these models without the variable appear in table B1 in Appendix B. The outcomes do not differ appreciably when this covariate is excluded.

Column 1 of Table 5 reports the results of EHA model for the adoption of any form of ISRT policy (Model 1).³³ The proxy variables measuring social construction revealed no significant effects in any of these five models and are thus not included in this table. Results of Model 1 indicate that the variables significantly associated with the adoption of any ISRT policy included the percentage of the population in metropolitan areas, the percentage of the population under age 15, GDP per capita, income inequality, educational attainment, state financial aid per capita, consolidated higher education governance, student share of tuition, state need-based aid per capita, the percentage of votes for Republican gubernatorial candidates, and gubernatorial power. Given that this measure of policy activity includes both permissive and restrictive forms, it is difficult to determine with any conclusiveness the degree to which policymakers are engaging in restrictive or permissive forms of policy activity. Thus, the summary below provides only an explanation of the likelihood that state will engage in the ISRT policy debate by actively adopting legislation. Speculations on the form of legislation that states are likely to adopt is reserved for later discussion.

Only two of the demographic variables included in the model revealed significant effects on ISRT policy adoption: metropolitan population and the population under age 15. For every one-percentage point increase in the percentage of the population living within or around a metropolitan area, the likelihood of policy adoption increased by almost 2%. A one-percentage point increase in the population under age 15 corresponded with a nearly 35% increase in the likelihood of ISRT policy adoption. In addition to demographics, several economic variables exhibited significant associations. For every \$1,000 increase in GDP per capita, the likelihood of

³³ Note that for Model 1, the failure includes both permissive and restrictive forms of ISRT policy. Thus, the direction and strength of these results will depend on the relative balance of permissive versus restrictive policy adoption within the state.

ISRT policy adoption decreased by over 6%, while a one-unit increase in the Gini coefficient (measuring income inequality) resulted in a 19% decrease in the likelihood of policy adoption.

Model 1 reports that state educational characteristics were exceedingly relevant to the likelihood of ISRT policy adoption, particularly in relation to the ecology of the higher education system. A one-percentage point increase in the number of individuals with a bachelor's degree or higher corresponded to a nearly 12% increase in the likelihood of policy adoption. Most of the other educational variables that demonstrated significance in the model had negative associations with policy adoption, apart from need-based aid per capita and governance. For every \$1increase in total (need-based and non-need-based) state financial aid per capita, the likelihood of policy adoption decreased by nearly 2%. Similarly, a one-unit increase in the student's share of net tuition as a proportion of total educational revenues decreased the likelihood of policy adoption by almost 5%. Alternatively, states that devoted a larger proportion of financial aid to need-based programs were more likely to adopt ISRT policies: a \$1 increase in need-based aid per capita resulted in a 2.7% increase in the likelihood of policy adoption. States with consolidated governing boards were much less likely to engage in policy activity, with consolidated state systems over 74% less likely to pass ISRT legislation than states with alternative forms of governance.

Several political variables included in the model had a significant effect on policy adoption, including the percentage of citizens voting for a Republican governor and the degree of gubernatorial policymaking and budgetary power. In gubernatorial elections, a one-percentage point increase in the percentage of citizens voting for the Republican candidate corresponded to a nearly 2% increase in the likelihood of policy adoption. States with strong governors (i.e., those

with sole budgetary power, reorganization power, and line-item veto power) were nearly 97% less likely to adopt ISRT policies.

Based on the results that follow below for the findings of Models 2 and 3, it is possible to speculate on the relative balance of permissive versus restrictive policies that state legislatures adopt. As evidenced below, states with a higher percentage of the population under age 15, a higher density of the population in urban areas, and greater contributions to need-based financial aid were also more likely to be active in the permissive ISRT policy area. Alternatively, states with a higher percentage of the population with a bachelor's degree, higher GDP per capita, consolidated higher education governance, higher student shares of tuition, a greater percentage of votes for the Republican gubernatorial candidate, and strong governors were more likely to remain active in the restrictive policy arena. States with higher income inequality (as measured by the Gini coefficient) and higher financial aid payments per capita were less likely overall to be active in either form of policy activity. These results will become more evident in the analyses that follow below.

Column 2 of Table 5 reports the results of the EHA model for the adoption of restrictive ISRT policies (Model 2), and shows significant effects for the size of the foreign-born population, the percentage of state GDP from agricultural production, income inequality, the unemployment rate, educational attainment, total financial aid per capita, the number of Hispanic-serving institutions per one million residents, a majority Republican legislature, and the percentage of votes for the Republican gubernatorial candidate. As with Model 1, no variables measuring social construction were significant.

The adoption of restrictive ISRT policies was significantly associated with only one demographic variable, which was the percentage of the population that was foreign-born. A one-

percentage-point increase in the foreign-born population corresponded with a 16% decrease in the likelihood of adopting a restrictive policy. This tendency to avoid restrictive policies could reflect the state's attention to the needs of the immigrant population and the unpopularity of bills that restrict access to postsecondary education among these individuals. Moreover, some states with larger foreign-born, immigrant populations may recognize the need for promoting economic mobility and educational attainment for immigrant as well as native-born residents. These state policymakers may thus be reluctant to implement policies that serve to deny educational opportunities to a significant portion of the immigrant population or that generate an atmosphere of ethnic or racial intolerance.

Several variables related to economic characteristics showed significant associations with restrictive policy adoption, including the percentage of the state's GDP derived from agricultural activity. With every one-percentage-point increase in the state's reliance on agriculture, the likelihood of restrictive policy adoption decreased by over 44%. This finding suggests that states with large agricultural industries that provide significant economic gains may also rely on immigrant or migrant labor pools to operate farms and facilities. Accordingly, these states may be home to a large number of immigrants, foreign-born individuals, or undocumented residents living within the state and working either temporarily or permanently in the agricultural sector and related industries. States with larger immigrant or undocumented populations – who may be critical to the operation of the agricultural sector and thus the economic well-being of the state – may therefore be less likely to adopt policies that restrict the ability of these workers (or the children of these workers) to access postsecondary education as a means of upward mobility.

Regarding the state's economic health and the corresponding wealth of its residents, states with a higher Gini coefficient (indicating higher income inequality) were less likely to

adopt restrictive policies: a one-unit increase in the Gini coefficient corresponded to a 20% decrease in the likelihood of restrictive policy adoption. This suggests that states whose residents experience unequal distributions of wealth may be reluctant to adopt policies that limit the educational access and opportunity of any of the state's residents (included undocumented students), which could exacerbate levels of income inequality. Moreover, such states may have depressed governmental budgets or state economies that necessitate legislative attention to employment and other labor market policy issues rather than to postsecondary educational policy problems. Thus, scarce resources and overburdened legislative attention may be diverted away from postsecondary issues (including ISRT policies) in favor of policy solutions to matters more direct and salient to an economically-depressed citizenry.

Conversely, states that had higher rates of unemployment were more likely to pass restrictive policies: a one-percentage point increase in the unemployment rate resulted in a nearly 79% increase in the likelihood of restrictive ISRT policy adoption. These findings suggest that states whose residents struggle to obtain gainful employment may promote an atmosphere of antagonism and hostility towards the perceived economic intrusion of immigrants and migrant workers. In such states, the likelihood of adopting policies that restrict access to public higher education only to those students who can prove legal residency in the country is augmented by this sense of economic threat. This tendency is perhaps due to the desire on the part of legislators to preserve educational opportunity for the native-born residents of the state who could benefit from postsecondary educational attainment. Moreover, such states may exhibit an irrational fear that immigrants, whether migrants or permanent residents of the state, will supplant the "rightful" positions of native residents in both postsecondary institutions and the labor market after graduation.

Some educational factors also influenced the likelihood of restrictive ISRT policy adoption, namely educational attainment and total state financial aid per capita. Interestingly, and contrary to this study's hypotheses and much of the literature on this topic, a one-percentage-point increase in the population with a bachelor's degree or higher corresponded with a 17% increase in the likelihood of adopting restrictive ISRT policies. This contradicts the notion that highly-educated states are more racially and ethnically tolerant and thus likely to support the expansion of educational opportunities to students of marginalized backgrounds, including undocumented students. The positive association between bachelor's degree attainment and the passage of restrictive policies, however, may have little to do with the ideological beliefs of citizens, and may instead be reflections of a legislative body that does not represent the social beliefs of the constituents. It is possible that legislators in states with a highly-educated populace are dedicated to promoting access to public postsecondary education as an exclusive right for native-born state residents, thus driving the decision to adopt policies that exclude undocumented students from these opportunities.

Other findings related to educational attributes were more consistent with hypothesized relationships among state context and policy adoption. The model reports that for every \$1 increase in total state financial aid per capita, the likelihood of restrictive policy adoption decreased by over 2%. This suggests that states that are more dedicated to the concept of state-subsidized public higher education may be less likely to adopt legislation that limits the number of students that are eligible to attend these institutions at in-state rates. In other words, states that invest heavily in higher education maintain a belief in the critical nature of higher education as a vehicle for social mobility, and thus have a disincentive to restrict access. Moreover, states with a commitment to providing postsecondary access through sufficient financial aid are also more

likely to have a robust educational market that maintains established rules and norms for the eligibility or non-eligibility of students to pay in-state tuition rates. Accordingly, the need for intervention or regulation through legislative activity may be diminished. Further disaggregation of the potential interactive effects of various state context indicators is warranted.

A final variable related to the educational context was significantly associated with the adoption of restrictive policies: a one-unit increase in the number of Hispanic-serving institutions per one million residents was associated with a 14% increase in the likelihood that a state would adopt a restrictive ISRT policy. Although counterintuitive, this result is perhaps unsurprising given the possibility for legislators to disagree with or contradict the public higher education system when the two entities have discrepant attitudes towards educational equity. For instance, states with a higher proportion of HSIs that provide opportunities for students to access and afford higher education are also likely to have large undocumented immigrant populations, given that most undocumented immigrants in the U.S. come from a Hispanic/Latino nation. Within certain state contexts (i.e., those with more Conservative representatives or a greater number of restrictive immigration laws), the presence of an expansive and potentially powerful immigrant population could stimulate retaliatory activity from the state legislature seeking to restrict illegal immigration and limit undocumented students' postsecondary opportunities. This is particularly true in instances wherein the state legislature espouses an attitude towards public postsecondary education that conflicts with the perspectives of the higher education community, or when the two entities maintain a tense relationship due to state disinvestment in higher education. Thus, although a state with more HSIs would be hypothesized to have a lower incidence of restrictive ISRT policies, the reverse may also be true in states whose legislators seek to combat the population and demographic trends in their jurisdictions through the denial of public benefits.

Two variables related to the political environment of states had significant associations with restrictive ISRT policy adoption. Majority Republican legislatures were over twice as likely to pass restrictive policies compared to majority Democrat or non-majority legislatures. Moreover, every one-percentage-point increase in the citizen vote for a Republican gubernatorial candidate corresponded with a 6% increase in the likelihood of adopting restrictive policies. This suggests that in states with a largely Conservative legislature and strong Republican representation among citizens, residents and legislators promote efforts to restrict educational opportunities for undocumented students through the adoption of policies that prevent such students from becoming eligible for in-state tuition rates. The motivation for this activity may stem in part from Conservative ideals including the duty to protect citizens and the dedication to rule of law, particularly in reference to illegal immigration and access to government-funded benefits. For instance, state legislators may worry that the extension of public benefits to undocumented students could incentivize illegal immigration. The ideological and political beliefs of the citizenry and political representatives may therefore exert a direct and significant effect on the ability of undocumented students to attain in-state residency tuition equity.

Column 3 of Table 5 reports the results of the EHA model for the adoption of permissive ISRT policies (Model 3), and suggests that there were significant associations between policy adoption and the percentage of the population that was non-white, the percentage of the population in urban areas, the percentage of the population under age 15, GDP per capita, income inequality, the unemployment rate, state financial aid per capita, consolidated governance, student share of tuition, need-based financial aid, and gubernatorial power. Consistent with Models 1 and 2, the covariates measuring social construction were not significant and were thus not reported.

Several demographic variables showed a significant association with permissive ISRT policy adoption. For every one-percentage point increase in the non-white population, the likelihood of permissive ISRT policy adoption decreased by over 3%. Alternatively, a onepercentage point increase in the percentage of the population living in a metropolitan area or under the age of 15 corresponded with 3% and 53% increases in the likelihood of permissive policy adoption, respectively. Regarding the non-white population, this decreased likelihood of permissive policy adoption may suggest one of several possible mechanisms. First, states with a larger percentage of non-white residents that are more ethnically and racially diverse may by default be more accepting and tolerant of immigrant students in their institutions. Due to a status quo that promotes a permissive postsecondary environment, therefore, state legislators may experience reduced pressure to adopt explicit policies protecting undocumented students' access to higher education. Alternatively, states with larger proportions of non-white residents may have state legislatures that are less tolerant towards or more fearful of the diverse population and are thus reluctant to adopt ISRT policies that would grant additional public benefits (i.e., in-state tuition) to undocumented immigrants who are categorized within this "non-white" population. This is particularly true in states whose government representatives do not reflect the racial and ethnic demographics of the states, thus undermining the potential for representative democracy and policy-making that is attuned to the needs of residents. As a result, the actual direction of the effects of this variable are difficult to discern.

With regard to the metropolitan and youth populations, states with a larger proportion of urban-located individuals may have a more robust and growing industrial and knowledge-based economy, owing to the advanced infrastructure and larger population residing within metropolitan areas. These states, eager to build upon technological advancements, may seek to

expand the educational opportunities of all individuals within the state, thus adopting ISRT policies to protect the rights of undocumented immigrants to access postsecondary education. States with a larger youth population (under age 15) are hypothetically more attuned to the educational demands of its population and are aware of the large population that may seek postsecondary education in the next several years. Policymakers in states with younger populations have a greater propensity to engage in policy activity that supports these future students as they advance through the educational system. Moreover, the states with large youth populations are also frequently the same states experiencing profound demographic changes in the form of immigration into the state. This migrant population could include greater numbers of undocumented immigrants and their children, perhaps encouraging state legislators to develop and adopt policies to address these students' rights to postsecondary education.

Several economic variables showed significant effects on the likelihood of permissive policy adoption. For every one-unit increase in income inequality, the likelihood of permissive ISRT policy adoption decreased by over 11%, while a one-percentage point increase in the unemployment rate decreased the likelihood of adoption by over 13%. In other words, as states are worse-off economically, they are less likely to adopt permissive ISRT policies. With regard to income inequality, these results are consistent with the findings for Model 2 and suggest that as states perform worse on measures of individual-level economic health, politicians, policymakers, and constituents are less likely to possess the resources necessary to support efforts to expand educational access to undocumented students. The inverse of this situation may also be true: states that are more economically healthy may be more likely to prioritize further economic stimulation through educational investments and may be more likely to reinvest state funds into programs such as higher education. With regard to the effects of the unemployment

rate, the reduced likelihood of permissive policy adoption aligns with the results from Model 2, which suggest that states with higher rates of unemployment are more likely to adopt restrictive policies (and therefore less likely to adopt permissive policies). This activity is perhaps a reaction to the fear of immigrant displacement of native workers which could further exacerbate unemployment and inequality; thus, states may substitute away from permissive ISRT policies and towards restrictive ISRT policies when the rate of unemployment among residents reaches a critical level.

The results of Model 3 also suggest that for every \$1,000 increase in GDP per capita, the likelihood of a state adopting a permissive ISRT policy decreased by over 4%. Although this seems to contradict the suggestion (above) that states with more economic wealth are more likely to invest in policies that promote further economic development (such as investment in higher education programs), it is also possible that states with a high GDP per capita experience reduced pressure from citizens or the higher education market to adopt legislative interventions that regulate access for certain student subpopulations, including undocumented students. Moreover, given that the effects of GDP per capita in Model 2 are positive, it is also possible that states with a higher GDP per capita substitute away from permissive ISRT policies and towards restrictive ISRT policies, perhaps as a means of protecting the benefits of a robust state economy for nativeborn citizens. Indeed, states with a strong economy may also exhibit the characteristics associated with a pro-business, anti-tax, fiscally-Conservative ideology, which is often correlated with reduced tolerance for undocumented immigrants and their access to government-funded benefits (i.e., public higher education) (NCSL, 2015). Thus, the mere existence of a more productive economy may signal a state's predisposition towards policy activity that restricts governmental benefits only to lawful citizens.

In addition to economic variables, several educational indicators were significantly associated with permissive ISRT policy adoption. Somewhat surprisingly, results show that for every \$1 increase in financial aid per capita, the likelihood of states adopting permissive ISRT policies decreased by over 3%. These findings run counter to the hypothesis that states that are more supportive of public higher education through appropriations and financial aid are more likely to support proposals to expand educational access to a larger population of students. One explanation for this counterintuitive finding is that states that already provide a significant degree of state subsidization for public higher education may be less likely to harbor political and social atmospheres that threaten the rights of undocumented students to attend higher education. In these states, educational opportunity and the rights of all students to attend public higher education with equitable receipt of financial aid may already serve as the societal norm, thus obviating the need for additional legislation to ensure the maintenance of these institutionalized policies and procedures. It is possible, however, that as the political climate continues to shift – particularly at the federal level – these states that are dedicated to providing adequate funding and access to students in public institutions will need to adopt legislation to ensure the protection of such rights. Currently, however, these states may have strong legacies and traditions of state support for higher education that render legislative intervention unnecessary or noncritical.

Contrasting with these results, Model 3 suggests that a one-unit increase in student share of tuition corresponded with an almost 7% decrease in the likelihood of permissive policy adoption, while a \$1 increase in need-based financial aid per capita increased the likelihood by almost 4%. These results are consistent with the original hypothesized relationships, suggesting that states that devote more funding to student financial aid (thus increasing need-based aid and lowering the student share of tuition) are also states that are more likely to support a permissive

educational environment that welcomes undocumented students in addition to native-born citizens. In effect, therefore, states with a greater proportion of funding for need-based programs directed towards an increasingly diverse groups of students may be more likely to adopt policies that protect the rights of students to access these funding opportunities and to pursue affordable and accessible higher education, even if these students are not native-born citizens or lawful residents. Moreover, by reducing the student share of tuition, these states may ensure that students from diverse backgrounds and socioeconomic levels are able to attain equity in postsecondary access and affordability at public institutions.

It less likely to pass permissive ISRT policies than states without consolidated boards. This again may reflect the fact that states with a strong and delineated dedication to educational access (such as those providing significant state support for higher education or maintaining consolidated governance) have the social and political capital, as well as the influence and power to ensure that the status quo (i.e., enabling all students to access financial aid and in-state tuition) remains unchallenged. Indeed, states with strong consolidated governing boards may find the adoption of permissive ISRT policies unnecessary given the power of the board to implement policies that protect access for undocumented students without legislative interference. Similar to the results for state funding of higher education, therefore, these seemingly counterintuitive results may instead reflect the lack of need for action at the state or system level in the current economic and political environment. Whether these environments and the policies developed within them will need to change in the future to maintain the status quo remains uncertain.

Only one variable measuring the political environment of states had a significant effect on permissive ISRT policy adoption: states with strong governors were over 92% less likely than

states with weaker governors to pass permissive policies. The reason for this finding could suggest several possible political considerations. In states with strong governors who are also opposed to the expansion of public educational benefits to undocumented students, the power of the governor to override or veto legislation could prevent permissive policy activity despite persistent and frequent action within the state legislature. Thus, although the state's citizens and policymakers may seek to expand access through the adoption of permissive ISRT policies, strong governors with alternative viewpoints may have the power to veto such proposals and prevent policy adoption. Alternatively, it is also possible that states with strong governors confront a situation similar to that of states with strong consolidated governing boards; that is, these states have governors who already support educational attainment and equal educational rights for all students (regardless of immigration status) and thus the need for policies to explicitly protect such rights is reduced. Much like the consolidated governing boards, these strong governors may be able to use political and social capital to ensure that the status quo of enabling undocumented students to access postsecondary tuition benefits remains a foundational component of the higher education ecology within the state.

Column 4 of Table 5 reports the results of the EHA model for policy adoption of low-intensity approaches to regulating undocumented student access to higher education (Model 4).

Results indicate that the covariates significantly associated with the passage of a weaker policy³⁴ included the percentage of the population living in a metropolitan area, the percentage of the population under age 15, GDP per capita, income inequality, educational attainment, consolidated governing boards, student share of tuition, the number of HSIs per one million residents, legislative professionalism, and gubernatorial power. Much like Model 1 (above) and

³⁴ Weak policies are system-level policies or legislation that include policy restrictions or eligibility criteria that limit the number of students to whom the policy is applicable, thus making it less impactful for students.

Model 5 (below), the results for this model include the adoption of both permissive and restrictive forms of weak policies. However, the findings from Models 2 and 3, which measure the adoption likelihood of restrictive and permissive policies, respectively, assist in determining the relative incidence of weak permissive or weak restrictive policy adoption.

Regarding demographic variable effects, a one-percentage point increase in the percentage of the population living in a metropolitan area increased the likelihood of weak policy adoption by 2%, while a one-percentage point increase in the percentage of the population under age 15 increased the likelihood by over 37%. In terms of economic variables, a \$1,000 per capita increase in state GDP corresponded to an almost 9% decrease in the likelihood that a state would adopt weak policies, while a one-unit increase in income inequality resulted in a nearly 19% decrease. In addition, two political variables demonstrated a significant association with weak policy adoption: states with a highly professionalized legislature were over 140% more likely to adopt weak ISRT policies, and states with strong governors were nearly 97% less likely.

Model 4 indicated relationships between weak policy adoption and education-related variables as well, with a one-percentage point increase in the percentage of the population with a bachelor's degree or higher resulting in a 16% increase in the likelihood that the state would adopt a weak ISRT policy. The other educational variables with significant associations with weak policy adoption all had negative effects: states with consolidated governing boards were 72% less likely to adopt weak policies, while states with one additional HSI per one million residents were over 24% less likely. Similarly, a one-unit increase in the student share of tuition decreased the likelihood of weak policy adoption by nearly 6%.

Because this model combines the likelihood of both permissive and restrictive forms of weak policies, it is useful to analyze the results in light of the alternative models estimated in this

study. Comparing across models, it appears as though states with higher percentage of individuals in metropolitan areas and a higher percentage of the population under age 15 were adopting permissive forms of weak policies, given the results in Model 3. Conversely, states with higher GDP per capita, higher educational attainment, consolidated higher education governance, higher shares of student tuition, more HSIs per capita, and stronger governors were adopting restrictive forms of weak policies, based on the findings in Models 2 and 3. Finally, states with a high degree of income inequality were less likely to adopt weak policies of any form. Only in the case of the number of HSIs per one million residents does it appear as though states were substituting away from weak forms of policy and towards stronger (broad-based, state-level) forms of policy.

Column 5 of Table 5 reports the results of the EHA model for the adoption of high-intensity ISRT policies (Model 5). Results indicate that the covariates significantly associated with the adoption of strong policies³⁵ included the percentage of the population that was foreign-born, the percentage of the population under age 15, the percentage of state GDP from agriculture, the unemployment rate, financial aid per capita, consolidated higher education governance, student share of tuition, need-based financial aid per capita, the number of HSIs per one million residents, and the percentage of votes for the Republican gubernatorial candidate. As with the results for weak policy adoption, it is difficult to discern the magnitude and direction of effects from this model without comparison to the results of Models 2 and 3 due to the combined measures of both restrictive and permissive forms of strong policy adoption.

Regarding demographics, a one-percentage point increase in the foreign-born population decreased the likelihood of strong policy adoption by over 9%, while a one-percentage point

³⁵ Strong policies are those that provide significant restrictions or expansions of access and affect a large number of students.

increase in the percentage of the population under age 15 increased the likelihood by over 31%. In terms of economic variables with significant effects, a one-percentage point increase in the state GDP from agricultural activity resulted in a nearly 42% decrease in the likelihood of strong policy adoption, while a one-percentage point increase in the unemployment rate increased the likelihood by over 24%.

The category of variables with the largest number of significant associations in Model 5 was educational factors, including both higher education governance and state support for higher education. For every \$1 increase in state financial aid per capita, the likelihood of strong policy adoption decreased by nearly 7%. Alternatively, results also indicated that a one-unit increase in the student share of tuition decreased the likelihood of strong policy adoption by almost 4%, while a \$1 increase in need-based aid per capita increased the likelihood by nearly 12%. States with consolidated governing boards were nearly 56% likely than states with other forms of governance to adopt strong ISRT policies. Finally, a one-unit increase in the number of HSIs per one million residents resulted in a nearly 24% increase in the adoption of strong ISRT policies.

In light of the results presented in Models 1 through 4, it is possible to speculate on the relative balance of permissive and restrictive forms of the policies that have strong and effectual outcomes owing to their state-level enforcement and broad applicability to students. States with more foreign-born individuals, more individuals under age 15, a higher percentage of GDP from agriculture, and greater need-based aid per capita were more likely to adopt permissive strong policies, as evidenced by the outcomes of Models 2 and 3. Conversely, states with a higher rate of unemployment, consolidated higher education governance, a higher share of student tuition, more HSIs per capita, and more votes for the Republican gubernatorial candidate were likely adopting restrictive forms of strong policies. The negative effects of financial aid on strong

policy adoption, meanwhile, was likely a reflection of reduced policy activity of any form as the amount of financial aid per capita in a state increased.

Models 6 through 10: Diffusion Effects in EHA

The preceding five models of policy adoption, while considering the five possible forms of policy adoption separately, did not account for the processes of policy innovation and diffusion for the sake of maintaining simplicity and isolating the effects of state context. Indeed, the inclusion of diffusion measures can prove difficult given the potential for collinearity among variables and subsequently biased parameter estimates, leading to incorrect conclusions about the relative importance of diffusion and state characteristics in policy adoption. Moreover, given the number of years and states for which the effects of diffusion were minimal or nonexistent (due to the slow rate of adoption prior to 2010), models including diffusion variables may fail to ascertain the actual effects of diffusion. One approach to measuring the diffusion effects of policy adoption is to construct a variable that measures the percentage of peer states that had adopted a policy of a particular form (any policy, restrictive policy, permissive policy, weak policy, or strong policy), operating on the hypothesis that a higher percentage of peers adopting the policy will increase the likelihood that neighboring states also adopt the policy. These measures of the proportion of peers adopting each form of ISRT policy were added to Models 1 through 5 (creating Models 6 through 10) to include an estimate of diffusion effects in addition to the existing state-level covariates of interest.

Although the addition of the various measures for capturing the effects of diffusion did not yield significant results for three of the five models, it is possible that alternative methods of operatizing diffusion could prove more effectual. Accordingly, several important caveats remain regarding the implications of these findings. These considerations include the characteristics and

complexity of the dataset, the challenges of operationalizing diffusion, and the high degree of correlation among the variables in the model.

The dataset for this study is unique for several reasons, including the fact that nearly 40% of the observed entities have censored observations, meaning they do not "fail" (adopt ISRT policies) prior to the conclusion of the study. Subsequently, determining when or if these states would adopt ISRT policies, as well as which covariates predict their likelihood of adoption, is difficult within the scope of this study. In addition to the large number of entities that survive beyond the study duration, another unique characteristic of the dataset lies in the timing of policy adoption and the later-term clustering of adoption in the years after 2008. Prior to 2008, fewer than 30% of the entities in the dataset had adopted an ISRT policy of any form, and it was not until 2010 that more than one-third of the entities had "failed," or experienced the event of interest. The effects are even more pronounced when looking only at the number of permissive or restrictive policies. As with censoring, this clustering of observations generates increasingly complex models for adoption and obscures the potential predictors of policy activity.

Another challenge of the dataset derives from the characteristics of the events of interest in the study, namely the variety of potential outcomes in ISRT policy adoption. Due to the differences in policy outcomes and subsequent policy effects, this study considers five models for ISRT policy activity: any policy adoption, restrictive policy adoption, permissive policy adoption, weak policy adoption, and strong policy adoption. Accordingly, the number of adoptions that fall within each category is low compared to the large number of total observations in the dataset (800 observations total, with 50 observations for each of the 16 years of the study). A simple tabulation of the binomial and multinomial outcomes confirms this fact: 234 policy adoptions of any form, 72 restrictive policy adoptions, 162 permissive policy

adoptions, 139 weak policy adoptions, and 95 strong policy adoptions. Although segmenting the policy adoption models for each type of policy does allow for isolation of the different covariates that predict the adoption of different policy formats, the low number of adoptions within each category further complicates the ability of the models to effectively capture the covariates most significantly associated with policy activity, including the potential effects of diffusion.

A second challenge with this approach to modeling diffusion stems from the inherent difficulty conceptualizing and operationalizing the concept and translating that conceptualization into measurable and discernable effects. Timing is exceptionally important, as the process of diffusion may take several years; thus, the adoption of a policy in one state may not appreciably affect other states until a number of years later, after the policy has had time to generate a noticeable effect for both the adoptive state and its neighbors. The number of neighboring states that have adopted ISRT policies may also contribute to the likelihood of policy adoption; for instance, the existence of one neighboring state with a particular policy may have little or no effect, while the existence of two or more states with ISRT policies may have a greater influence on neighboring states.

There is also uncertainty regarding the extent to which states engage in policy imitation (adopting similar policies) or policy defense (adopting conflicting policies). For states that have political or ideological beliefs that align with their regional peers, a process of imitative policy adoption through diffusion may be more likely, whereas states that are ideologically or politically opposed to their geographical peers may be more likely to engage in defensive policy adoption strategies. Thus, the adoption of one form of ISRT policy in a state may result in the diffusion of similar or opposing forms of policy in neighboring states, thus rendering the

discernment of the direction and timing of these adoptions more difficult.³⁶ Finally, it is also possible that states are not engaging in ISRT policy activity as a means of imitation, competition, or defense, but rather as nearly simultaneous and independent adoptions of the same policy solution to a national or regional issue of public interest, although this scenario is less likely given the increasing salience of the issue on a national scale.

Despite the difficulties measuring diffusion and the potential for some measures of diffusion to result in biased outcomes, it is important to note that in this study, results do not change appreciably for the other variables that had significant effects prior to the inclusion of the diffusion variable. Indeed, only in the two models that did show significant effects of diffusion did the other covariates of interest that were significant exhibit any difference from the models estimated above, and these changes occurred only at the margin. The results of Models 6 through 10 appear in Table 6. A first round of regressions revealed no effects for a number of covariates that were hypothesized to have a significant association; these covariates have been removed.³⁷

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³⁶ Future studies could consider the adoption of opposing forms of policy as one conceptualization of policy diffusion among states through mechanisms such as competition and antagonism.

³⁷ These omitted variables include: poverty rate, income per capita, state tax appropriations for higher education per capita, Republican legislature, Republican governor, split legislative chambers, gubernatorial party change, percentage of state lobbying funding spent on education issues, state-federal political party divide, citizen ideology, and state government ideology.

Table 6. Event History Analysis Results for Models 6-10

| Variable | Hazard Ratio (Std. Error) | | | | |
|----------------------------|---------------------------|-------------|------------|----------|-----------|
| | Model 6: | Model 7: | Model 8: | Model 9: | Model 10: |
| | Any Policy | Restrictive | Permissive | Weak | Strong |
| % Non-White | 0.988 | 1.033* | 0.963* | 0.983 | 0.970 |
| | (0.008) | (0.016) | (0.014) | (0.011) | (0.018) |
| % Foreign-Born | 0.991 | 0.956 | 1.035 | 1.059 | 0.928 |
| _ | (0.023) | (0.062) | (0.033) | (0.041) | (0.038) |
| % Metro Area ³⁸ | 1.016** | 0.995 | 1.032*** | 1.021** | 1.005 |
| | (0.005) | (0.012) | (0.007) | (0.008) | (0.009) |
| % Under 15 | 1.358*** | 1.272** | 1.403*** | 1.402*** | 1.265** |
| | (0.067) | (0.116) | (0.099) | (0.099) | (0.105) |
| % GDP from | 0.908 | 0.646 | 1.032 | 1.003 | 0.567*** |
| Agriculture | (0.051) | (0.175) | (0.068) | (0.066) | (0.097) |
| GDP per Capita | 0.936*** | 1.005 | 0.951* | 0.908*** | 0.942* |
| | (0.013) | (0.033) | (0.019) | (0.019) | (0.024) |
| Gini Coefficient | 0.815*** | 0.687*** | 0.866** | 0.818*** | 0.909 |
| | (0.035) | (0.058) | (0.047) | (0.048) | (0.078) |
| Unemployment | 1.066 | 1.940*** | 0.879* | 1.005 | 1.247** |
| | (0.048) | (0.207) | (0.053) | (0.059) | (0.099) |
| % BA or Higher | 1.114** | 1.214** | 1.077 | 1.172** | 1.107 |
| _ | (0.038) | (0.090) | (0.048) | (0.060) | (0.064) |
| Financial Aid per | 0.981*** | 0.997 | 0.972*** | 0.993 | 0.930*** |
| Capita | (0.005) | (0.009) | (0.008) | (0.007) | (0.015) |
| Consolidated | 0.266*** | 1.273 | 0.142*** | 0.276*** | 0.360** |
| Governance | (0.056) | (0.594) | (0.042) | (0.079) | (0.134) |
| Student Share of | 0.951*** | 1.000 | 0.932*** | 0.944*** | 0.934*** |
| Tuition | (0.008) | (0.019) | (0.011) | (0.011) | (0.015) |
| Need Based Aid | 1.027* | 0.947* | 1.037* | 1.011 | 1.125*** |
| per Capita | (0.011) | (0.026) | (0.015) | (0.014) | (0.030) |
| HSIs per Capita | 1.004 | 1.077 | 0.971 | 0.755*** | 1.075* |
| (millions) | (0.029) | (0.062) | (0.037) | (0.061) | (0.054) |
| Legislative | 1.401 | 0.246 | 0.685 | 2.479** | 0.333* |
| Professionalism | (0.357) | (0.177) | (0.215) | (0.846) | (0.183) |
| Percent Vote for | 1.019** | 1.050** | 0.994 | 0.995 | 1.029* |
| Republican | (0.007) | (0.017) | (0.008) | (0.009) | (0.011) |
| Gubernatorial | 0.036*** | 0.025* | 0.106** | 0.032*** | 0.282 |
| Power | (0.021) | (0.037) | (0.078) | (0.025) | (0.307) |
| % Neighbors | 1.001 | 1.076*** | 1.010 | 0.994 | 1.023*** |
| Adopting | (0.004) | (0.015) | (0.006) | (0.008) | (0.006) |
| N * n < 0.05 ** n | 712 | 712 | 712 | 712 | 712 |

* p<0.05

** p<0.01

***p<0.001

³⁸ Given the issues associated with the measure for urbanicity, results for these models without the variable appear in table B2 in Appendix B. The outcomes do not differ appreciably when this covariate is excluded.

Column 1 of Table 6 reports the results of the binary outcome model with diffusion effects (Model 6) and shows that the percentage of peers that had adopted any form of ISRT policy did not have a significant effect on the likelihood of adoption among other states. That is, the effects of diffusion do not appear to influence a state's likelihood to adopt an ISRT policy of any form. The covariates in the model that were significant were identical to those in Model 1 of Table 5, which did not include a measurement of diffusion. The results did not differ appreciably, as all covariates retained the same relationship strength and direction with only minor changes in the magnitude of the effects. The lack of difference between these two models is likely due to the insignificant effects of the variable measuring diffusion. This indicates, moreover, that factors related to demographics, the economy, politics, and higher education ecology are more significant predictors of ISRT policy activity than any influence from peers.

Column 2 of Table 6 reports the results of the restrictive policy adoption model (Model 7) and suggests that diffusion was significantly and positively associated with the adoption of restrictive policies. For every ten-percentage point increase in the proportion of peer states adopting restrictive ISRT policies, neighboring states were over 76% more likely to adopt similar ISRT policies. Other covariates with a significant effect on policy adoption included the percentage of the population that was non-white, the percentage of the population under age 15, income inequality, unemployment, educational attainment, state need-based financial aid, votes for a Republican gubernatorial candidate, and gubernatorial power.

The model for restrictive policy adoption that included diffusion did show a distinct number of differences from Model 2 in Table 7, which excluded a measure of diffusion.

Variables that were not significant in Model 2 but that did show a significant effect in Model 7 included the percentage of the population that was non-white, the percentage of the population

under age 15, state need-based aid, and gubernatorial power. The covariates that were significant in Model 2 but that no longer had a significant effect in Model 7 included the percentage of the population that was foreign-born, agricultural production, financial aid per capita, and HSIs per one million residents. The other covariates that were significant in both models did not change appreciably with regards to directionality and magnitude of the relationship.

Among the newly significant demographic variables (i.e., those that were not significant in Model 2), a one-percentage point increase in the non-white population corresponded to a 3% increase in the likelihood of restrictive ISRT policy adoption, while a one-percentage point increase in the population under age 15 corresponded to almost 28% increased likelihood.

Together, these findings suggest that states with a large number of non-white, young residents are more likely to pass restrictive policies, perhaps as a means for protecting the young native-born (and frequently white) students who will soon enter postsecondary education. States' motivation for restricting access and benefits to only native-born students could reflect an interest in preserving state benefits for students who are present in the country "legally" and who will soon increase the demand for higher education at public state institutions.

With regards to the educational variables that were significant in Model 7, a \$1 increase in the amount of need-based aid per capita the state provided resulted in a 5% decrease in the likelihood that the state would adopt a restrictive ISRT policy. This result suggests that states with a greater investment in higher education for financially-needy students may be less likely to implement legislation that would restrict educational access for a subpopulation of students. An economic variable that also had a negative effect on restrictive policy adoption that was significant in Model 7 but that was not significant in Model 2 was income inequality: a one-unit increase in the Gini coefficient corresponded to a 31% decrease in the likelihood of restrictive

policy adoption. This suggests that states whose residents have a less equal distribution of wealth and income are also less likely to adopt restrictive policies, perhaps due to the identified need to provide sufficient educational opportunities to residents as a means of promoting the acquisition of better and higher-paying jobs as well as economic mobility and more equitable distribution of wealth and income.

In another departure from Model 2, the results of Model 7 suggest that the presence of a strong governor reduced the likelihood of restrictive policy adoption by over 98%. As with prior models, it is hypothesized that legislatures in states with strong governors are unable to overcome the budgetary, regulatory, and symbolic power of a strong governor to pass legislation, particularly if it is controversial and affects a sensitive population in society. Moreover, governors are often more visible and thus directly accountable to citizens than are legislators, and thus are less likely to support policies that are politically unpopular or that target a marginalized segment of society.

Column 3 of Table 6 reports the results of the permissive policy adoption model with the inclusion of diffusion effects (Model 8). Results indicate that the percentage of states adopting a permissive policy did not have a significant effect on the adoption rate among peer states. The covariates that were significantly associated with permissive policy adoption were identical to those presented in Model 3, which excluded the variable for diffusion. The changes between Models 3 and 8 in the significance, magnitude, and directionality of these relationships were also marginal. The lack of difference in these outcomes is likely due to the insignificant effects of the inclusion of the diffusion variable on permissive policy adoption.

Column 4 of Table 6 reports the results of the weak policy adoption model with diffusion effects (Model 9) and suggests that the percentage of peer states adopting a weak form of ISRT

policy did not have a significant effect on the likelihood of adoption among neighboring states. Covariates in the model that did have a significant effect on weak policy adoption were identical to those in Model 4, which did not include the measure for diffusion. The changes in magnitude, significance, and direction were not notable. Again, the similarities in the results obtained for Models 4 and 9 are likely due to the insignificant impact of the measure for diffusion.

Column 5 of Table 6 reports the results of the strong policy adoption model (Model 10), suggesting that the percentage of peers adopting a strong policy had a significant and positive effect on adoption among other states: a ten-percentage-point increase in the proportion of neighboring states adopting a strong policy increased the likelihood of strong policy adoption among peer states by almost 23%. The other significant factors in the model for strong policy adoption differed from those in Model 5, which measured the likelihood of strong policy adoption in the absence of a covariate for diffusion. Other significant factors in this model included the percentage of the population under age 15, the percentage of state GDP from agricultural production, GDP per capita, the unemployment rate, financial aid per capita, consolidated governance, student share of tuition, need-based financial aid, legislative professionalism, and the percentage of votes for the Republican gubernatorial candidate.

The covariates that were significant in Model 5 but no longer had a noticeable effect on strong policy adoption after the inclusion of a measure for diffusion included the percentage of the population that was foreign born and the number of HSIs per one million residents. The covariates that had not previously been significant but that did show discernible effects after accounting for diffusion included GDP per capita and legislative professionalism. One difficulty in assessing the effects of these newly significant covariates is the fact that restrictive and permissive forms of policy adoption are combined in this strong policy outcome. However, the

results of Models 7 and 8 can assist with explication of the directionality of the results and the relative balance of strong permissive or strong restrictive policy adoption.

In Model 10, GDP per capita had a negative effect on strong policy adoption: a \$1,000 per capita increase in GDP corresponded with a nearly 6% decline in the likelihood of strong policies. This suggests that highly productive states with a strong economy have less need for or interest in adopting a policy that affects a large number of undocumented students. This could signal the strength of the state in promoting educational opportunity through other mechanisms (thus obviating the need for strong permissive policies) or could reflect the desire of the state to continue to provide access to undocumented students by avoiding policies that would deny benefits and restrict opportunity (in the case of strong restrictive policies). Based on the results in Models 7 and 8, however, it is likely that these effects reflect the reduced likelihood of adopting permissive policies, and a concomitant increased likelihood of adopting restrictive policies. This suggests that states with strong economies measured in productivity (i.e., GDP per capita) may be more inclined to preserve the benefits of public higher education only for native students. This may signify an attempt to protect the generous economic resources for the presumed "rightful" beneficiaries (i.e., native-born residents) and to ensure economic mobility and affluence only among these individuals deemed deserving. Moreover, given that the effects of GDP per capita were also negative for weak policy adoption (as shown in Model 9), it is not the case that states are substituting away from strong policies in favor of weak policies.

Legislative professionalism also had a negative effect on strong ISRT policy adoption, with a one-unit increase in the strength of the legislative professionalism index corresponding to a nearly 67% decrease in the likelihood of strong policy adoption. Based on the results in Model 9, which show strong positive effects of legislative professionalism on weak policy adoption, it is

likely that states with a highly sophisticated legislature in terms of the availability of resources, expertise, and research are substituting away from strong (i.e., broad-based, far-reaching) policies in favor of weaker (i.e., narrowly-tailored) policies. This could be due to additional time and ability to dedicate to policies that do not implicate a large number of individuals in society. Less professionalized legislatures, alternatively, may lack sufficient time and funding to devote to weak policies that affect few students, and may thus instead be encouraged or coerced to focus limited resources on more broad-reaching, impactful policy actions.

Taken collectively, the results of these models that account for the effects of diffusion are somewhat surprising, in that the percentage of peers adopting a policy did not seem to affect policy adoption in neighboring states to a large degree. The two exceptions are for the adoption of restrictive policies and strong policies, the implications of which are discussed in following sections. The aforementioned limitations of the diffusion-based event history analysis suggest that alternative methods for measuring diffusion or different specifications of the analytical model, including approaches other than EHA, may be necessary in order to fully account for the extent to which policy adoption is the result of diffusion among peer or neighboring states. Although the results of the models do not change drastically with the inclusion of these diffusion effects, some of the parameter estimates do appear to have biased results due to misspecifications in the model. Thus, while the process of diffusion is an important consideration for any examination of policy adoption at the state level, the challenges associated with defining state neighbors and identifying economic and social peers and competitors necessitates additional attention to how best to operationalize the mechanisms underlying the diffusion process. These models offer only one alternative to the myriad ways researchers can define and identify peer states for the purposes of examining policy diffusion, and reinforce the need to continue to

develop better methods and models to more accurately capture the phenomenon and its potential effects.

Limitations and Ethical Implications

The results presented herein are just one of many ways to examine the adoption of state policies across the country, which can include both quantitative and qualitative approaches to ascertaining the primary determinants of policy activity. Although the quantitative approach does have multiple benefits, one of the main disadvantages of using quantitative methods to measure the emergence of state policies – particularly methods such as event history analyses – is the possibility that the models will fail to account for some missing or unobservable covariates that are significantly associated with the outcome of interest. For instance, some measures of social or political ideology may not have reliable, accepted methods of measurement, or they may be inherently related to a third, spurious variable that is not included in the model.

One means to account for this possible confounding relationship is to include interactive effects and to construct several iterations of the model using a variety of approaches and different covariates. This more conservative technique can serve as a form of frailty analysis or robustness check, thus ensuring that the results obtained in one model are reliable, consistent, and unbiased. For instance, if small changes in the covariates of interest or the specifications of the functional form result in significant transformations in the outcomes of the model, it is likely that some of the covariates or models have been incorrectly specified. This is also one of the motivations for including several models measuring different (although similar) outcomes of interest (i.e., one model for any activity, two models for degree of permissiveness, and two models for level of intensity). Moreover, comparisons of how the relationships and degrees of importance of various covariates change across the ten models permits a more sensitive analysis

of the covariates and their ultimate effects on the outcomes of interest, particularly as they differ based on the questions researchers aim to answer.

In exploratory studies considering a variety of covariates and functional forms, it is also useful to construct narrower confidence intervals to provide more conservative estimates of significance and to increase the likelihood that a significant effect is due to an observed relationship rather than to error or chance. As such, this study only considers covariates within a 95% confidence interval to be "significant;" any parameters that fall outside of the confidence interval are not considered to be significantly associated with the outcomes of interest examined herein. Another potential issue in quantitative studies arises from the phenomenon already discussed regarding the difficulty operationalizing various covariates and outcomes of interest. Thus, researchers often turn to proxy measures of the covariates they are most interested in studying (i.e., using citizen or state government ideology as measures of social construction of target populations within a state). This approach to modeling is one of the most significant limitations of the study, along with the general unavailability of data for some states and years. By using proxy measures rather than accepted definitions for some concepts that are difficult to define and observe, this study must rely on theoretical justifications for the choice of data and the subsequent development of analytical models.

Most of the shortcomings of a quantitative approach can be overcome through appropriate control mechanisms and the use of robust standard error estimates and tests for model fit. Indeed, this ability to objectively measure the fit of the model and the significance of the relationship between covariates and the outcome of interest is one of the primary advantages of the quantitative approach when compared to qualitative methods. Assuming appropriate controls and proper model specification, the quantitative approach is less likely than some

qualitative approaches to be exposed to competing interpretations or multiple views of reality. Rather, the interpretations of the results through accepted statistical and logical techniques drive inferences regarding the predictive power of the model and the significance of associations among covariates and outcomes of interest. This conservative approach to interpreting results may permit the model to be generalized across cases and to predict future outcomes and occurrences of the event of interest based on the determinants and covariates included in the specification. Moreover, the EHA model specifically accounts for the some of the peculiarities of longitudinal data, including censored observations, time-varying covariates, competing outcomes, multiple event occurrences, and interactions among time and covariates that could confound results in other modeling approaches (Vermunt, 2009; DesJardins, et al., 1999).

On a more practical level, this study also confronts limitations in the availability of some forms of data, including more detailed information on state-level demographics, economics, educational outcomes, and culture. Moreover, the lack of reliable data for all variables of interest post-2015 necessitates a shorter study period ranging from 2000 to 2015. More immediately, this study is also limited by the relatively recent adoption of ISRT policies beginning in 2001.

Although several cohorts of students have since cycled through institutions in the states that are considered "early adopters," most states did not begin to address the issue until after 2010, perhaps due to delayed diffusion processes or to the lack of attention to the issue prior to that time. Whatever the reason, the result is that many states have not had the opportunity to sufficiently assess and analyze their current manifestations of ISRT policies or to respond to any shortcomings or address any critical issues with the design or implementation of the legislation. Accordingly, additional time is necessary in many instances to better understand why states opt to engage in policymaking and how these policies may manifest or evolve in future years.

Another important limitation to consider in regard to defining policy activity is the fact that "no activity" may indeed signal a form of action, in that the repression of activity may itself be intentional. For instance, the adoption of permissive ISRT legislation may have the same practical effects as blocking the adoption of restrictive ISRT legislation, in that both events may allow undocumented students to attend postsecondary education at in-state tuition rates. This is particularly true in states wherein the status quo is to enable undocumented students to attain instate residency tuition equity on a case-by-case basis determined at the institutional level.

Alternatively, the adoption of restrictive ISRT legislation may have the same effects as blocking the adoption of permissive ISRT legislation: in both cases, the state is preventing undocumented students from accessing in-state tuition rates. Thus, while this study uses policy adoption as the measurable outcome of interest, it is necessary to remain attentive to the fact that the prevention of policy adoption through legislative, executive, or interest group activity could serve to have the same manifest impacts on students in their lived experiences navigating the postsecondary educational market.

Although not necessarily a limitation given the purposes of this study, it is important to note that this research focuses entirely on public, state-funded institutions, and does not consider the policies of private non-profit or for-profit institutions in the state. It is possible that some states with restrictive ISRT policies have a robust private educational sector that provides generous grants and financial aid to undocumented students who are priced out of or prohibited from attending public postsecondary institutions. Many students may also choose to attend private for-profit colleges that have lower admissions barriers and carry fewer limitations regarding which students are eligible to attend. Whether the movement of undocumented students towards the private non-profit and for-private sector is beneficial or harmful is not

within the purview of this study, nor is it explicitly known or measurable without further investigation. Indeed, these limitations in the study due to the narrow scope of generalizability feed directly into the areas for potential future research that can build and expand upon what is already known. Thus, this study contributes to not only the present state of knowledge, but also the continued attention to this topic in future research endeavors.

In addition to limitations due to data and modeling, this study confronts some ethical challenges that are important considerations when interpreting and applying the findings presented herein more broadly. Specifically, this study examines policies that have symbolic as well as material implications for students on a daily basis, many of whom confront obstacles due to their marginalization within various segments of society. Any attempt to study the policies that profoundly affect this population are necessarily controversial and open to ethical critique and challenge; thus, researchers must remain tactful, unbiased, and fair not only in their definition and identification of undocumented students, but also in their treatment of this population as a viable subject of study. Although this research focuses primarily on the state- and system-level policy process, it does implicate the real-world experiences of students who live in a nation that has institutionalized various forms of discrimination and racism against individuals lacking legal documentation. Moreover, a researcher's own identity as well as the inherent biases that may accompany this identity can result in misrepresentation of the outcomes of the research and can lead to false assumptions or assertions that do little to advance the objective knowledge of the topic. Accordingly, attention to ethical implications is of critical importance.

6. IMPLICATIONS AND CONCLUSIONS

The results and accompanying discussion from the previous chapter, while provoking new questions and areas of future research, also present researchers, policymakers, and practitioners with a novel approach to examining the existing data and offer an alternative perspective on the status of the field. From a theoretical perspective, this study contributes to the literature on the implementation of theoretical approaches, including the theory of policy diffusion and the theory of policy design and social construction. In particular, it highlights the difficulties associated with not only the conceptualization and operationalization of diffusion and social construction, but also with the identification of appropriate proxy variables to capture these phenomena. Moreover, the study presents results and conclusions that illuminate the need for researchers to continue to search for new and novel approaches to developing theory that reflects our most current understandings of the mechanisms in question.

With regard to policy, the results presented herein provide policymakers with the knowledge to interrogate their own approaches to policymaking. Specifically, the examination of how policy enactment is related to various demographic, economic, political, and social characteristics of the state highlights both the explicit and implicit utilization of policy mechanisms in a real-world context. The identification of these characteristics and their influence (or lack of influence) on policy adoption also provides policy researchers with valuable information for the possible prediction of future policy activity.

Finally, these results have substantive implications for the practice of policymaking in general and higher-education policy development in particular. Policymakers, researchers, and practitioners can apply the tentative lessons of this study to the development of best practices and

better approaches to the real-world implementation of the policymaking process. Moreover, the findings have implications for the recommended approaches to strategically addressing the growing presence of undocumented students seeking access to postsecondary education.

Implications for Theory

The three theoretical frameworks informing and guiding this research include the advocacy coalition framework, the theory of policy innovation and diffusion, and the theory of policy design and social construction. The need for three frameworks stems from the inability of any one theoretical approach to fully and adequately capture all of the mechanisms and contexts associated with the adoption of ISRT policies. Specifically, the ACF enables researchers to understand how policy adoption is a function of the public interplay between coalitions with competing social and political ideologies and interests; the theory of policy innovation and diffusion provides nuance to the patterns of policy adoption across location and time as states emulate or compete with their peers; and the theory of policy design and social construction highlights the symbolic and subjective processes by which marginalized individuals become the target of particular forms of legislation due to preconceived notions about morality and deservedness.

Because of the limited applicability of the advocacy coalition framework to this study – aside from establishing the mere existence of competing advocacy coalitions with differing interests and ideologies regarding undocumented students – this study does not significantly advance the literature surrounding this theoretical approach. Thus, although the framework does not provide significant insight for this study, it also is not possible to definitively conclude that the framework could not serve as a viable framework for other examinations of policy emergence. Although this research study requires the use of additional theoretical frames to more

fully account for the results obtained herein, other studies have proven that the ACF is indeed an efficient predictor of how and why policies emerge within particular policy contexts and through the interactions of clearly defined advocacy coalitions (see Deupree, 2013; Dougherty, et al., 2010). While it is certainly true that the question of undocumented students' rights to access instate tuition benefits for postsecondary education engenders the formation of several competing coalitions, the actual development of these coalitions, including how or why they form, is not explicitly clear from the ACF alone in this particular study. For instance, coalitions that form based on political party (i.e., liberal or conservative) may have motivations to support or oppose ISRT policies for a number of ideological and practical reasons.

One such contradiction arises in the case of primarily conservative groups: one conservative coalition may support permissive ISRT policies based on the economic argument of expanding the eligible workforce and promoting economic growth, while another conservative coalition with similar ideological beliefs may oppose permissive ISRT policies on the grounds of the moral arguments against "incentivizing" unauthorized immigrant through the provision of public benefits to undocumented students.³⁹ The same situation could occur among business owners and industrial interest groups: one pro-business coalition may support permissiveness due to the benefits that migrant workers provide to the agricultural and service sectors, while another coalition that is equally pro-business may oppose ISRT policies based on the fear that immigrant students and workers could supplant native-born residents and increase rates of unemployment.⁴⁰ In light of these discrepancies, it becomes evident that additional attention to

³⁹ For instance, the conservative states of South Carolina and Utah have adopted different policies, with South Carolina prohibiting all undocumented students from attending public institution, and Utah permitting undocumented students to access in-state tuition benefits.

⁴⁰ The "pro-business" states of Georgia and Texas have adopted different policies, with Georgia prohibiting in-state tuition rates for undocumented students and Texas providing in-state tuition as well as state financial aid for undocumented students.

the particular contexts and circumstances within which ISRT policies are developed and adopted is critical. This study thus emphasizes the need for additional frameworks (i.e., policy design and social construction or policy innovation and diffusion) to enhance the groundwork the ACF generates in defining the advocacy coalitions that may exist in this policy arena.

While the theory of policy diffusion has been used widely to study public policies related to health and the environment, only recently have researchers begun to recognize its valuable contributions to the study of postsecondary educational policy development. Even when researchers have applied the theory, very few have addressed the controversial topic of undocumented students and their ability to access in-state tuition benefits.⁴¹ This study builds upon the prior research to understand if – and if so, how – diffusion processes may contribute to the geographical and temporal mapping of ISRT policy adoption across the country. One significant contribution of this study, while not necessarily unforeseen, is the underscoring of the difficulties associated with correctly defining and identifying state "peers." This topic has been studied extensively by a number of researchers grappling with the question of which other states can or should be classified as a "peer" in some sense of the term, including definitions based on region, borders, economics, politics, and ideologies (Berry & Berry, 2014). For instance, some researchers may define a regional peer as strictly a state with a shared border, or as specific pairs of states that imitate or compete with one another frequently (Volden, 2006). Other approaches to identifying regional peers may have fewer restrictions, such as groupings based on eight regional classifications of the U.S. Bureau of Economic Analysis (BEA), which contain a varying number of states within a particular geographical area.

⁴¹ For a recent example of a study, see McLendon, et al., 2011.

Although geographical distinctions remain the most popular, easily conceived, and readily implemented of the various approaches to identifying peers, other techniques may be more applicable in the instance of different forms of policy adoption or different public policy arenas. States compete with one another to attract the most talented students to their higher education institutions, for the purposes of both academic prestige and financial gains through additional tuition revenues and economic growth if students remain in the state after graduation. Thus, states can be thought of as "economic" competitors when they attempt to attract out-ofstate students to their public institutions. While ISRT policies focus explicitly on in-state students at public institutions, the signaling associated with the adoption of a particular form of policy (i.e., permissive versus restrictive or weak versus strong) may have spill-over implications for students responding to the prevailing ideological and social positioning of the state. States that adopt policies in order to attract students from a peer state and seek to encourage these students to remain in the state and enter the state's labor force effectively engage in a form of economic competition. In this regard, states can pass either emulative policies (wherein they adopt the same policy as their peers) or retaliatory policies (in which they adopt policies that directly contradict the actions of their peers); accordingly, competitive forms of diffusion can be viewed as either cooperative or oppositional.^{42 43}

Related to the concept of economic peers is the notion of political and ideological peers.

In this situation, states align or compete with one another based not on economic considerations, but rather on shared (or differing) political and ideological perspectives. The emulative approach

⁴² The peer (bordering) states of Texas and New Mexico have passed emulative policies (both permissive), while the peer (bordering) states of Indiana and Illinois have passed contradictory policies (permissive in Illinois and restrictive in Indiana). These two sets of states are considered regional peers given their shared borders, but have shown different patterns of adoption in response to peers' actions.

⁴³ One approach to measuring this oppositional form of policy diffusion is to operationalize diffusion as the adoption of a policy that directly opposes that of a peer state.

to policy adoption frequently arises from the phenomenon of "satisficing," in which legislators with limited financial and temporal resources engage in a form of scanning, analysis, and imitation of policies that have been adopted in comparable locations or among their identified peers. In borrowing from peers rather than engaging in the extensive, often time-consuming and expensive policy process, states reach solutions that (while perhaps not ideal) are satisfactory given the time and resources constraints (Walker, 1969). Some of the criteria upon which states base their decisions regarding which states to emulate (or oppose) could include political and ideological factors, such as the dominant political party, the prevailing political culture, and the general ideological positioning of the state government and citizens. With regard to an oppositional political or ideological approach, a more liberal or tolerant state may respond to the restrictive policy actions of a more conservative or restrictionist state through the adoption of permissive ISRT policies. In effect, these states signal to their students and other peers that they do not agree with or condone the policy decisions of their political or ideological partners. Alternatively, states with similar political or ideological beliefs can witness the outcomes of a particular form of ISRT policy in one of their peer states and engage in a form of emulative policymaking that seeks to replicate that success.

Another difficulty in distinguishing the mode of policy diffusion that states experience concerns the differentiation between vertical and horizontal diffusion (Walker, 1969). Horizontal diffusion is the more common form, and is typically characterized by mechanisms of competition, emulation, isomorphism, and policy learning. In this case, peer states learn from, compete with, emulate, or conform with their horizontal peers (i.e., other states), adopting similar or divergent policies based on the degree of ideological or political alignment or divergence between the states. Alternatively, vertical diffusion typically occurs through more

powerful mechanisms that diminish state autonomy; often this form of policy diffusion occurs through coercion that may carry fiscal penalties for lack of compliance. Moreover, this form of policy diffusion is vertical in the sense that it flows downwards from a "superior" entity (the federal government) rather than outwards from egalitarian peers (other state governments).

Determining the extent to which policy adoption within a particular state is due to vertical or horizontal diffusion can be difficult, particularly if the state does not provide any public rationale or justification for their actions. Moreover, when states retain authority for the policy in question at the state level, they may choose (despite federal interference) to adopt a policy that competes or conflicts with the ideological perspectives of the federal government. Thus, states can also engage in a form of vertical competition with the federal government, in addition to horizontal competition with other states.⁴⁴

Another important point regarding diffusion that emerges from this study is the concept of salience: a state must have sufficient numbers of individuals in the state that are potentially affected by the policy in order to devote the necessary time and resources to addressing it at the legislative level. Thus, although peer states or the federal government may encourage policy adoption of one form or another (i.e., emulative or retaliatory), a state that does not have a large number of undocumented students seeking access to postsecondary education will not find it profitable or advantageous to adopt policies addressing this small segment of the population. For instance, the state of Nevada is geographically, economically, and politically similar to surrounding states that have adopted various forms of the policy: restrictive ISRT (Arizona), permissive ISRT at the legislative level (New Mexico), and the provision of state financial aid in

⁴⁴ For instance, the adoption of restrictive ISRT policies may have been a reaction to the 2012 executive order that created the Deferred Action for Childhood Arrivals, while the adoption of permissive ISRT policies may have occurred in response to the 2018 expiration of the program.

addition to permissive ISRT (California). However, compared to its peers, Nevada has a very low number of HSIs and may thus have a small potentially undocumented population, or may not have a higher education system that is particularly attractive to undocumented students. The state may therefore consider the issue insufficient for legislative attention. This example underscores the need to consider whether a state is predisposed to policy adoption of a particular form based on other circumstances (i.e., state characteristics) before proposing to measure the effects of diffusion on policy adoption in the state.

Finally, this study also brings attention to the fact that policy diffusion may indeed be occurring to a small degree, despite researchers' inability to witness the adoption of concrete, manifest policy solutions. This is particularly true for policies that are highly politically contentious and controversial, and those for which politicians and policymakers may sacrifice their likelihood of reelection or their political influence for engaging in policymaking with which a majority of citizens or other politicians disagree. Thus, the state may have the energy and enthusiasm necessary to adopt ISRT policy legislation but may be incapable of progressing beyond the policy proposal stage due to contention from within the legislature or significant political debate with a strong governor. Accordingly, while the process of diffusion may appear to have little or no effect on a state despite the rate of adoption among its peers, this manifestation may belie an underlying dedicated to adopting an ISRT policy of some form. Indeed, it may be the case that the state has attempted on numerous occasions to adopt a policy, but has failed to do so due to other social, economic, or political factors in the state context. This possibility evokes the need for greater attention to other measures of policy activity, such as policy proposals or appearance on the legislative agenda.

This situation also raises important considerations regarding the degree to which adoption must occur in order for the diffusion process to have been considered successful. For instance, questions remain as to whether the development of legislation and the introduction of a bill to the legislature signal that diffusion has occurred, or if the bill must progress beyond the proposal and development phases into codified legislation. In this regard, the definition of the event of interest that is modeled through diffusion processes is exceedingly important, as adoptions differ substantially from proposals or calls to a vote. Moreover, additional considerations regarding enforcement and funding may also influence the extent to which even codified and adopted policies have real-world manifestations and discernible effects on the population. Minimal differences in how researchers define policy adoption or other events of interest can thus have profound implications for the ultimate results of the study and the subsequent conclusions and recommendations that follow.

With regards to the specific effects of diffusion, only the adoption of strong policies and restrictive policies among peers had a significant effect on subsequent rates of policy adoption within the same regional boundary. The effects of the diffusion process for any form of policy adoption, permissive policy adoption, and weak policy adoption were not significant in this study. This is somewhat surprising based on the theoretical grounding for policy diffusion, but does align with past research (McLendon, et al., 2011; Lacy & Tandberg, 2014). Meanwhile, in the case of the two forms of policy that did show significant diffusion effects, the impacts are rather significant: a ten-percentage point increase in the number of peers adopting restrictive policies increased the likelihood of restrictive policy adoption by nearly 77%, while a ten-percentage point increase in the number of peers adopting strong policies increased the

likelihood of strong policy adoption by almost 23%. In comparison to the other significant covariates in the model, these results are noteworthy.⁴⁵

Although it is not possible to generalize these results to other public policy arenas (i.e., health, environment, or transportation), it does suggest that policies that are more impactful for a large number of students and those that serve to restrict rather than expand the rights and privileges of a marginalized population are more likely to spread among peers than policies that are less impactful or more generous towards students. This may also foretell the distinct possibility that the future balance of permissive versus restrictive policies in the country may begin to lean more heavily towards restrictive policies with broad-reaching impacts and legislative enforcement as the mechanisms of policy diffusion continue to take effect across the country. This is particularly true in states that have not yet adopted any form of ISRT policy, or that have shown variability in their dedication to one form of policy versus another over the years since the first incidence of adoption. How this will influence the future of undocumented students in postsecondary education remains unknown, but it does suggest the need for policymakers and researchers to remain attentive to the continued evolution of ISRT policies.

The results presented in this study also have implications for the theory of policy design and social construction. As with the process of diffusion, the mechanisms of social construction (and how those constructions inform policy design) are difficult not only to define and conceptualize, but also to derive and measure. Given that social construction is itself a subjective and inter-subjective process of which researchers and policymakers are often unaware, it is not surprising that researchers struggle to measure an inherently invisible behavioral process that often lacks identifiable outward manifestations. The definition of social construction does point

⁴⁵ Both results are significant at the 99.9% confidence interval (p<0.001).

to the role of symbolic language and communication, signaling the importance of policy language in determining a state's propensity to socially construct certain groups as targeted or "deviant" individuals. However, the difficulties associated with extracting meaning from this language and attributing intentions without the input of the authors or speakers is not only methodologically questionable, but also potentially unethical. Even if researchers can agree upon a definition for social construction as well as a mechanism for measuring it, the approaches to collecting and analyzing these variables will continue to remain contentious and uncertain. This highlights the need for the theory to provide more robust methodological approaches to measuring a characteristic that is perhaps inherently non-quantifiable and not easily analyzed. Recognition of this deficiency can provide direction for moving towards a more holistic theory of the policy process, either through improvement of the theoretical approach itself or identification of alternative theories that can account for these gaps in comprehension or completeness.

One proposed methodological approach for better comprehension of the theory of social construction and how it manifests in the policy process is to engage in qualitative research that is likely more suitable to a subjective and indeterminant concept. Content analysis, which examines the language in a text, can be used to identify frequently used terms and the implicit meanings underlying these terms. These meanings can then be assessed and analyzed to determine whether the policy text contains any additional subconscious or subversive messages that provide signals to consumers of the text (i.e., citizens in the state to which the policy applies). If conducted responsibly, effective content analysis can assist with the development of better working definitions of the phenomena of social and cultural attitudes that are otherwise difficult to discern. This is particularly true in the case of controversial policy areas that target a

marginalized population; in this instance, political correctness often masks the underlying interests and motivations of policymakers and politicians who seek to advance their own agendas without attracting undue political attention. The relative success of this approach to measuring social construction, however, depends upon the rigor and acceptability of the analytical techniques researchers apply, as well as verification that the meanings attributed to certain linguistic elements are indeed accurate reflections of the intentions of the writers or speakers. This study, which uses an alternative, non-linguistic measure of social construction, emphasizes the need for better methods and theories to capture this elusive concept.

Because of the challenges associated with content analysis and the attribution of underlying meaning to written or spoken words, this study instead applies the theory of social construction to policy adoption through measures of both citizen and state government ideology. From a theoretical perspective, these attitudes towards individuals (particularly targeted individuals) in society are a reflection of internalized feelings, thoughts, or emotions about a particular group that can in turn affect the development and ultimate implications of public policy solutions that address that group. To some degree, citizen and state government ideology can also serve as approximate measures of political culture, which tends to demonstrate identifiable trends across the country due to cultural and political norms that exist and persist in particular regions (Elazar, 1984). It seems reasonable, therefore, to theorize that political and ideological culture should map onto policymaking decisions in instances of controversial or contentious topics that are overtly or subconsciously associated with policymakers' and citizens' attitudes towards the targeted groups. However, given the lack of alignment in this study's outcomes between policy adoption and these approximated measures of social construction and

policy design, questions remain as to the applicability of this approach and the acceptability of these measures.

Although the theory seems to suggest that such variables should reflect policymakers' and citizens' attitudes (and therefore policy decisions), the results of this research provide no evidence to this effect. From a theoretical perspective, therefore, it is necessary for researchers to implement more than one theoretical approach and more than one proxy variable to measure citizen and government culture and attitudes. Indeed, it is possible that government and citizen ideology are not appropriate measures for social construction in this study, given the evidence suggesting that attitudes towards undocumented students are often far more complex and internalized than a simple partisan distinction can capture. The work of Reich and Barth (2010) underscores this notion in comparing two states with similar party ideologies and partisanship scores, yet highly discrepant outcomes in state policies regulating in-state tuition for undocumented students. Although Kansas and Arkansas both maintain a strong Republic base and conservative ideology, the language used to describe students as either "proto-citizens" or as under the control of state jurisdictional authority resulted in opposing policy outcomes. This points to the importance not only of state political context, but also of the framing of issues and the social construction of individuals that becomes engrained and institutionalized in society.

A final theoretical implication for the theory of policy design and social construction concerns the findings from this research that suggest the need for more attention to the political, social, and legal atmosphere within the state that could reflect these internalized and institutionalized social constructions. Improvements of the application of the theory of social construction would include acknowledgement of the existence of legal regulations and social norms that influence the economic and social mobility of marginalized individuals. For instance,

the extent to which the state has legal mechanisms to support the protection of civil rights and to combat instances of discrimination and crime could signal increased attention to promoting tolerance and social justice for a broader diversity of state residents. The subsequent effect for higher education would hypothetically result in more permissive policies that are designed to expand access, affordability, and overall equity among undocumented students. Alternatively, states with a higher preponderance of restrictionist or segregationist legal mechanisms or policies could operate under a state government that is less welcoming to undocumented immigrants and other marginalized groups. These states would hypothetically adopt increasingly restrictive policies regarding the ability of undocumented students to access public higher education. The theory of social construction could therefore benefit from the consideration and incorporation of more social justice and civil rights related issues in examining the association between social construction and policy adoption.

Implications for Policy

While the results of this study are mixed regarding the effects of state characteristics, diffusion, and social construction on the adoption of particular forms of legislation, they do offer important implications for policy. These implications emerge most definitively for the specific instance of state policies that either permit or restrict undocumented students living within the state from attending public in-state higher education institutions at in-state tuition rates. In addition, policymakers can gain insight from this research into other public policies related to undocumented immigrants, including those concerning immigrants' rights and protections in the public sphere. Moreover, these lessons can inform policymaking in a wide array of different

⁴⁶ One example of a restrictionist immigration policy adopted at the state level that could be highly predictive of ISRT policy adoption is the 287(g) Program, which provides state and local police officers with the authority to collaborate more closely with the federal government in the enforcement of federal immigration laws.

policy arenas, including those that do not deal specifically with immigrants or other targeted populations or those that are not specific to higher (or other forms of) education. These implications can be categorized into each of the six categories of variables that are tested in the analytic models: demographic, economic, educational, political, diffusionary, and social.

Regarding the policy implications that emerge in reference to demographics, the results of this study raise questions for policy regarding the relative balance of representative governance and reactionary techniques. In states that exhibit representative governance, a greater number of non-white, foreign-born citizens would be hypothesized to correspond with more nonwhite, foreign-born members of the legislature. These representative legislators could then promote the interests of these marginalized, underrepresented populations and encourage the adoption of legislation that would benefit these individuals. In the instance of representative governance, therefore, states with a higher number of undocumented students would be more likely to pass permissive forms of ISRT policy and less likely to adopt restrictive forms.⁴⁷ In direct contradiction to this theory of representative governance is the existence of retaliatory or reactionary activities among policymakers in response to the growing presence and influence of undocumented immigrants within a state. Individuals wielding economic and political power may confront challenges to their dominant positioning in society and may thus seek out legal or political mechanisms to prevent minority populations from attaining sufficient numbers and influence to undermine the current hierarchical structure. States in which the ideology and demographics of the population contrast with – and perhaps threaten – the interests of the

⁴⁷ For example, Texas has a large number of undocumented immigrants and has adopted permissive ISRT legislation.

political and economic elite would be more likely to pass restrictive forms of ISRT policy and less likely to adopt permissive forms.⁴⁸

Results of this study provide evidence for both of these aforementioned possibilities (i.e., representative democracy and reactionary policymaking). States with younger, more urban, and more foreign-born populations were more likely to adopt permissive policies, suggesting the influence of representative democracy. In this instance, state legislators are either demographically reflective of the populace (and thus more sensitive to their needs) or are in some respects marginally attuned to the demands of the population and dedicated to adopting legislation that responds to these interests. In contrast, however, states with more non-white individuals were more likely to adopt restrictive policies, perhaps indicating the presence of retaliatory governance. ⁴⁹ This was also evident in the outcomes related to higher education ecology: that is, as the number of Hispanic-serving institutions in the state increased, so did the likelihood that states would adopt restrictive policies. Given that the presence of HSIs is likely highly correlated with the number of Hispanic residents in the state, this is indicative of an instance in which the state legislature acts not to protect the interest of the undocumented student population, but rather to prevent these students from attaining in-state residency tuition equity.

The results of this study also highlight the importance of economic variables in determining policy design and outcomes. Specifically, the state's economic health with regard to income, employment, productivity, and industry had a collective significant and discernible influence on policy outcomes. However, the direction of magnitude of the influence of certain

⁴⁸ In the case of Georgia, the large number of undocumented immigrants is often viewed as a threat among members of the legislature who see immigrants as competitors for native-born workers and students, thus resulting in the adoption of restrictive forms of ISRT policy.

⁴⁹ Although race does not connote documentation status, most undocumented students are classified as non-white. Thus, a higher incidence of undocumented students is likely to correspond with a higher percentage of non-white individuals residing in the state.

economic factors was not consistent across states or across policy types. With some consistency, the results of this study suggest that states with a higher GDP per capita were less likely to adopt any form of policy, particularly permissive policies and weak, less-effectual policies. The association between GDP per capita and restrictive policy adoption, while not significant, did have a positive value, indicating a higher likelihood of restrictive forms of policy being adopted in the state. This suggests that more economically productive states may aim to preserve the economic benefits of a productive economy only for native-born residents through restricting the rights of undocumented students to obtain access to government-funded benefits (i.e., subsidization of public higher education). Similarly, states that exhibited higher levels of unemployment also showed a consistently higher likelihood of restrictive policy adoption, perhaps as a reflection of citizens' heightened fear of outsiders (i.e., undocumented immigrants) during times of economic disparities and hardship. In states with a populace that struggles to find gainful employment, citizens may be more likely to find fault with the immigrant population that is presumed to supplant native-born workers and students and to deny residents the opportunity to advance educationally and economically.

Alternatively, states wherein a higher proportion of the state GDP derived from agricultural activity were more likely to adopt permissive ISRT policies, perhaps as a reflection of the desire to promote educational attainment and economic mobility among a largely migrant agricultural workforce. Many of these workers (or the children of these workers) may lack legal documentation and may thus face difficulty in accessing and affording postsecondary education. In the interest of promoting the educational and economic well-being of this citizenry that is so critical to the state's agricultural economy, the adoption of permissive ISRT policies is a logical outcome. In contrast, a high degree of income inequality measured by the Gini coefficient

reduced policy activity of both a permissive and a restrictive form. States that have unequal distribution of wealth (and therefore a potentially large population of residents who struggle to meet basic economic needs) may be more likely to devote their time, resources, and attention to policies that have a more direct impact on improving the economic condition of the state. While investment in higher education is indeed one mechanism for promoting economic well-being and upward mobility, these benefits only accrue after many years, and are thus less impactful in the immediate term. Thus, states with higher income inequality are expected to engage in less activity related to ISRT policies in favor of policies that are directly relevant to economy and labor market.

The implications for policy from an educational perspective are equally uncertain and unpredictable, given the differential effects of educational trends within differing state contexts and among the alternative approaches to policy adoption. For instance, while the literature suggests that more highly educated populations (i.e., those with a greater rate of bachelor's degree attainment) are more likely to possess tolerant attitudes towards marginalized populations and are more likely to support policies that promote educational attainment, this hypothesis did not hold in the results of this study. The reasons for this are unclear, but it is possible that states with a highly-educated populace are also states with an elite and restrictive postsecondary educational system; moreover, the higher rates of BA attainment may also signal that the state is not home to a large number of immigrants or undocumented students to whom ISRT policies would apply. This again raises this issue of salience, and the recognition that policies will not develop in locales that do not consider a particular policy issue to be of sufficient importance to merit devotion of resources to developing a policy solution.

Other educational variables are equally confounding for policy, particularly the amount of financial aid that states provide to students. Theoretically, states that provide more funding for students through financial aid are more supportive of public higher education and are more likely to adopt policies that will expand educational opportunity and access to otherwise overlooked or underrepresented students. However, the results of this study suggest that policy development does not always align with the hypothesized outcomes regarding financial support for students. Overall, states with higher financial aid payments were less likely to adopt any form of policy. This may be due to the fact that the state's high level of economic investment in higher education has generated a robust postsecondary environment that does not require legislative intervention to protect students' access and affordability (thus reducing the need for permissive policies). Alternatively, these states may seek to preserve the generous benefits for native students only (thus reducing the incidence of permissive policies) or may endeavor to promote broad educational access (thus reducing the incidence of restrictive policies). These contradictory findings suggest that policymakers consider a range of approaches for promoting educational advancement but may attempt to limit these opportunities to select populations of students, often excluding those who are most in need of assistance and educational advancement. In contrast, the amount of need-based aid that a state provided did have positive effects on permissive policy adoption, as did a lower student share of tuition. This suggests that in states with targeted financial aid policies, the promotion of inclusion and access for all students is the dominant motivator in ISRT policy activity.

One educational correlate that had more consistent implications for policy concerns the form of higher education governance that existed in the state. States with a strong consolidated system of higher education governance were far less likely to adopt permissive ISRT policies,

potentially owing to the domineering influence of the governing board in making decisions and developing policies surrounding the state's postsecondary market. This is perhaps unsurprising, but does have implications for policy in states with strong consolidated governance structures. Legislators that have competing interests and ideologies from those of the governing board may have limited authority or ability to implement various forms of postsecondary educational policy, including those that determine which students have access to institutions and public benefits such as in-state tuition. Indeed, results suggest that overall, states with strong consolidated governing boards were more likely to adopt restrictive forms of ISRT policies. From a policy perspective, this suggests that state governing boards and state legislators must work in unison to adopt policies that are most beneficial to students in the state and that address the range of concerns among members of the board as well as the legislature. Moreover, in states that have not adopted ISRT policies of any form due to the strength of the governing board, it is important that the board possesses mechanisms for handling requests of undocumented students for access to public postsecondary educational benefits, especially given the lack of enforcement at the governmental level.

The implications for policy that emerge from examination of the results of the political variables are perhaps the most confounding of all of the inputs explored in this model. As suggested in the above section outlining implications for theory, there are few discernible and consistent trends in the relationship between political factors and policy adoption when the primary political variable of interest is related to the dominant political party in power. This is somewhat surprising given the prevailing findings and hypotheses of the literature in this field. However, these results may reflect the fact that both conservative and liberal groups have justifications for adopting permissive or restrictive forms of ISRT legislation as a means for

advancing the interests of their respective parties and responding to the demands of their constituents and party members. Accordingly, it appears as though the issue of ISRT policy adoption transcends simplistic partisan delineations.

One political variable that did remain consistent across the models was the dampening effect of a strong governor (i.e., one with significant budgetary, appointment, and veto power), particularly on permissive forms of policy activity. The rationale for this finding is similar to that for consolidated governing boards: governors possess the power and authority to override the decisions of the legislature if they are unpopular or misguided, enabling a strong governor to stymie action at the legislative level. For policymakers, it is important to recognize the potential for this disconnect between the branches and to devise mechanisms for overcoming the disagreements and encouraging cooperation and coordination in the goal of promoting policy adoption that is beneficial to the state. One of the other political covariates that was consistent across models was the percentage of the gubernatorial votes for a Republican candidate. States with a large number of citizens that cast votes for the Republican candidate were more likely to adopt restrictive policies, perhaps as a reflection of the conservative ideals of discouraging illegal immigration and preserving public benefits for native-born citizens.

While the effects of the variables measuring social construction in this study were insignificant (perhaps due to inability to correctly identify and capture the concept), there are still implications for policy that can emerge from these findings. The lack of influence of citizen ideology on policy adoption suggests that many legislatures are not responsive to the demands of their constituents and do not develop policies that respond meaningfully to the needs and interests of the population they serve. This may also explain the lack of evidence for representative politics with respect to the percentage of non-white residents and the number of

HSIs in the state. While seemingly disheartening, the results of this study also suggest that state government ideology was equally insignificant. Thus, the ideological perspectives of neither the state government nor the citizenry were important factors in determining which policies legislators adopted. This is consistent with the implications that emerge from the examination of the political covariates included in this study; that is, partisanship and political control were not significantly associated with ISRT policy adoption in either a permissive or restrictive form. From a policy standpoint, this suggests that other contextual factors are more important in determining how states react to the issue of undocumented students seeking access to in-state tuition rates at public postsecondary institutions.

Finally, the findings related to the effects of diffusion on policy adoption are exceedingly relevant to the emergence of policy in the future. Despite the hypothesis that percentage of peers adopting a policy will have significant and positive effects on adoption in neighboring states, three of the five models in this study did not support these assumptions. Only in the case of strong policy adoption and the adoption of restrictive policies did the percentage of peer adoption have significant effects. The implication for policy, therefore, is that states are less likely than previously thought to emulate their peers by adopting similar forms of ISRT policy, except perhaps in the case of strong (state-level) policies or policies that restrict the ability of undocumented students to obtain eligibility for in-state tuition at public institutions. Although the results are not as strong as anticipated, theory and anecdotal evidence suggests that it is still necessary for policymakers to remain attentive to the development of policy in surrounding states and to emulate (or oppose) their peers' activities accordingly. Some of this diffusion may indeed occur subconsciously, with legislatures obtaining information and ideas from their peers through osmosis and interaction. Regardless, however, it remains unclear whether or to what

degree policies may diffuse from one state to another as more states begin to experiment with various forms and approaches to policy adoption. Indeed, as the salience of this issues grows on a national scale and as more states become politically active in this policy arena, it is possible that these states will look to their peers for knowledge and guidance on the appropriate mechanisms for addressing the presence of undocumented students in public postsecondary education. The possibility that these states will eventually turn to their peers and that policies will subsequently diffuse to other states highlights the need for responsible policymaking in the first instance, ensuring that only the most comprehensive, cohesive, and relevant policies are adopted, implemented, and eventually diffused to neighbors and peers.

Implications for Practice

From the aforementioned implications for theory and policy flow a number of implications for practitioners in the field of higher education, including policymakers, institutions, and students. For all of these stakeholders, the results of this study have significant and real-world implications that affect their daily operations and can promote or inhibit their future ability to function effectively in the realm of higher education. For policymakers, many of the implications for practice mirror the implications for policy; that is, policymakers are encouraged to work with the higher education governing board, the executive branch of the state (i.e., the governor), and constituent voters in order to balance competing interests and to promote policies that respond sufficiently and satisfactorily to the needs and desires of these various populations. Regarding dynamics with the state's governing board, policymakers and the board can benefit from collaborative work aimed at advancing the interests of the state, working together to develop policy rather than engaging in retaliatory responses to undesirable policy actions among their counterparts. From a practical standpoint, this initial investment of

additional time, resources, and funding can prevent future conflicts and further financial and human resources costs through the reduction of contradictory outcomes prior to policy adoption.

For institutions, the implications for practice are less readily identifiable, given the lack of control some institutions have over the development of postsecondary policy at the state government level. However, institutions that have a large number of undocumented students that are potentially affected by broad-reaching ISRT policies have an incentive to lobby the legislative process and promote the interests of the institution and its students. This is particularly true at HSIs, given the strong incidence of restrictive policies in states with a greater proportion of HSIs per capita. While institutions are often limited in their capacity to engage in lobbying or to have meaningful impacts on the policymaking process, they can have significant influence in states with robust postsecondary systems that are also highly attuned to the needs of their constituents and dedicated to promoting educational access and opportunity. Practically speaking, therefore, institutions can stand to benefit substantially from engaging the legislature in a meaningful and reasoned debate regarding the appropriate policy mechanisms for addressing the rights and privileges of undocumented students seeking access to public postsecondary education. Moreover, the fact that states with a larger number of HSIs are less likely to offer instate residency tuition rates suggests that legislatures and institutions in these states must collaborate in the future to become more aware of and responsive to the needs of their students.⁵⁰

Finally, there are also practical implications from these findings for undocumented students navigating the postsecondary landscape, although they are not necessarily heartening and positive considerations. This arises primarily from the phenomenon of geographical

⁵⁰ While the number of HSIs in a state does not necessarily correlate with the number of undocumented immigrants, there is evidence to suggest that the majority of undocumented youth immigrants in the country are of Hispanic/Latino origin.

determinism, wherein the student's state of residence – over which he or she has no control – has direct bearings on his or her ability to access in-state tuition at public institutions of higher education. However, these students can participate in the policymaking process through active and informed engagement and debate with political leaders, legislators, and institutional officials as well as "voting with their feet" to attend institutions that support and promote their personal ideals. Moreover, as members of an increasingly economically and socially influential segment of the population whose presence stands to become more relevant in the coming years, these students are situated in a prime location for affecting future higher education policy. This study provides the appropriate background knowledge and information that students require in order to comprehend the relevant state context, acknowledge the power that they possess, and identify the techniques for advancing their interests and expanding their educational opportunities.

Future Research

The gaps present in the higher education literature base on undocumented students in postsecondary institutions, coupled with the limitations of this study, provide researchers with ample opportunities for future research and theory development. Specifically, future research should consider new methodologies for studying the emergence of ISRT policies, better approaches to understanding the student experience and its contribution to policy adoption, additional research on the implications of ISRT policies for students and institutions, further delineation of the processes of policy innovation and diffusion, and improved techniques for defining and measuring the phenomenon of social construction.

Regarding methodical and theoretical development, additional work is required to improve the approaches that researchers employ in the direct observation and study of undocumented students, particularly with regards to the intersections of race, gender, and

immigration status in higher education. In addition to the growing use of LatCrit, Critical Race Theory, and feminist approaches, researchers must develop new theories or combine existing theories to fully capture the lived experience of postsecondary education as an undocumented student. Future research must also acknowledge that undocumented students derive from a wide array of ethnic, religious, and national backgrounds, including from non-Latino nations.

Although gaining access to these student populations remains one of the primary challenges of future research on the topic, researchers with more nuanced and sensitive methodologies are in an ideal position to connect with and provide voices for undocumented students as they navigate postsecondary education. As with any study of marginalized (in some instances "illegal") individuals, moral and ethical concerns will unquestionably emerge, particularly concerning the biases of individual researchers. However, developing and implementing methodologies that effectively capture the lived experience of undocumented students is critical for enabling researchers and policymakers to engage in more informed research and policymaking.

Another area for future research pertains to better understanding of how instrumental policy interventions – such as the provision of financial aid or the establishment of non-financial institutional supports – influence undocumented students' outcomes and attainment. Research on both resident students and undocumented immigrant students can further explicate the rates of persistence and graduation among historically underrepresented or marginalized individuals as they pursue postsecondary education. Although extensive research confirms the links between financial aid and student persistence more generally, less is known about how these policies could affect students with non-traditional educational and demographic backgrounds, including students who are undocumented. This shortcoming highlights the lack of rigorous quantitative research on many of the topics related to undocumented students in their pursuit of higher

education, including accurate enrollment records as well as the number of students who do not enroll due to the hostile policy environment. Additional empirical research on the short- and long-term implications of these policies for undocumented students in particular is critical and provides an additional arena for future study.

A related topic for research concerns the long-term implications of these state-level ISRT policies for students, institutions, and the national and state economies. As more states continue to adopt policies and prior adopters continue to modify legislation, the balance of benefits and burdens for undocumented students will invariably change. For students, these policies have a direct effect on their ability to access affordable and adequate postsecondary education, as many students cannot afford the high out-of-state or international tuition rates at public institutions or the equally high tuition rates at private institutions. As such, the existence of permissive or restrictive ISRT legislation affects these students' capacities to attain additional educational credentials and to gain the knowledge and skills necessary for advancement in the workforce.

Institutions will also confront long-term implications, including impacts on institutional budgets, enrollments, and academic outcomes. For instance, an influx of undocumented students paying in-state tuition rates (rather than forgoing higher education altogether due to high costs) could contribute significantly to the institution's tuition and fees revenues. In addition, the growth in enrollments could allow the institution to invest in additional capital and human resources through augmented enrollment-based state appropriations. However, given the challenges many of these students confront with academic readiness and adequate financial and social capital supports, institutions must remain vigilant to student persistence and attainment to ensure academic success. Research into the long-term effects on students and institutions can

provide policymakers with the evidence and information necessary to engage in informed policy decision-making and the development of best practices for policy design and implementation.

Finally, these policies also have implications for the long-term health and viability of the national and state economics, particularly in the agricultural and service sectors that rely heavily on migrant (and sometimes undocumented migrant) labor. Promoting an economic and political environment that is welcoming to these workers and that supports their continued educational advancements and economic mobility can encourage growth in all sectors, raising overall wages, stimulating spending, and lowering unemployment. Immigrant students with the ability to work legally in the country also contribute to state and federal tax revenues that in turn provide necessary public benefits to low-income or dependent populations. Accordingly, better research on the economic implications associated with permitting or denying access to higher education for undocumented state residents could assist states in the formulation of more appropriate policies for their specific economic and social contexts.

As suggested above in regard to the limitations of this study, future research should address the shortcomings associated with the current approaches to operationalizing ephemeral phenomena such as social construction and policy diffusion. While researchers have developed extensive frameworks for both approaches to understanding the policy process, the application of these frameworks to new policy arenas (i.e., ISRT policies) suggests the need for more nuanced definitions that are sensitive to the state and national contexts in which policy development occurs. Moreover, researchers must acknowledge the distinctions that exist among different forms of policy and the subsequent discrepancies that emerge in how to best operationalize the various approaches to modeling the policy process. With regards to diffusion, future research should examine the multiple ways researchers have proposed to define "peers," testing the

relative importance of regional, bordering, and economically or politically competitive peer groups in explaining how policies diffuse. It is possible, for instance, that states have alternative peer groups based on the category of public policy in question (i.e., education, transportation, or health) and that the same patterns of diffusion do not hold across all of these policy arenas.

Another area for future research in policy diffusion concerns the mechanisms that drive policy activity, such as competition, emulation, correction, and isomorphism. Although this study does not consider opposition tactics, future research could examine the extent to which a one form of policy adoption increases or decreases the likelihood of opposing policy adoption in peer states as a form of competition.

In terms of social construction, future research should combine the current approaches to defining citizen and state ideology with new methodological approaches to examining the language of policy text and the underlying messages communicated through both proposed and enacted legislation. Extensive examination not only of the policy text that is formally adopted and implemented by the legislature, but also the rhetoric surrounding the issue in the popular media, could collectively provide a more nuanced assessment of the degree to which citizens and state governments socially construct target populations. Indeed, the very definition of deviancy is itself an important aspect for future research to consider, particularly with regards to whether undocumented students are largely viewed as dependents deserving of sympathy and public welfare benefits, or as deviants unworthy of government assistance or acceptance into society and among citizens. Taken together, these advancements in theoretical approaches enable more robust and defensible conclusions regarding the relative influence of policy diffusion or social construction in the adoption of ISRT policies across the country.

Conclusion

Throughout its history, the United States has maintained two consistent ideological principles that have guided much of its past and current approaches to public policymaking: offering freedom from oppression and discrimination, and promoting access to education and knowledge. To these ends, the country has developed an elite postsecondary educational system that provides students with the resources, skills, and capacities necessary to attain educational advancement, economic mobility, and social well-being. Recent changes in both the prevailing political culture and the predominant demographic makeup of the nation, however, have stimulated a retreat from these ideals and have threatened the freedoms of a growing number of individuals in the country. In particular, the presence of unauthorized immigrants, specifically students seeking access to postsecondary education, has ignited conflicts and debates across the country with respect to how best to manage the presence of these students in the higher education market. With approximately 3.2 million undocumented youths living in the U.S., this population is not insignificant and will only continue to grow in the ensuing years. As these students progress through the educational system and aspire to higher forms of education, states are adopting legislation that addresses their presence, engaging in a complex policymaking process with profound implications for all of higher education's stakeholders.

Despite the growth of the undocumented student population and the activities among states to adopt legislation addressing their attendance in higher education institutions, surprisingly little attention has been devoted to understanding how and why states develop and adopt policies aimed at either protecting or rescinding the rights of these students. This study addresses the critical gap in the literature and attempts to link the observed policy outcomes in the form of ISRT legislation with the social, economic, political, and educational contexts that

predict their emergence and continued existence. While results vary in terms of consistency across states and policy types, this study has shown that the state context is indeed important for understanding why and when policymakers engage in one form of policymaking in contrast to another. The results regarding the relative roles of policy diffusion and social construction are less conclusive, but do provide avenues for future research.

Specifically, this study suggests that demographic diversity is an important determinant of state policy adoption, but that it may serve to enhance progressive legislation (through representative democracy) or may promote more restrictive forms of policy (through protectionist retaliation). Economic factors are also significantly associated with policy adoption, but again through a variety of mechanisms, with poor economic conditions resulting in more permissive policies to expand educational access to invest in the labor market, or resulting in increasingly restrictive policies to deny educational benefits to undocumented students in favor of protecting the interests and educational opportunities of native-born residents. Somewhat surprisingly, political variables also exhibit inconsistent results despite prior research documenting the protectionist tendencies of conservative states in contrast to the tolerant approaches of liberal states. This study suggests that the argument for or against in-state tuition residency is more complex than a single distinction between liberal and conservative and depends upon the relative importance of economic versus moral justifications for a particular policy position. Variables related to the educational ecology of the state are equally unpredictable, with highly-subsidized state systems of higher education resulting in either increased educational access to promote the ideal of universal education, or restricted access to protect the generous provision of public benefits only for native-born residents deemed worthy of public assistance.

Collectively, these mixed results, coupled with the inconclusive findings for measures of policy diffusion and social construction, suggest that state context is an exceedingly important consideration when examining policy adoption and one that cannot be overlooked in favor of more simplistic solutions such as adoption through emulation or coercion. Moreover, these results highlight the need for researchers to remain attuned to the needs of the students who experience the implications of these policies first-hand either through access to resources and opportunities that advance their aspirations or through the denial of opportunity due to the creation of insurmountable financial and political barriers. As this population of prospective students continues to grow, this study and others that follow will ideally provide policymakers, practitioners, and future researchers with the tools and expertise necessary to ensure that all students have the opportunity to attain educational equity regardless of their documentation status. Through the education of and investment in this bright and promising population of undocumented students, the U.S. can affirm its position as a nation dedicated to the ideals of opportunity, education, and equity in its purest forms.

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A. DEFINITIONS AND DESCRIPTIVE STATISTICS

Table A1.

Definitions and Sources for Independent Variables

| Variable Name | Definition | Source |
|---|--|--|
| Demographic Variables | | |
| Ethnicity Percent American Indian Percent Asian Percent Black Percent Native Hawaiian Percent White | The percentage of the state population that identifies as American Indian, Asian, Black, Native Hawaiian, White, or two or more races. | U.S. Census American Community Survey (ACS) |
| Percent Two+ Races | | |
| Percent Non-White | Derived from the percentage of the population that identifies as any racial category other than White. Equivalent to 100 less the percentage of White individuals. | U.S. Census ACS |
| Percent Foreign-Born | The percentage of the population that includes naturalized U.S. citizens, lawful permanent residents, temporary migrants, humanitarian migrants, and "illegal-present" persons whose place of birth is not the United States. | U.S. Census ACS |
| Percent in Metropolitan Region | Derived variable to capture percentage of the population that resides within a defined metropolitan statistical area. These areas consist of the county or counties associated with at least one urbanized area of at least 50,000 individuals, as well as adjacent counties with a high degree of social and economic integration with the urban core. Equivalent to the sum of the number of individuals living in the metro area, central/principal city and in the metro area, outside central/principle city divided by the total population of the state. | U.S. Census ACS |
| Percent Under Age 15 | The percentage of the population that is under age 15 (i.e., the | U.S. Census ACS |

| Total Population | percentage of the population that will be eligible for postsecondary education within the next 3 to 18 years) The total number of individuals residing within the state in a given year. | U.S. Census ACS |
|---|--|---|
| Economic Variables | _ | |
| Agricultural Production Agricultural GDP Percent GDP from Agricultural Industry | State-level gross domestic product that comes from the agricultural industry, including agriculture, forest, fishing, and hunting (crop and animal production, forestry, fishing, and related activities). Reported both in total 2009 dollars and as a derived variable calculated by the total agricultural GDP divided by the total state GDP for all industries. | U.S. Bureau of Economic Analysis (BEA) |
| GDP per Capita | The total value of goods and services produced within the state in a given year, divided by the total population of the state. Measured in 2009 dollars and reported per \$1,000. | U.S. BEA |
| Gini Coefficient | An index measuring the concentration of wealth within the state, ranging from 0 to 1. A value of 0 indicates total equality (all households have equal wealth), and a value of 1 indicates total inequality (one household has all the wealth). | U.S. Census Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC) |
| Income per Capita | Total income earned by households in the state divided by the total population of the state. Measured in 2009 dollars. | U.S. Census ACS |
| Median Household Income | Median value of income earned by all households in the state. Measured in 2009 dollars. | U.S. Census ACS |
| Poverty Rates Total Poverty Rate Under 5 Poverty Rate Under 18 Poverty Rate | The percentage of the population (the total population as well as the population under age 18 or under age 5) with a combined income below the threshold set by the Census Bureau and the Office of Management and Budget. The poverty threshold varies annually based on family size and composition. | U.S. Census ACS |

| Percent Unemployed | The percentage of the civilian population over age 16 that is not working in the reference week, has been looking for work during the last four weeks, and is available to accept a job. This does not include individuals under age 16 or who are not actively looking for work. | U.S. Census ACS |
|---|---|--|
| Educational Variables | _ | |
| Educational Attainment Percent with BA or Higher Percent with HS Diploma Percent with No HS | The percentage of the population over age 25 that has earned a bachelor's degree or higher, a high school diploma, or has earned less than a high school diploma or equivalent. | U.S. Census ACS |
| Governor Appoints State Higher Education Executive Officer | Binomial variable indicating whether the governor appoints the state higher education executive officer and/or the members of the state higher education governing board. | Council of State Governments |
| Consolidated Higher Education Governance | A derived binomial variable that indicates whether the state organizes all public higher education under one, two, or three state-wide governing boards as opposed to permitting institutional-level control. | Education Commission of the States |
| State Tax Appropriations to Higher Education | The total amount of state appropriations to higher education that originate from state tax revenues. Measured in 2009 dollars. | State Higher Education Executive Officers Association (SHEEO) |
| Need Based Financial Aid Graduate Undergraduate Uncategorized | The amount of primary need-based grant aid plus other grant aid with a need component the state provides to postsecondary students. This includes funding for students at the graduate level, the undergraduate level, and uncategorized funding. Measured in 2009 dollars. | National Association of State Student Grant & Aid Programs (NASSGAP) |
| Non-Need Based Financial Aid Graduate Undergraduate Uncategorized | The amount of grant aid without a need component the state provides to postsecondary students at the graduate level, the undergraduate level, and uncategorized funding. Measured in 2009 dollars. | NASSGAP |
| Total State Financial Aid Graduate | The total amount of primary need-based grant aid, other grant aid | NASSGAP |

| Undergraduate Uncategorized | with a need component, grant aid without a need component, and non-grant program funding that states provide to all postsecondary students, including graduate, undergraduate, and uncategorized students. Measured in 2009 dollars. | |
|--|--|--|
| State Financial Aid per Capita | Derived variable that measures the total amount of state financial aid divided by the state population. Measured in 2009 dollars. | NASSGAP & U.S. Census ACS |
| Net Public FTE Enrollment | The full-time equivalent (FTE) enrollment at all in-state public institutions. | SHEEO State Higher Education Finance (SHEF) |
| Net Tuition per FTE | The net tuition revenues of the state per full-time equivalent (FTE) enrollment in public institutions. Measured in 2009 dollars. | SHEEO SHEF |
| Student Share of Tuition | The student share of public instate tuition, defined as net tuition as a proportion of total state educational revenues. | SHEEO SHEF |
| Hispanic Serving Institutions per Capita | Derived variable measuring the number of all postsecondary institutions in the state whose enrollment is at least 25% Hispanic/Latino. Reported per 1 million residents. | Integrated Postsecondary Education Data System (IPEDS) |
| Political Variables | | |
| Percent of Gubernatorial Votes for Party Candidate | The percentage of voters in a gubernatorial election who cast votes for the Independent, Democratic, Republican, or "other" candidate. | Council of State Governments Book of the States (BOS) |
| Governor Party | A multinomial indicator of the political party of the governor (Republican, Democrat, or Independent). | National Conference of State Legislators (NCSL) |
| Legislative Party | A multinomial indicator of the majority party of the legislature (Republican, Democrat, Independent, or split chambers). | NCSL |
| Split Legislature | Derived binomial variable used to measure whether the two chambers of the state legislature are of the same party (unified government) or opposing parties (split government). | NCSL |

Governor's Powers Multinomial variables that capture Council of State Governments **Budget Power** the powers constitutionally **BOS** Line Veto Power granted to the governor, including Votes Required for total or shared control of the state Legislative Override budget, item veto on bills and/or Reorganization Authority appropriations, the number of legislative votes needed to override a veto, and reorganization authority. **Gubernatorial Power Index** Council of State Governments Derived variable measuring relative gubernatorial power, **BOS** calculated as the sum of the governor's constitutionallygranted powers (between 0 and 4) divided by the highest power index attainable (maximum of 4). **NCSL** Change in Gubernatorial Party Derived binomial variable indicating if the party of the governor changed from the previous year due to an election. Annual expenditures per state Expenditures per Legislator U.S. Census Annual Survey of legislator in 2009 dollars. **State Government Finances** Legislator Salary Annual salary and/or per diem Council of State Governments salary multiplied by length of BOS regular session per legislator per year. Does not include living expenses, housing allowances, health care benefits, and other forms of compensation. Measured in 2009 dollars. Legislative Session Length The total length of the regular Council of State Governments Regular & Special session or the combined length of BOS the regular and special sessions of the legislature, measured in legislative days. Legislative days are works days or session days in which either chamber of the legislature is in session. Derived variable measuring the Council of State Governments Legislative Professionalism BOS and U.S. Census Annual degree of professionalism of the Index legislature, calculated as the sum Survey of State Government of the ratio of session length to **Finances** maximum session length, the ratio of legislator expenditures to maximum legislator expenditures, and the ratio of legislator salary to maximum legislator salary. The result is a ranking of states by the degree of legislative professionalism each year.

| Interest Group Lobbying Total State Lobbying for Education Percent of State Lobbying for Education Federal-State Government Party Difference | Total amount of publicly-reported lobbying funds in the state that are directed towards education-related causes. Reported in 2009 dollars as well as a percentage of the total value of all state lobbying. Derived binomial variable indicating the presence of different majority parties in power at the state versus federal level. | Center for Responsive Politics OpenSecrets.org |
|--|--|---|
| Social Construction Variables | | |
| State Ideology (ADA/COPE) | Measure of state government ideology using methodology developed by the Americans for Democratic Action (ADA) and the AFL-CIO Committee on Political Action (COPE). The scores are continuous indicators of the average ideology for each state's congressional delegation using roll call data and interest group ratings of members of Congress. | Richard Fording Dataverse (Berry, Ringquist, Fording, & Hanson, 2009). |
| State Ideology (NOMINATE) | Alternative approach to measuring state government ideology using the NOMINATE (nominal threestep estimation) methodology. This approach uses a multidimensional scaling application to analyze legislative voting behavior. | Richard Fording Dataverse (Poole, 1998). |
| Citizen Ideology | Measurement of citizen ideology through the identification of ideological positions of Congress using interest group ratings, ideology scores for district incumbents, ideology scores for (real or hypothetical) challengers, and election results reflecting ideological divisions in electorate. | Richard Fording Dataverse (Berry, Ringquist, Fording, & Hanson, 2009) |
| Diffusion Variables | | |
| Diffusion Any Policy Restrictive Policy Permissive Policy Weak Policy Strong Policy | Percentage of states identified as regional peers (based on BEA geographical groupings) that have adopted one of the five forms of ISRT policy. Calculated as the number of states that have adopted the specific form of the policy in that year divided by the total number of states in the BEA region. | NCSL |

Table A2. Descriptive Statistics of Independent Variables^{51 52}

| Variable Name | Mean | Std. Dev. | Min. | Max. |
|-----------------------|-------------|------------|-------------|-------------|
| Demographic Variables | S | <u>_</u> | | |
| % American Indian | 1.59 | 2.65 | 0.00 | 16.81 |
| % Asian | 3.66 | 6.11 | 0.00 | 47.81 |
| % Black | 10.32 | 9.46 | 0.11 | 37.51 |
| % Native Hawaiian | 0.45 | 1.72 | 0.00 | 17.23 |
| % White | 81.52 | 12.81 | 17.81 | 97.25 |
| % Two+ Races | 2.45 | 3.33 | 0.00 | 27.15 |
| % Non-White | 18.47 | 12.82 | 0.91 | 82.27 |
| % Foreign-Born | 8.25 | 5.97 | 0.45 | 27.82 |
| % Metropolitan | 37.78 | 27.03 | 0 | 91.55 |
| % Under Age 15 | 20.21 | 1.84 | 15.72 | 27.14 |
| Total Population | 6,030,947 | 6,652,599 | 494,300 | 39,000,000 |
| Economic Variables | | | | |
| Agricultural GDP | | _ | | |
| (Millions) | \$3,045.39 | \$4,206.94 | \$90.00 | \$34,667.44 |
| % GDP from | | | | |
| Agriculture | 1.67 | 1.92 | 0.11 | 13.05 |
| GDP Per Capita | | | | |
| (Thousands) | \$45.98 | \$8.69 | \$28.86 | \$73.48 |
| Gini Coefficient | 43.58 | 2.99 | 34.03 | 51.38 |
| Income Per Capita | \$38,930.43 | \$6,290.23 | \$26,918.75 | \$61,496.10 |
| Median Household | | | | |
| Income | \$50,118.30 | \$7,927.14 | \$34,576.47 | \$70,708.56 |
| Poverty Rate | 13.26 | 3.32 | 5.60 | 23.90 |
| U-18 Poverty Rate | 18.19 | 5.16 | 6.60 | 34.00 |
| U-5 Poverty Rate | 21.22 | 5.77 | 6.80 | 37.80 |
| % Unemployed | 5.86 | 2.00 | 2.10 | 14.00 |
| Educational Variables | | | | |
| % Bachelor's | | _ | | |
| Degree or Higher | 19.56 | 4.04 | 10.77 | 33.72 |
| % High School | | | | |
| Diploma | 24.29 | 3.31 | 16.40 | 35.99 |
| % Less than High | | | | |
| School Education | 14.28 | 2.65 | 8.22 | 21.24 |
| Governor Appoints | | | | |
| SHEEO (0/1) | 0.07 | 0.26 | 0.00 | 1.00 |
| Consolidated | | | | |
| Governance (0/1) | 0.48 | 0.50 | 0.00 | 1.00 |
| State Tax | | | | |
| Appropriations to | | | | |
| Higher Education | | | | |
| (Millions) | \$1,442.21 | \$1,730.12 | \$76.91 | \$11,759.82 |
| | | | | |

⁵¹ All monetary values reported in 2009 dollars.
52 Detailed descriptions of these variables appear above in Table A1 in Appendix A.

| State Tax | | | | |
|-----------------------------|------------------------|-------------------------------------|--------------------|--------------------------|
| Appropriations to | | | | |
| HE per Capita | \$252.09 | \$82.05 | \$58.21 | \$650.67 |
| Need Based | | | | |
| Graduate Financial Aid | \$71,829.21 | \$452,467.60 | \$0 | \$3,663,000.00 |
| Non-need Based | \$71,829.21 | \$432,407.00 | ΦU | \$3,003,000.00 |
| Graduate | | | | |
| Financial Aid | \$625,730.70 | \$2,897,570.00 | \$0 | \$35,000,000.00 |
| Total Graduate | Ψ023,730.70 | Ψ2,071,510.00 | ΨΟ | Ψ33,000,000.00 |
| Financial Aid | \$6,131,629.00 | \$22,100,000.00 | \$0 | \$190,000,000.00 |
| Need Based | + -,, | +,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 7.5 | +->0,000,000 |
| Undergraduate | | | | |
| Financial Aid | \$51,800,000.00 | \$139,000,000.00 | \$0 | \$969,000,000.00 |
| Non-need Based | . , , | , , | | , , |
| Undergraduate | | | | |
| Financial Aid | \$21,900,000.00 | \$68,600,000.00 | \$0 | \$565,000,000.00 |
| Total | | | | |
| Undergraduate | | | | |
| Financial Aid | \$85,900,000.00 | \$162,000,000.00 | \$0 | \$1,010,000,000.00 |
| Need Based | | | | |
| Uncategorized | | | | |
| Financial Aid ⁵³ | \$40,500,000.00 | \$152,000,000.00 | \$0 | \$1,630,000,000.00 |
| Non-need Based | | | | |
| Uncategorized | | | | |
| Financial Aid | \$17,500,000.00 | \$68,400,000.00 | \$0 | \$736,000,000.00 |
| Total | | | | |
| Uncategorized | 472 7 00 000 00 | φ10 = 000 000 00 | 40 | #1 (00 000 000 00 |
| Financial Aid | \$73,700,000.00 | \$187,000,000.00 | \$0 | \$1,680,000,000.00 |
| Total State | ¢1.66,000,000,00 | ¢220,000,000,00 | ¢Ω | ¢1 (00 000 000 00 |
| Financial Aid | \$166,000,000.00 | \$229,000,000.00 | \$0 | \$1,680,000,000.00 |
| Total State | | | | |
| Financial Aid per Capita | \$22.61 | \$17.76 | \$0 | \$100.90 |
| Total Need Based | \$22.01 | \$17.70 | ΦU | \$100.90 |
| Aid per Capita | \$10.44 | \$11.12 | \$0 | \$57.38 |
| Net Public FTE | φ10. 77 | Φ11.12 | ΨΟ | φ37.36 |
| Enrollment | 201,927 | 243,801 | 15,571 | 1,624,753 |
| Net Tuition per | 201,727 | 213,001 | 13,371 | 1,021,733 |
| FTE | \$5,826.75 | \$2,681.72 | \$1,178.80 | \$16,455.49 |
| Student Share of | +-, | +-, | , -, - , - , o , o | +, |
| Tuition | 42.00 | 15.48 | 8.77 | 86.02 |
| Number of | | | | |
| Hispanic Serving | | | | |
| Institutions per | | | | |
| 1,000,000 | 1.34 | 2.95 | 0 | 19.71 |
| Political Variables | | | | |
| % Vote for Other- | | | | |
| Party Candidate | 2.36 | 5.70 | 0.00 | 69.07 |
| | | | | |

53 Uncategorized financial aid is aid that does not specify whether it applies to graduate or undergraduate students.

| % Vote for | | | | |
|------------------------------|----------|--------------------------|-------------------------|-------------------|
| Independent | | | | |
| Candidate | 2.90 | 6.78 | 0.00 | 43.38 |
| % Vote for | | | | |
| Democratic | | | | |
| Candidate | 45.66 | 11.04 | 3.21 | 73.89 |
| % Vote for | | | | |
| Republican | | | | |
| Candidate | 49.08 | 11.38 | 11.13 | 82.11 |
| Independent | | | | |
| Governor (0/1) | 0.02 | 0.14 | 0.00 | 1.00 |
| Democratic | | | | |
| Governor (0/1) | 0.40 | 0.49 | 0.00 | 1.00 |
| Republican | | | | |
| Governor (0/1) | 0.58 | 0.49 | 0.00 | 1.00 |
| Independent | | | | |
| Legislature (0/1) | 0.00 | 0.00 | 0.00 | 0.00 |
| Democratic | | | | |
| Legislature (0/1) | 0.38 | 0.49 | 0.00 | 1.00 |
| Republican | | | | |
| Legislature (0/1) | 0.42 | 0.49 | 0.00 | 1.00 |
| Split Legislature | | | | |
| (0/1) | 0.19 | 0.39 | 0.00 | 1.00 |
| Full Governor | | | | |
| Budget Power ⁵⁴ | 0.65 | 0.48 | 0.00 | 1.00 |
| Governor Veto | | | | |
| Power $(0/1)^{55}$ | 0.86 | 0.35 | 0.00 | 1.00 |
| Override of Veto | | | | |
| Majority (0/1) ⁵⁶ | 0.15 | 0.36 | 0.00 | 1.00 |
| Override of Veto | | | | |
| Quorum $(0/1)^{57}$ | 0.74 | 0.44 | 0.00 | 1.00 |
| Governor Reorg. | | | | |
| Power | 0.57 | 0.49 | 0.00 | 1.00 |
| Governor Power | | | | |
| Ratio | 0.82 | 0.14 | 0.50 | 1.00 |
| Change in | | | | |
| Gubernatorial | | | | 4.00 |
| Party (0/1) | 0.15 | 0.36 | 0.00 | 1.00 |
| Expenditures per | | | | |
| Legislator | Φ.600.00 | Φ 7 0 7 40 | φ ε ς 0 π | Φ5 255 41 |
| (Thousands) | \$698.90 | \$795.48 | \$56.87 | \$5,357.41 |
| Legislator Salary | Φ54.24 | 40.44 | 40 | \$2.45.2 0 |
| (Thousands) | \$54.31 | \$48.41 | \$0 | \$247.29 |
| Legislative Session | 105.60 | 77.04 | 27.00 | 510.30 |
| (Days) | 135.62 | 77.06 | 37.00 | 518.30 |
| | | | | |

Governor has full responsibility for developing budget.
 Governor has veto power on all bills and/or on appropriations.
 Override of governor's veto requires majority vote of legislature.
 Override of governor's veto requires 2/3 or 3/5 vote of legislature.

| Special & Regular Legislative | | | | |
|-------------------------------|-----------------|-----------------|-------|-----------------|
| Session (Days) | 146.02 | 82.65 | 39.00 | 531.79 |
| Total State | | | | |
| Lobbying for | | | | |
| Education | \$ 1,579,958.00 | \$ 1,839,762.00 | \$0 | \$10,600,000.00 |
| % State Lobbying | | | | |
| Funds for Higher | | | | |
| Education | 1.80 | 2.08 | 0.00 | 17.54 |
| Federal-State | | | | |
| Government | | | | |
| Party Difference | | | | |
| (0/1) | 0.26 | 0.44 | 0.00 | 1.00 |
| Social Construction V | ariables | | | |
| State Ideology | | | | |
| (ADA/COPE) | 50.92 | 29.84 | 0.00 | 99.17 |
| Citizen Ideology | 51.98 | 16.03 | 8.45 | 95.97 |
| State Ideology | | | | |
| (NOMINATE) | 49.06 | 26.34 | 0.00 | 92.45 |
| Diffusion Variables | | | | |
| Percent Any Policy | 29.25 | 27.49 | 0.00 | 100.00 |
| Percent Restrictive | | | | |
| Policy | 9.00 | 15.27 | 0.00 | 60.00 |
| Percent Permissive | | | | |
| Policy | 20.38 | 21.24 | 0.00 | 75.00 |
| Percent Weak | | | | |
| Policy | 17.63 | 14.56 | 0.00 | 60.00 |
| Percent Strong | | | | |
| Policy | 11.88 | 21.74 | 0.00 | 80.00 |

B. COMPARATIVE ANALYTICAL MODELS

Table B1. *EHA Models 1-5 without Urbanicity*

| Variable | | Haza | rd Ratio (Std. Err | or) | |
|---------------------------------------|------------|-------------|--------------------|----------|----------|
| | Model 1: | Model 2: | Model 3: | Model 4: | Model 5: |
| | Any Policy | Restrictive | Permissive | Weak | Strong |
| % Non-White | 0.991 | 1.017 | 0.975* | 0.984 | 0.976 |
| | (0.008) | (0.016) | (0.012) | (0.011) | (0.018) |
| % Foreign-Born | 1.004 | 0.845** | 1.051 | 1.092* | 0.906* |
| C | (0.024) | (0.045) | (0.035) | (0.046) | (0.035) |
| % Under 15 | 1.374*** | 1.178 | 1.568*** | 1.399*** | 1.316*** |
| | (0.067) | (0.102) | (0.109) | (0.099) | (0.107) |
| % GDP from | 0.861** | 0.548** | 0.902 | 0.943 | 0.580*** |
| Agriculture | (0.047) | (0.120) | (0.056) | (0.061) | (0.089) |
| GDP per Capita | 0.936*** | 0.965 | 0.945** | 0.912*** | 0.957 |
| r | (0.013) | (0.026) | (0.018) | (0.019) | (0.023) |
| Gini Coefficient | 0.810*** | 0.799** | 0.885* | 0.811*** | 0.889 |
| | (0.035) | (0.066) | (0.049) | (0.047) | (0.075) |
| Unemployment | 1.080 | 1.799*** | 0.889* | 1.022 | 1.245** |
| · · · · · · · · · · · · · · · · · · · | (0.048) | (0.179) | (0.051) | (0.059) | (0.101) |
| % BA or Higher | 1.161*** | 1.182* | 1.146** | 1.218*** | 1.011 |
| , | (0.038) | (0.084) | (0.049) | (0.058) | (0.058) |
| Financial Aid per | 0.980*** | 0.979* | 0.968*** | 0.991 | 0.930*** |
| Capita | (0.005) | (0.008) | (0.007) | (0.007) | (0.013) |
| Consolidated | 0.253*** | 1.119 | 0.151*** | 0.267*** | 0.442* |
| Governance | (0.054) | (0.505) | (0.043) | (0.078) | (0.166) |
| Student Share of | 0.951*** | 0.995 | 0.932*** | 0.945*** | 0.962** |
| Tuition | (0.008) | (0.016) | (0.011) | (0.011) | (0.014) |
| Need Based Aid | 1.028* | 1.001 | 1.041** | 1.012 | 1.119*** |
| per Capita | (0.012) | (0.025) | (0.015) | (0.014) | (0.029) |
| HSIs per | 0.984 | 1.131* | 0.942 | 0.702*** | 1.235*** |
| 1,000,000 | (0.025) | (0.066) | (0.030) | (0.056) | (0.053) |
| Republican | 1.126 | 3.197** | 0.606 | 1.210 | 1.726 |
| Legislature | (0.222) | (1.271) | (0.160) | (0.367) | (0.560) |
| Republican | 0.991 | 2.003 | 0.779 | 1.016 | 0.587 |
| Governor | (0.187) | (0.892) | (0.186) | (0.235) | (0.202) |
| Legislative | 1.643 | 0.614 | 0.900 | 3.111** | 0.550 |
| Professionalism | (0.418) | (0.390) | (0.300) | (1.075) | (0.287) |
| % Vote for | 1.015* | 1.061*** | 0.998 | 0.989 | 1.041*** |
| Republican | (0.007) | (0.016) | (0.008) | (0.009) | (0.011) |
| Gubernatorial | 0.025*** | 0.239 | 0.039*** | 0.022*** | 0.148 |
| Power | (0.015) | (0.331) | (0.030) | (0.017) | (0.161) |
| N | 712 | 712 | 712 | 712 | 712 |

Table B2. *EHA Diffusion Models 6-10 without Urbanicity*

| Variable | | Haza | ard Ratio (Std. Err | or) | |
|-------------------|------------|-------------|---------------------|----------|-----------|
| | Model 6: | Model 7: | Model 8: | Model 9: | Model 10: |
| | Any Policy | Restrictive | Permissive | Weak | Strong |
| % Non-White | 0.990 | 1.033* | 0.973* | 0.984 | 0.971 |
| | (0.008) | (0.016) | (0.014) | (0.011) | (0.018) |
| % Foreign-Born | 1.001 | 0.946 | 1.060 | 1.085* | 0.931 |
| C | (0.024) | (0.057) | (0.035) | (0.042) | (0.038) |
| % Under 15 | 1.383*** | 1.271** | 1.445*** | 1.428*** | 1.268** |
| | (0.068) | (0.117) | (0.101) | (0.100) | (0.105) |
| % GDP from | 0.856** | 0.655 | 0.904 | 0.932 | 0.557*** |
| Agriculture | (0.046) | (0.174) | (0.055) | (0.057) | (0.095) |
| GDP per Capita | 0.935*** | 1.003 | 0.939** | 0.908*** | 0.942* |
| 1 1 | (0.013) | (0.032) | (0.019) | (0.019) | (0.024) |
| Gini Coefficient | 0.814*** | 0.688*** | 0.860** | 0.818*** | 0.906 |
| | (0.035) | (0.058) | (0.047) | (0.047) | (0.077) |
| Unemployment | 1.076 | 1.912*** | 0.909 | 1.018 | 1.250** |
| 1 0 | (0.048) | (0.193) | (0.048) | (0.058) | (0.099) |
| % BA or Higher | 1.156*** | 1.206** | 1.176*** | 1.226*** | 1.112 |
| C | (0.037) | (0.087) | (0.048) | (0.060) | (0.063) |
| Financial Aid per | 0.980*** | 0.997 | 0.971*** | 0.991 | 0.930*** |
| Capita | (0.005) | (0.009) | (0.007) | (0.007) | (0.015) |
| Consolidated | 0.259*** | 1.265 | 0.137*** | 0.273*** | 0.354** |
| Governance | (0.054) | (0.589) | (0.039) | (0.078) | (0.132) |
| Student Share of | 0.951*** | 0.999 | 0.929*** | 0.944*** | 0.936*** |
| Tuition | (0.008) | (0.018) | (0.011) | (0.011) | (0.015) |
| Need Based Aid | 1.028* | 0.949 | 1.041** | 1.012 | 1.125*** |
| per Capita | (0.011) | (0.026) | (0.015) | (0.014) | (0.030) |
| HSIs per Capita | 0.982 | 1.082 | 0.916* | 0.701*** | 1.074 |
| (millions) | (0.028) | (0.060) | (0.034) | (0.056) | (0.055) |
| Legislative | 1.682* | 0.240* | 0.898 | 3.246*** | 0.359 |
| Professionalism | (0.424) | (0.171) | (0.288) | (1.101) | (0.191) |
| Percent Vote for | 1.015* | 1.050** | 0.993 | 0.990 | 1.029* |
| Republican | (0.007) | (0.017) | (0.008) | (0.009) | (0.011) |
| Gubernatorial | 0.026*** | 0.024** | 0.050*** | 0.021*** | 0.270 |
| Power | (0.015) | (0.034) | (0.037) | (0.017) | (0.295) |
| % Neighbors | 1.000 | 1.076*** | 1.009 | 0.996 | 1.022*** |
| Adopting | (0.004) | (0.015) | (0.006) | (0.008) | (0.006) |
| N | 712 | 712 | 712 | 712 | 712 |

Table B3.

Multinomial Logistic Regression (MNL) Results for Any Policy Adoption

| Variable | Odds Ratio (Std. Error) | |
|-------------------------------------|-------------------------|-----------|
| _ | Model 1: Any Policy (1) | |
| % Non-White | -0.020 | |
| | (0.014) | |
| % Foreign-Born | 0.137** | |
| _ | (0.042) | |
| % Metro Area | -0.038*** | |
| | (0.008) | |
| % Under 15 | 0.869*** | |
| | (0.102) | |
| % GDP from Agriculture | -0.176* | |
| 6 | (0.082) | |
| Poverty Rate | 0.430*** | |
| 1 0 . 010) 11440 | (0.070) | |
| Unemployment Rate | -0.115 | |
| Chemployment Rate | (0.075) | |
| % BA or Higher | 0.517*** | |
| 70 BIX of Higher | (0.061) | |
| State Tax Appropriations for HE | 0.011*** | |
| State Tax Appropriations for Tile | (0.002) | |
| Financial Aid por Conita | -0.008 | |
| Financial Aid per Capita | | |
| Consolidated Coverno | (0.009) | |
| Consolidated Governance | -0.800* | |
| G. 1 (G) CT '.' | (0.322) | |
| Student Share of Tuition | 0.031* | |
| V 15 1411 G 1 | (0.015) | |
| Need Based Aid per Capita | 0.043* | |
| **** | (0.019) | |
| HSIs per Capita (millions) | -0.035 | |
| | (0.057) | |
| Republican Legislature | 1.420*** | |
| | (0.338) | |
| Republican Governor | -0.595* | |
| | (0.288) | |
| Legislative Professionalism | 1.320** | |
| | (0.496) | |
| % Vote for Republican | 0.012 | |
| | (0.012) | |
| Gubernatorial Change | -0.727* | |
| - | (0.362) | |
| Gubernatorial Power | -7.640*** | |
| | (1.041) | |
| State-Federal Divergence | 0.856** | |
| <i>C</i> - | (0.297) | |
| Constant | -32.843*** | |
| | (3.380) | |
| Referent group = no policy adoption | * p<0.05 ** p<0.01 | ***p<0.00 |

Table B4.

Multinomial Logistic Regression (MNL) Results for Restrictive or Permissive Policy Adoption

| Variable | Odds Ratio (Std. Error) | | | |
|---|--------------------------|-------------------------|--|--|
| <u> </u> | Model 2: Restrictive (1) | Model 3: Permissive (2) | | |
| % Non-White | 0.016 | -0.042 | | |
| | (0.027) | (0.019) | | |
| % Foreign-Born | -0.138 | 0.228*** | | |
| | (0.080) | (0.054) | | |
| % Metro Area | -0.029* | -0.033*** | | |
| | (0.013) | (0.010) | | |
| % Under 15 | 0.542*** | 1.021*** | | |
| | (0.134) | (0.120) | | |
| % GDP from Agriculture | -1.040*** | -0.042 | | |
| - | (0.306) | (0.097) | | |
| Poverty Rate | 0.349** | 0.547*** | | |
| | (0.114) | (0.092) | | |
| Unemployment Rate | 0.186 | -0.384*** | | |
| | (0.121) | (0.100) | | |
| % BA or Higher | 0.456*** | 0.546*** | | |
| 2 | (0.100) | (0.073) | | |
| State Tax Appropriations for HE | 0.012*** | 0.013*** | | |
| | (0.004) | (0.003) | | |
| Financial Aid per Capita | -0.005 | -0.009 | | |
| 1 1 | (0.016) | (0.011) | | |
| Consolidated Governance | 1.014 | -1.009** | | |
| | (0.593) | (0.373) | | |
| Student Share of Tuition | 0.091** | 0.017 | | |
| | (0.029) | (0.019) | | |
| Need Based Aid per Capita | -0.015 | 0.056* | | |
| T · · · · · · | (0.036) | (0.022) | | |
| HSIs per Capita (millions) | 0.208* | -0.099 | | |
| r · · · · · · · · · · · · · · · · · · · | (0.100) | (0.066) | | |
| Republican Legislature | 2.110*** | 0.983* | | |
| | (0.615) | (0.404) | | |
| Republican Governor | 0.936 | -1.089** | | |
| | (0.563) | (0.349) | | |
| Legislative Professionalism | 1.003 | 0.943 | | |
| 8 | (0.985) | (0.704) | | |
| % Vote for Republican | 0.101*** | -0.025 | | |
| 70 1010 101 110p wondown | (0.022) | (0.014) | | |
| Gubernatorial Change | -0.889 | -0.429 | | |
| | (0.583) | (0.421) | | |
| Gubernatorial Power | -5.566** | -6.199*** | | |
| Coccinimonal I on or | (1.749) | (1.228) | | |
| State-Federal Divergence | 0.757 | 0.364 | | |
| Same I ederal Divergence | (0.563) | (0.363) | | |
| Constant | -36.381*** | -36.354*** | | |
| Constant | (5.397) | (4.118) | | |
| Referent group = no policy adoption | * p<0.05 ** p<0.01 | ***p<0.001 | | |

Table B5.

Multinomial Logistic Regression (MNL) Results for Weak or Strong Policy Adoption

| Variable | Odds Ratio (Std. Error) | | | | |
|----------------------------------|-------------------------|---------------------|--|--|--|
| <u>-</u> | Model 4: Weak (1) | Model 5: Strong (2) | | | |
| % Non-White | -0.026 | -0.040 | | | |
| | (0.016) | (0.029) | | | |
| % Foreign-Born | 0.221*** | 0.108 | | | |
| | (0.059) | (0.059) | | | |
| % Metro Area | -0.031*** | -0.056*** | | | |
| | (0.009) | (0.012) | | | |
| % Under 15 | 0.969*** | 0.778*** | | | |
| | (0.121) | (0.128) | | | |
| % GDP from Agriculture | -0.026 | -0.608** | | | |
| | (0.095) | (0.190) | | | |
| Poverty Rate | 0.481*** | 0.453*** | | | |
| | (0.081) | (0.108) | | | |
| Unemployment Rate | -0.143 | 0.009 | | | |
| | (0.085) | (0.110) | | | |
| % BA or Higher | 0.556*** | 0.448*** | | | |
| | (0.069) | (0.089) | | | |
| State Tax Appropriations. for HE | 0.011*** | 0.014*** | | | |
| | (0.003) | (0.003) | | | |
| Financial Aid per Capita | -0.001 | -0.040** | | | |
| | (0.010) | (0.015) | | | |
| Consolidated Governance | -0.854* | -0.453 | | | |
| | (0.362) | (0.523) | | | |
| Student Share of Tuition | 0.029 | 0.062* | | | |
| | (0.017) | (0.025) | | | |
| Need Based Aid per Capita | 0.020 | 0.112*** | | | |
| | (0.021) | (0.029) | | | |
| HSIs per Capita (millions) | -0.417*** | 0.208** | | | |
| | (0.122) | (0.080) | | | |
| Republican Legislature | 1.306** | 2.224*** | | | |
| | (0.403) | (0.515) | | | |
| Republican Governor | -0.667* | -0.567 | | | |
| • | (0.326) | (0.455) | | | |
| Legislative Professionalism | 1.646** | 1.120 | | | |
| | (0.549) | (0.767) | | | |
| % Vote for Republican | -0.011 | 0.067*** | | | |
| 1 | (0.013) | (0.018) | | | |
| Gubernatorial Change | -0.633 | -1.085 | | | |
| 6 | (0.405) | (0.563) | | | |
| Gubernatorial Power | -8.184*** | -6.828*** | | | |
| | (1.198) | (1.623) | | | |
| State-Federal Divergence | 0.800* | 0.813 | | | |
| | (0.338) | (0.479) | | | |
| Constant | -35.645*** | -36.573*** | | | |
| Companie | (3.979) | (4.757) | | | |

C. FAILURE MODELS 90.0 90.0 10.0 10.0 15.0 10.0

Figure C1.
Kaplan-Meier Failure Estimate for Any Policy Adoption

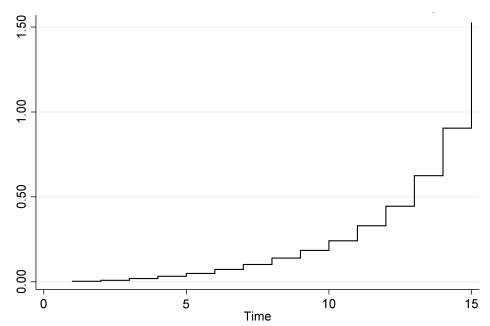


Figure C2.
Nelson-Aalen Cumulative Hazard Estimate for Any Policy Adoption

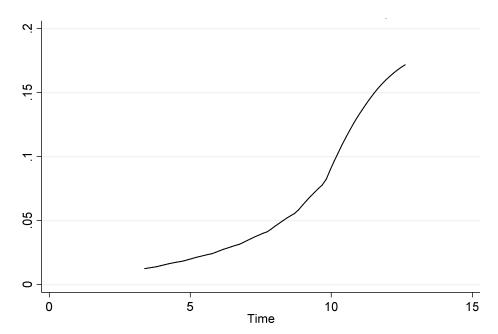


Figure C3. Smoothed Hazard Estimate for Any Policy Adoption

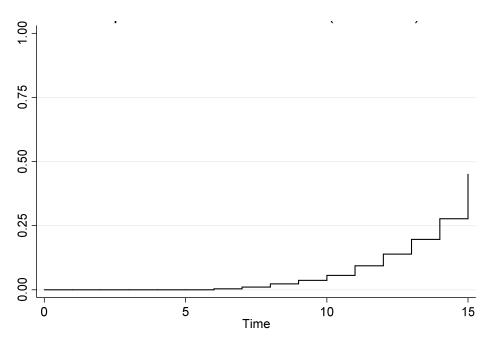


Figure C4.

Kaplan-Meier Failure Estimate for Restrictive Policy Adoption

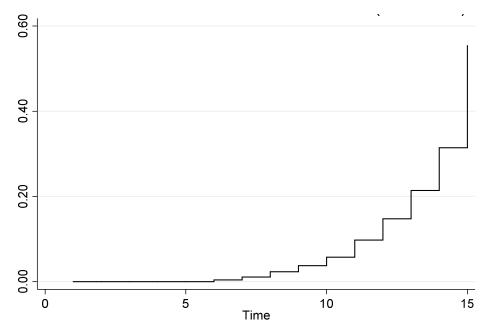


Figure C5.
Nelson-Aalen Cumulative Hazard Estimate for Restrictive Policy Adoption

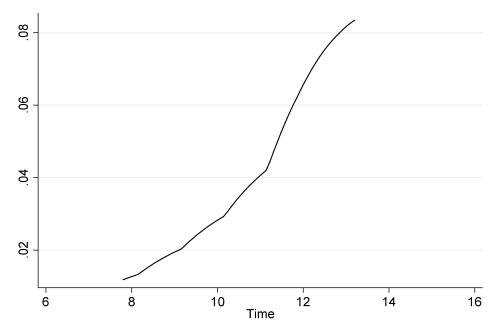


Figure C6. Smoothed Hazard Estimate for Restrictive Policy Adoption

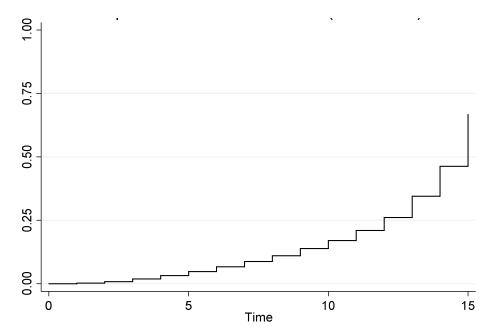


Figure C7.
Kaplan-Meier Failure Estimate for Permissive Policy Adoption

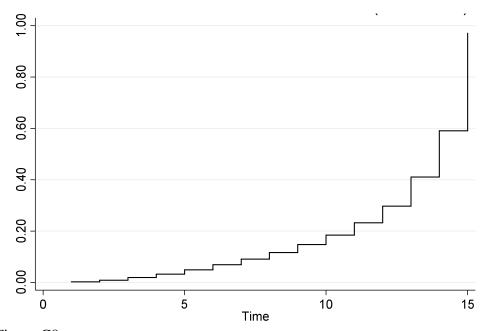


Figure C8.
Nelson-Aalen Cumulative Hazard Estimate for Permissive Policy Adoption

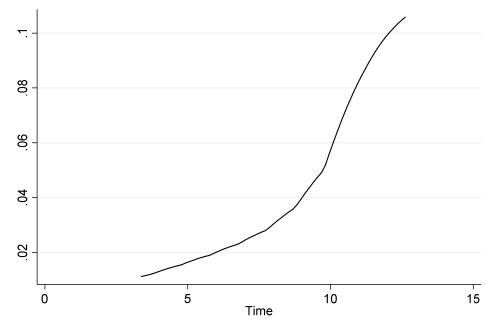


Figure C9.
Smoothed Hazard Estimate for Permissive Policy Adoption

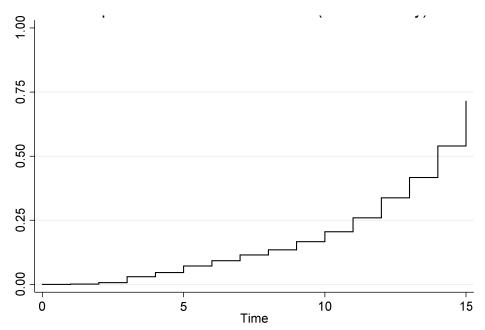


Figure C10.

Kaplan-Meier Failure Estimate for Low-Intensity Policy Adoption

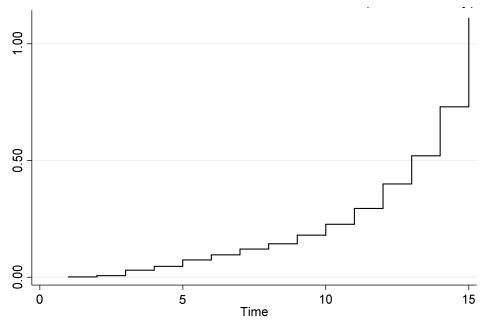


Figure C11.
Nelson-Aalen Cumulative Hazard Estimate for Low-Intensity Policy Adoption

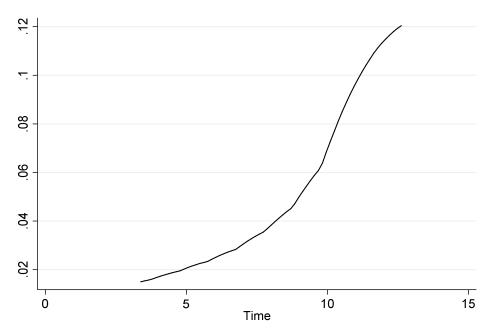


Figure C12.
Smoothed Hazard Estimate for Low-Intensity Policy Adoption

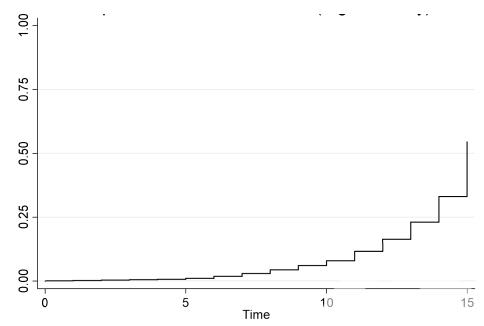


Figure C13.

Kaplan-Meier Failure Estimate for High-Intensity Policy Adoption

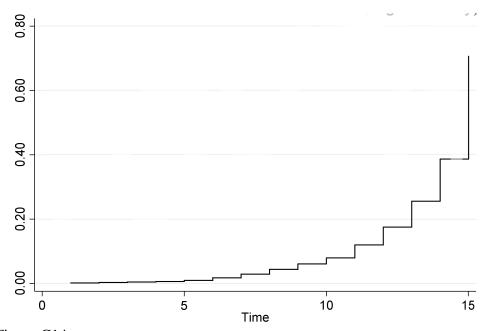


Figure C14.
Nelson-Aalen Cumulative Hazard Estimate for High-Intensity Policy Adoption

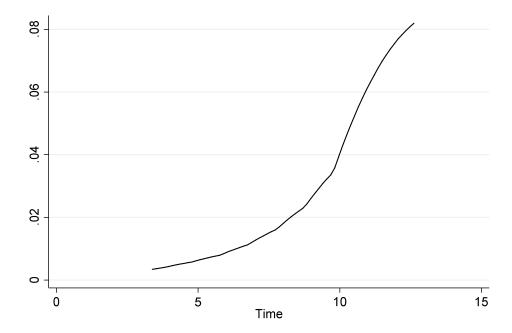


Figure C15. Smoothed Hazard Estimate for High-Intensity Policy Adoption

Table C1.

Any Policy Failure Function

| | Beginning | | | Failure | |
|------|-----------|------|----------|----------|----------------|
| Time | Total | Fail | Net Lost | Function | Standard Error |
| 1 | 750 | 2 | 48 | 0.0027 | 0.0019 |
| 2 | 700 | 4 | 46 | 0.0084 | 0.0034 |
| 3 | 650 | 7 | 43 | 0.019 | 0.0052 |
| 4 | 600 | 8 | 42 | 0.0321 | 0.0069 |
| 5 | 550 | 9 | 41 | 0.048 | 0.0086 |
| 6 | 500 | 12 | 38 | 0.0708 | 0.0106 |
| 7 | 450 | 13 | 37 | 0.0977 | 0.0127 |
| 8 | 400 | 15 | 35 | 0.1315 | 0.0149 |
| 9 | 350 | 16 | 34 | 0.1712 | 0.0172 |
| 10 | 300 | 17 | 33 | 0.2182 | 0.0196 |
| 11 | 250 | 22 | 28 | 0.287 | 0.0227 |
| 12 | 200 | 23 | 27 | 0.369 | 0.0258 |
| 13 | 150 | 27 | 23 | 0.4825 | 0.029 |
| 14 | 100 | 28 | 22 | 0.6274 | 0.0312 |
| 15 | 50 | 31 | 19 | 0.8584 | 0.0282 |

Table C2. Restrictive Policy Failure Function

| | Beginning | | | Failure | |
|------|-----------|------|----------|----------|----------------|
| Time | Total | Fail | Net Lost | Function | Standard Error |
| 1 | 750 | 0 | 50 | 0 | |
| 2 | 700 | 0 | 50 | 0 | • |
| 3 | 650 | 0 | 50 | 0 | |
| 4 | 600 | 0 | 50 | 0 | • |
| 5 | 550 | 0 | 50 | 0 | • |
| 6 | 500 | 2 | 48 | 0.004 | 0.0028 |
| 7 | 450 | 3 | 47 | 0.0106 | 0.0047 |
| 8 | 400 | 5 | 45 | 0.023 | 0.0072 |
| 9 | 350 | 5 | 45 | 0.037 | 0.0094 |
| 10 | 300 | 6 | 44 | 0.0562 | 0.0121 |
| 11 | 250 | 10 | 40 | 0.094 | 0.0165 |
| 12 | 200 | 10 | 40 | 0.1393 | 0.021 |
| 13 | 150 | 10 | 40 | 0.1967 | 0.0263 |
| 14 | 100 | 10 | 40 | 0.277 | 0.0338 |
| 15 | 50 | 12 | 38 | 0.4505 | 0.0507 |

Table C3. *Permissive Policy Failure Function*

| | Beginning | | | Failure | |
|------|-----------|------|----------|----------|----------------|
| Time | Total | Fail | Net Lost | Function | Standard Error |
| 1 | 750 | 2 | 48 | 0.0027 | 0.0019 |
| 2 | 700 | 4 | 46 | 0.0084 | 0.0034 |
| 3 | 650 | 7 | 43 | 0.019 | 0.0052 |
| 4 | 600 | 8 | 42 | 0.0321 | 0.0069 |
| 5 | 550 | 9 | 41 | 0.048 | 0.0086 |
| 6 | 500 | 10 | 40 | 0.067 | 0.0103 |
| 7 | 450 | 10 | 40 | 0.0877 | 0.012 |
| 8 | 400 | 10 | 40 | 0.1105 | 0.0137 |
| 9 | 350 | 11 | 39 | 0.1385 | 0.0156 |
| 10 | 300 | 11 | 39 | 0.1701 | 0.0177 |
| 11 | 250 | 12 | 38 | 0.2099 | 0.0203 |
| 12 | 200 | 13 | 37 | 0.2613 | 0.0234 |
| 13 | 150 | 17 | 33 | 0.345 | 0.0282 |
| 14 | 100 | 18 | 32 | 0.4629 | 0.0342 |
| 15 | 50 | 19 | 31 | 0.667 | 0.0425 |

Table C4. Low-Intensity Policy Failure Function

| | Beginning | | | Failure | | |
|------|-----------|------|----------|----------|----------------|--|
| Time | Total | Fail | Net Lost | Function | Standard Error | |
| 1 | 750 | 1 | 49 | 0.0013 | 0.0013 | |
| 2 | 700 | 4 | 46 | 0.007 | 0.0031 | |
| 3 | 650 | 15 | 35 | 0.03 | 0.0066 | |
| 4 | 600 | 10 | 40 | 0.0461 | 0.0082 | |
| 5 | 550 | 15 | 35 | 0.0721 | 0.0104 | |
| 6 | 500 | 11 | 39 | 0.0925 | 0.0119 | |
| 7 | 450 | 11 | 39 | 0.1147 | 0.0133 | |
| 8 | 400 | 9 | 41 | 0.1347 | 0.0146 | |
| 9 | 350 | 13 | 37 | 0.1668 | 0.0165 | |
| 10 | 300 | 14 | 36 | 0.2057 | 0.0187 | |
| 11 | 250 | 17 | 33 | 0.2597 | 0.0216 | |
| 12 | 200 | 21 | 29 | 0.3374 | 0.0251 | |
| 13 | 150 | 18 | 32 | 0.4169 | 0.0282 | |
| 14 | 100 | 21 | 29 | 0.5394 | 0.0326 | |
| 15 | 50 | 19 | 31 | 0.7144 | 0.0375 | |

Table C5. *High-Intensity Policy Failure Function*

| | Beginning | | | Failure | |
|------|-----------|------|----------|----------|----------------|
| Time | Total | Fail | Net Lost | Function | Standard Error |
| 1 | 750 | 1 | 49 | 0.0013 | 0.0013 |
| 2 | 700 | 1 | 49 | 0.0028 | 0.002 |
| 3 | 650 | 1 | 49 | 0.0043 | 0.0025 |
| 4 | 600 | 1 | 49 | 0.006 | 0.003 |
| 5 | 550 | 2 | 48 | 0.0096 | 0.0039 |
| 6 | 500 | 4 | 46 | 0.0175 | 0.0055 |
| 7 | 450 | 5 | 45 | 0.0284 | 0.0073 |
| 8 | 400 | 6 | 44 | 0.043 | 0.0093 |
| 9 | 350 | 6 | 44 | 0.0594 | 0.0113 |
| 10 | 300 | 6 | 44 | 0.0782 | 0.0134 |
| 11 | 250 | 10 | 40 | 0.1151 | 0.0172 |
| 12 | 200 | 11 | 39 | 0.1637 | 0.0217 |
| 13 | 150 | 12 | 38 | 0.2306 | 0.0272 |
| 14 | 100 | 13 | 37 | 0.3307 | 0.0351 |
| 15 | 50 | 16 | 34 | 0.5448 | 0.0502 |