

Understanding State in Vitro Fertilization Policies Using Political Culture and Policy Liberalism

Rodney E Stanley*

Department of Public Administration, Tennessee State University, United States

*Corresponding Author

Rodney E. Stanley, Department of Public Administration, Tennessee State University, United States.

Submitted: 2025, Aug 01; Accepted: 2025, Sep 08; Published: 2025, Sep 16

Citation: Stanley, R. E. (2025). Understanding State in Vitro Fertilization Policies Using Political Culture and Policy Liberalism. *Politi Sci Int*, 3(2), 01-08.

Abstract

Purpose Statement: This study intends to explain the differences in IVF policy across the 50 states using political culture and policy liberalism as indicators, explaining why some states adopt IVF policies while others do not.

Literature: After reviewing the literature for this study, a gap exists in empirically explaining why some states require employers to cover IVF treatment through employer-based insurance policies, while others do not.

Data: This study incorporates multiple socioeconomic and political variables to answer the research question.

Methods: This study utilizes a policy diffusion model similar to Berry and Berry's landmark work explaining policy adoption across the 50 states.

Findings: Utilizing a logistic regression model, the study found that policy liberalism is a significant factor in predicting IVF policy regulation and adoption across the states

Limitations: Although quantitative techniques help explain general patterns of policy diffusion, to gain more in-depth knowledge of state cultural differences in IVF policy adoption and regulation, especially those states with similar political cultures, future studies should incorporate qualitative techniques that could provide the breadth and depth needed to understand these differences.

1. Introduction

Since the Alabama Supreme Court ruling in *LePage v. Center for Reproductive Medicine, P.C.*, political functionaries and policymakers are paying greater attention to the in vitro fertilization (IVF) debates across the fifty states and Congress. Politicians openly support this necessary treatment as IVF becomes more prominent in family planning and development. According to the Advocacy Resources, recent public statements supporting IVF policies are examples of bipartisan support for this medical procedure [1].

“House Speaker Mike Johnson (R-LA) called IVF “something we ought to protect and preserve” at this year’s Republican Issues Conference. Sen. Tammy Duckworth (D-IL) shared that her family’s use of IVF is the reason she “gets to experience the chaos and the beauty, the stress and the joy, that is motherhood.” Sen. Tim Kaine (D-VA) said that “patients have a right to access IVF services or other reproductive technologies,” and “providers have a right to

provide those services and technologies.” Sen. Marsha Blackburn (R-TN) said, “I am for IVF, and I know many are pushing for this to be more completely covered via insurance. That is good [1].”

Although IVF receives bipartisan support at the federal and some state levels of government, the states vary tremendously in the policies that protect and govern IVF procedures. This study is intended to demonstrate that policy liberalism should be considered as a way to draft legislation to ensure its passage so healthcare providers and families can be provided with the necessary protection so this important policy arena can continue to thrive across states.

1.1. IVF Policy in Some States

During the 2024 legislative session in Tennessee, two democratic representatives introduced legislation in both the House and Senate to protect the rights of families opting for in vitro fertilization (IVF) to start a family. HB 2227 and Senate Bill 1918 were introduced to

codify IVF policy to prevent what happened in Alabama's in vitro fertilization industry from happening in Tennessee. In the case of Alabama, the ruling from the Alabama State Supreme Court stated that "extruterine children" (children who were "unborn" outside the biological uterus) were covered under Alabama's wrongful death law. The court's ruling was based on the wrongful death statute and the additions to the Alabama State Constitution in 2018 protecting the rights of unborn children [2]. This ruling led to a temporary shutdown of the IVF industry in Alabama, temporarily leaving families who were in the process of going through the IVF process devastated that their planning and saving for the procedures might be prohibited.

The Alabama General Assembly responded by passing legislation that shielded providers from prosecution and lawsuits if something might happen to an embryo while the process of IVF was occurring. The bill passed with bipartisan support in both chambers in Alabama, resulting in healthcare providers offering this reproductive health procedure again. In Tennessee, however, the need for legislation to protect IVF was and still is viewed much differently. Both HB 2227 and Senate Bill 1918 were stopped in both subcommittees and did not even make it to the floor for a vote. Opposed mainly by Republican lawmakers, the consensus was that IVF procedures were not under any threat of being taken away from those wishing to use the method. Therefore, legislation is unnecessary to protect something that is not being threatened [3].

HB 2227 and Senate Bill 1918 would have exempted the use of contraceptives and "the disposal of embryos resulting from fertility treatments, including healthcare services, procedures, testing, medications, treatments, or products" from Tennessee's statute on abortion. In addition, both bills included language that specifies the disposing of embryos resulting from fertility treatments as not associated with abortion care. In addition, both bills also included language that stipulated that any device or product used to prevent pregnancy is also not considered abortion care. The sponsors of the bill believed the reason for this type of language was needed because, in Tennessee, individuals who provide abortion treatments can be charged with a Class C felony. The only exclusions from being accused of a felony are cases involving molar or ectopic pregnancies where the unborn child is not expected to live or the mother's life is in danger [4].

Both bills faced immense opposition once they were introduced in the subcommittees. Many of the Republicans argued that the legislation was not needed because there are currently no state laws forbidding IVF treatment or birth control in Tennessee. The Republicans feel that current IVF procedures and protections for birth control are protected by an interpretation of Tennessee's current abortion law from Attorney General Jonathan Skrmetti, which applies only to the embryo after it has been transferred to a uterus and that the law does not apply to discarded or unused embryos. As a result of this ruling, the Republicans in the Tennessee General Assembly voted down the bill in both committees [4].

In recent conversations with Representative Harold Love Jr. and Senator Raumesh Akbari (the sponsors of both bills), the plan is to reintroduce both bills in the 2025 General Assembly, which begins in January 2025. However, the passage of both bills continues to be highly unlikely due to the continued view that IVF somehow violates the sanctity of life for unborn children. For instance, in June of 2024, the Southern Baptist Convention voted to approve a resolution opposing the use of in vitro fertilization IVF. It encouraged their parishioners not to seek this treatment to start a family. Their opposition is based on the disposal of unused and discarded embryos. In addition, the Catholic Church has taken a stance against IVF treatment as well by indicating that it is a violation of the marriage act between a man and a woman. With the Republicans holding a supermajority in both the Tennessee House and Senate and from prominent religious denominations taking a stance against IVF, it seems unlikely that any codified protections for IVF treatment are going to emerge anytime soon from Tennessee's General Assembly. One explanation for why Tennessee has yet to protect families with codified legislation regarding IVF might best be provided by John Lyon in one of his many writings on political culture.

"Political culture consists of widely held values, attitudes, and beliefs that shape political dialogue and behavior, popular expectations of government and ultimately public policy". The South overwhelmingly influences Tennessee's political culture; Southern culture is traditionalistic. Therefore, Tennessee's political culture is traditionalistic, and its citizens strongly support traditional values and institutions. Religion has played a significant role in Tennessee's political culture. Tennessee is overwhelmingly Protestant, Baptist, Methodist, and Presbyterian. However, in rural areas of Tennessee, Fundamentalism strongly influences the political culture.

The case of IVF in Tennessee is not the only case around the country that is being challenged in legislative efforts to protect this medical treatment. The American Society for Reproductive Rights calls on all families, citizens, doctors, and other stakeholders to support the following bills that are being considered to protect IVF and parents' rights and IVF treatment facilities and providers across the country. The following list includes the recent bills being introduced across the country in state legislatures for IVF stakeholders to support:

- Access to Infertility Treatment and Care Act (S.2386 / H.R.4731)
- Equal Access to Reproductive Care Act (H.R.4391)
- Family Building FEHB Fairness Act (S.1262 / H.R.2828)
- The Comprehensive Cancer Survivorship Act (H.R.4363)
- Veteran Families Health Services Act of 2023 (S.2801 / H.R.5492)
- Veterans Infertility Treatment Act (H.R.544)

According to the authors, there is also a federal policy being considered by Congress that establishes a federal right to access of IVF services:

- Access to Family Building Act (S.3612 / H.R.7056)

2. Literature Review

As states continue to adopt and pass legislation attempting to codify and protect all stakeholders in the IVF policy arena, one question comes to mind in trying to understand this Social Phenomenon: *why some states require employers to cover IVF treatment through employer-based insurance policies, while others do not?* Even though IVF policies are becoming more universally accepted across the country, there are still legislatures and politicians who do not support IVF for various reasons. To better understand why a particular segment of the population is still opposing IVF policies, examining this policy arena through the lens of political culture and policy liberalism may assist in understanding such legislative behavior. Much work has been conducted to explain political culture's influence on public policy formulation and implementation. Examining many of the various historical and contemporary works in this area will help explain the author's empirical model to explain why some states support IVF legislation while others oppose this important medical procedure.

2.1. Political Culture

Political culture is one of the central research themes in contemporary political and policy science, but scholars remain divided on its meaning. Almond and Verba postulate that "political culture is the pattern of individual attitudes and orientations toward politics among the members of a political system [5]. The subjective realm underlies and gives meaning to political actions." "Political Culture" functions as a conceptual umbrella for a wide heterogeneous range of political issue areas, such as national character, the impact of collective historical experiences on national identity, and the emotional or normative dimensions of the relationship between the state and its citizenry. This includes aspects such as apathy or a sense of political efficacy, which are prominent concerns in the literature regarding political culture [6]. According to Elkins & Simeon, "Political culture" is a shorthand expression of a "mindset" that "has the effect of limiting attention to alternative behaviors, problems, and solutions that are logically possible [7]." However, one of the most, if not the most, prominent scholars of political culture, Daniel Elazar, defined political culture as a "concept attempting to explain the differences in socio-demographic characteristics of the American states [8].

He describes the influence of political culture on state political systems and the legislation these systems promote. He identifies three significant subcultures across the United States that the early American settlers brought to this country. Elazar notes that these tendencies are often found among politicians and the general public, and they serve to shape each individual's understanding of government and, ultimately, its purposes and outcomes. Elazar points out that states with individualistic subcultures emphasize the marketplace and a limited role of government. The moralistic subculture promotes the commonwealth and expects the government to advance the public's interest. At the same time, the third subculture identified by Elazar is the traditionalistic political culture. Traditionalists expect government to maintain the existing social and economic hierarchy, and governance remains an obligation of the elite rather than the ordinary citizen [9]. Elazar

utilizes the early American settlement patterns to identify the dominant political subcultures existing in each of the 50 American states. The moralistic subculture dominates states in the extreme north, the northeast, and the Pacific coast. States across the mid-section of the United States are classified as individualistic, and those states in the South are generally seen as traditionalistic [8].

Although Elazar's work is probably the most recognized among scholars, several problems have been identified in using this model to explain current state political cultures. One such issue is the identification of subcultures within the dominant cultures of states. Ira Sharkansky utilizes Elazar's classifications to create a nine-point linear scale, which enhances comparative state analysis in empirical terms. The creation of these nine points allows for both the primary and secondary cultures that may exist in a state. Sharkansky hypothesizes that certain political traits should be associated with each type of culture. Each of the 50 states is given a political culture score, which correlates with 23 variables reflecting political participation, government size, government prerequisites, and government program implementation.

Sharkansky notes that two-thirds of these dependent variables demonstrate the expected relationship with Elazar's scale of political cultures. He concludes that political culture can be related to several state traits regarding politics and public service [10]. Other authors in the political field have been critical of Elazar's topography due to its lack of empirical evidence. Clynch argues that the interval scale developed by Sharkansky does not exhibit the same relationships with the dependent variables when regionalism is included. He notes that the impact of political culture can be seen intra-regionally rather than nationally [11]. Schiltz and Rainey conducted a secondary analysis of data from 13 states in 1968, initially conducted by the Comparative State Elections Project, to determine whether Elazar's assumptions of the existing political subcultures in the 50 states are statistically substantiated. These two authors conclude that little statistical evidence supports Elazar's classifications [9].

Robert Savage, however, points out several flaws in the research analysis conducted by Schiltz and Rainey [12]. He notes that these two authors fail to address several ambiguities found in the survey. He also argues that they form hypotheses loosely construed from Elazar's work. Savage questions their statistical analyses and the "rummage sale approach" Schiltz and Rainey utilize in their political culture study. He argues that Elazar's theory has been proven valuable to political research. Savage points out that this normative scale is "the one political measure that compares favorably with traditional socioeconomic indicators in explaining policy variations among the states." Nardulli collects and analyzes data from a 1986 telephone survey that also examined the utility of Elazar's typology [13]. Nardulli wanted to determine whether Elazar's assumptions concerning citizens and politics were still valid and correct regarding political culture. Also, Nardulli questions whether the citizens categorized in Elazar's political subcultures exhibit the characteristics required in these classifications. Nardulli posits that many individuals in the survey

did not follow the belief systems in each subculture identified by Elazar. Nardulli suggests that the failure of Elazar to operationalize his scheme for categorizing geographic locales “makes it difficult to rebut the implication that his classifications measure little more than sectional differences.” Therefore, he does not conclude that Elazar’s typology is a good measure for explaining the impact of subcultures on the overall political culture of the state.

Social class, regional diffusion, and economic disparity are other research areas concerning political culture and policy diffusion that have received attention in the academic literature. Black and Black posit that even when power and influence within the South shifted as the population of a new middle class of Southerners composed of professional, technical, managerial, clerical, and skilled workers began to outnumber the agrarian middle class, the political agenda of these states remained virtually unchanged because most members of this new middle class shared the same agrarian beliefs, values, and interests [14]. The emerging traditionalistic and entrepreneurial individualistic cultures greatly emphasized financial self-reliance and minimal government intervention. The authors point out that the transformation of social order within the South from 1940 through 1980 has not resulted in a political culture shift. Most white residents in this region still believe in individual, as opposed to governmental, responsibility for economic well-being, and the policies created in these states reflect these fundamental values.

2.2. Policy Liberalism

Many efforts have been made to quantify the importance of political culture debates in understanding state and federal policy diffusion. Much of this work is around the concept of policy liberalism. Wright, Erikson, and McIver provide a fascinating multilevel quantitative study utilizing regression and 2-stage least squares regression to demonstrate a liberal-conservative identification variable measuring public opinion and its relation to policy liberalism [15]. Their model of analysis demonstrates that ideological tendencies of state electorates and not socioeconomic variables at the state level are significant determinants of the direction of state policy adoption. They further suggest that more progressive states tend to pass more liberal policies, while more conservative states tend to pass fewer policies or policies, if any. Their work is groundbreaking in this era because it was one of the first attempts to quantify socioeconomic and population demographic variables in showing the impact of political culture on policy adoption.

Another set of scholars who were researching policy liberalism during this time was Klingman and Lammers [16]. In a search for more of a general theory of policy liberalism, these two scholars incorporated a factor analysis using expenditure variables such as AFDC payments and percentage of federal allotment to states for the Title XX social security program by state, as well as regulatory policy programs such as Mc Crone- Cnudde scale of anti- discrimination provisions as of 1961 and number of years for states to ratify the Equal Rights Amendment for Women, if the state ever did ratify the program. Using these and a few other

variables in factor analysis, the scholars identified states with a more liberal policy record and agenda as non-southern, Great Lakes, with large, diverse, and urban populations. They also possess state governments with high levels of institutional and fiscal capacity.

Gray, Hanson, and Kousser have written extensively on public policy liberalism across the American states [17]. In what many (including myself) perceive to be one of the best textbooks ever written about public policy formulation and the influence of political culture and policy liberalism by state. They effectively include various policy experts across a diverse arena of policy scholars to demonstrate how policy liberalism and political culture are factors at all policy levels [17]. The literature is immense and filled with quantitative and qualitative studies suggesting the importance of understanding political culture’s impact on public policy formulation. These scholars provide us with concepts derived from the numerous studies conducted on policy liberalism over time to discuss as factors contributing to why some states adopt more progressive policies like IVF.

In contrast, others are still reluctant to see the importance of such policies. Finally, the literature on policy diffusion studies is also important for this argument. Gilardi, Fabrizio and Fabio Wasserfallen [18]. Provide an overview of how policy diffusion studies have been used to describe policy adoption studies since Berry and Berry’s landmark study. Although Berry and Berry were writing about policy diffusion as it relates to lotteries, their argument can be used to model IVF policy adoption because they demonstrate that regional diffusion, as well as political, economic, and social characteristics, serve as plausible explanations of state government policy innovations [19]. These two authors examine state lottery adoption across the states by utilizing panel data to reveal that a state’s internal political and economic characteristics will influence the probability that the state adopts a lottery. The author of this manuscript intends to utilize Berry and Berry’s policy diffusion model while incorporating political culture and policy liberalism as major indicators in examining IVF policy diffusion. Pierce and Miller’s contributions about economic variables being drivers of policy adoption are also incorporated in this study [20]. As Pierce and Miller suggested, this study uses similar socioeconomic variables as indicators.

2.3. Rationale for the Study

After reviewing the literature for this study, it is apparent that a void exists empirically explaining *why some states require employers to cover IVF treatment through employer-based insurance policies, while others do not?* In addition, some states are adopting IVF policies to protect the rights of parents and healthcare specialists and regulate the insurance industry, where employers pay for the various procedures associated with IVF treatment. The vast variances in these IVF policy differences need to be examined empirically. This study intends to explain these differences in IVF policy across the 50 states using political culture and policy liberalism as indicators explaining these differences. This study generated three null hypotheses from the academic literature to

answer the following research questions.

2.4. Null Hypotheses

H₀₁: Policy liberalism has no impact on determining which states adopt employer-mandated IVF insurance coverage.

H₀₂: Political culture has no impact on determining which states adopt employer-mandated IVF insurance coverage.

H₀₃: The various socioeconomic, political, regulatory, and urbanization indicators have no significant impact on determining which states adopt employer-mandated IVF insurance coverage.

3. Data and Methods

Based on the works of various scholars conducting research in policy diffusion, political culture, and policy liberalism, several variables were identified as predictors and descriptors of this phenomenon. The following are the conceptual and operational definitions of the variables utilized in this study to explain the impact of political culture and policy liberalism on IVF policy in the American states. The data was a snapshot of two years, 2023 and 2024, with an N=100.

3.1. Conceptual and Operational Definitions: Dependent Variable

The dependent variable (DV) in this study is the number of states requiring insurance companies to pay for IVF treatment. Currently, 21 states (and D.C. not included) require insurance coverage for IVF treatment. Therefore, the dependent variable in this study is states that require and do not require employers to pay the cost of IVF treatment for employees. The dependent variable will be coded as a dichotomous variable where 0 represents states requiring insurance coverage for IVF and 1 for states not requiring coverage for IVF treatment. Only 11 states require both IVF and fertility preservation coverage. These states are Colorado, Connecticut, Delaware, Maryland, Maine, New Hampshire, New Jersey, New York, Rhode Island, Utah, and Washington, D.C. In addition to these 11 states, 10 others offer restrictive insurance coverage that varies dramatically from state to state. They are California, Montana, Oklahoma, Texas, Arkansas, Louisiana, Illinois, Kentucky, Ohio, Hawaii, and West Virginia. For example, Arkansas' restrictive measures include a stipulation that a patient's eggs must be fertilized with her partner's sperm. This stipulation excludes LGBTQIA+ couples and single parents from IVF treatment in Arkansas. Similar types of restrictions are found in Texas and Hawaii as well [21,22].

3.2. Independent Variables

Policy Liberalism is defined as a state's preference for the policies and restrictions it chooses to adopt and place on policy based on each state's political preferences. This concept was codified by the work of Gray, Hanson, and Kousser who assign a quantifiable score to each state based on a set of policy preferences and restrictions on five public policy choices in each state [17]. The policy arenas used to create this score for each state were gun control, abortion laws, TANF, tax progressivity, and state unionization laws between 2013 and 2016. The index records are on a 1 to 50 scale, with one being more progressive and 50 being

more conservative. This score is incorporated as an independent variable in this study. Political Culture as defined by Elazar's three distinct political cultures across the states is the definition and the conceptual reference to this variable. The political culture variable is operationalized according to Elazar's concepts of traditionalistic, moralistic, and individualistic states as utilized by Stanley and French in 2002 [23]. There, dichotomous variables were created, with 0 representing each of the three concepts and 1 indicating that the state was not categorized as one of the three categories. Three dummy variables are created in the dataset and two of the variables are added to the statistical test while the constant represents the scores for the third dummy variable in the model. Per Capita Income by State is used as an independent variable in the study to capture a state's wealth and population. This variable is calculated by dividing the total income of a state by its population. This will serve as an interval-level variable in the study to measure the effect of wealth and population of a state and its impact on IVF policy. Per Pupil Expenditures is defined as the amount of revenue spent by each for each student. This measure is operationalized by dividing the total expenditure spent by each state by the number of students enrolled in each state [24].

Political Party ID variable in this study incorporates a political party identification variable by creating a dichotomous variable that stipulates party control of the state. Party control of a state is the party that controls the governorship in each state. The coding scheme is 0 for states with democratic governors and 1 for states with republican governors [25]. The Presidential ID variable is created based on the 2024 and 2020 presidential election votes and coded as follows: states that voted Democratic in both years received a 0, and states that voted Republican received a 1. This variable is consistent with the literature suggesting that presidential voting trends demonstrate a state's political culture and political liberalism [25,26].

Regulatory Control variable comes from the Dove and Sobel study, that provides the first empirical study of how differences in the regulatory review processes across the 50 states affect the regulatory level in a state [27]. Inefficient and ineffective regulations significantly impact the economic growth of a state. Their initial findings suggest that sunset provisions are the most effective means political functionaries constrain state regulatory systems. Their comprehensive regulation study defines our regulatory control variable as "the number of regulatory rules per capita issued per year by each state's regulatory agencies" [27]. The coding scheme for this interval level variable is derived from the Cicero Institute's 2024 National Regulatory Reform Progress Ranking Report [28].

State Percentage of Urbanization is defined as how large numbers of various populations become perpetually connected and concentrated in areas that form cities [28]. Based on the numerous studies that measure the amount of urbanization on policy diffusion, we incorporate a measure of urbanization based on the percent of urbanization by state, as recorded by Dickert [29]. This is another interval-level variable in the study to measure the amount of

urbanization in a state and how it impacts IVF policy by state.

4. Methodology

The statistical method employed by this study is logistic regression. Although this statistical method has various limitations associated with its use (e.g., violations of OLS assumptions), its strength is that it allows various types of categorical and interval-level variables to be used simultaneously in a study to predict a policy outcome. Since the dependent variable in this study is dichotomous (whether a state requires employers to cover IVF treatment through

insurance policies, yes or no), this method is appropriate for this data set. Logistic regression is chosen over probit regression to prevent extreme outliers from dramatically impacting the data [30]. To ensure the dependability of the study, the data set was subjected to a Variance Inflationary Factor (VIF) test to measure the level of multicollinearity present in the model. Based on a VIF cut score of 5.6, it was determined that multicollinearity was not a problem factor in the model. The VIF scores are reported in the Table.

Variable	Odds Ratio	Z	P>.	VIF
PRESID	.426	-1.07	.287	2.92
PCT	3.74	1.57	.116	2.79
PCM	1.41	.044	.662	1.85
PCI	N/A	N/A	N/A	N/A
Policy Liberalism	1.10	2.87	.004**	3.06
Education	.999	-1.12	.261	4.27
Wealth	1.00	.95	.341	3.25
Governors ID	.747	-.47	.640	1.94
Regulation	8.64	-1.06	.289	1.17
Urbanization	.015	-1.64	.101	2.32
Constant	1.52	.16	.871	
LR Chi ² 24.49 LR Chi ² Prob. .004	Pseudo R ² .180	Note:***p<.001,**p<.01,*p<.05.05		

Table: Logistic Regression Data Analysis

4. Findings and Discussion

Logistic regression is the statistical method employed in this study to measure the impact of political culture and policy liberalism on states adopting various forms of IVF policy. This statistical methodology is employed because the dependent variable regarding IVF policy diffusion is dichotomous (0 = yes and 1 = no). Other studies, such as Furlon Ellison and Nybrotten (although examining lottery adoption), similarly utilize logistic regression to the one employed by this study. Several problems can be associated with using logistic regression; the most notable is multicollinearity. A VIF (variance inflationary factor) test was conducted on the data to check for high correlations among predictor variables. The reported VIF statistics suggest that multicollinearity between the variables listed in the table is not a problem. The LR Chi² goodness of fit p-value of .004 (24.49) with ten df suggests that the model fits the observed distribution of parameters. Although the model demonstrates an acceptable overall model fitness score, the estimates for the pseudo-R² .18 indicates that the logistic regression model explains only a small amount of predictability across the indicators in the study.

The unstandardized regression coefficient (B) for policy liberalism suggests that for every unit increase in a state's level of policy liberalism, an increase of 1.10 will occur in the likelihood of

an IVF policy being adopted among states. The direction of the relationship suggests that states that are higher on the policy liberalism scale are more likely to adopt and regulate IVF employer-based insurance funding. This variable was the only variable in the study demonstrating statistical significance at the confidence level of .004. The odds ratio Z score represents an increase of 2.87, where policy liberalism impacts IVF policy adoption by the state in the model allows for the rejection of the null hypothesis. Since the significant level of policy liberalism reports a statistically significant p<.001, the findings suggest that this variable is the best predictor in the model indicating that the likelihood of IVF policy being regulated and adopted by a particular state can be understood by how liberal a state has been in prior policy adoption activities. Hence, this finding is similar to Gray et al. study by suggesting that policy liberalism helps explain why some states regulate employer-based IVF regulation.

Regarding the political culture variables in the model, none of the indicators reported statistically significant findings. These findings are consistent with several various scholars who argue that Elazar's measures of political culture are no longer valid as a measure of political culture. Although not specifically tested in this study, the assumption is the presence of numerous small distinct cultures within the primary culture of a state as one possible reason

why the Elazar political cultural variables failed to demonstrate statistical significance [31]. Despite the lack of statistical support for the remaining socio-demographic variables in the regression model, this study lends support by suggesting that the economic, political, and urban indicators offer some explanations as to why states adopt IVF policies. For instance, the urbanization variable suggests that an inverse relationship between the level of urbanization in a state hurts IVF policy adoption. In other words, the direction of the relationship suggests that states with lower amounts of urbanization are less likely to pass or adopt IVF legislation. Although the variable was not statistically significant at the 95% confidence level, it was close at .10. Even though only one null hypothesis is rejected, the data seems to suggest that states with scores reflecting conservative, traditionalistic political and policy cultures, tend to not adopt IVF policies in the same manner as states with moralistic and progressive scores on policy liberalism.

Therefore, the following null hypothesis was rejected in this study: H01: There are no differences between states with higher scores on the policy liberalism scale and states with lower scores on the policy liberalism scale regarding the adoption of mandatory insurance payments for IVF treatment. Therefore, the null hypothesis was replaced with the alternative hypothesis that

H1: there is a difference in states with higher scores on the policy liberalism scale compared to states with lower scores on the policy liberalism scale, and they are more likely to adopt mandatory insurance payments for IVF treatment.

So why is this study important? This study should be used to inform policymakers about the importance of understanding cultural differences in adopting IVF policy, even among states with similar political cultures. Just because a state might fall within a traditional culture as defined by scholars such as Elazar, it has been suggested that subcultures within these more significant cultural categories are moving states away from typical voting and policy adoption patterns. As Gray and others have suggested with policy liberalism, states vary across policy arenas. For example, a state like Vermont might score overall as progressive on the policy liberalism scale. However, when it comes to policies on gun control, their policies tend to reflect more traditionalistic and conservative culture states. This study could assist state policymakers in Tennessee to understand the importance of drafting legislation that takes into consideration the various attributes of policy liberalism in understanding how to draft legislation that will be adopted in the TN General Assembly.

4.1. Limitations

One limitation of this study is that the policy liberalism measure needs to be updated based on the changes in policy preferences across the states and recent political elections. The policy liberalism score created by Gray et al, was developed between 2013 and 2016. This score was generated using traditional policy arenas such as gun control, tax progressivity and abortion. As medical technological advances continue to be regulated by states, such as IVF, this measure should be updated to incorporate such policy

measures. In turn, with AI becoming more prominent in everyday life, state legislatures are going to be asked to regulate this arena as well. This policy area should be considered as an indicator of a new policy liberalism measure as well. With only two years of data being used to make this prediction with the logistic regression statistical test, the probability of those trends occurring over a longer period of time is needed.

A much more sophisticated model using panel data over time could provide the depth that is needed to explain in more detail what drives IVF policy in the American states such as the study by Caughey & Warshaw, [31]. They incorporate a latent variable model (LVM) to a historical event analysis examining 148 policies across the 50 states over time. Although it is limited in scope at explaining policy change, it does provide insight into policy adoptions over time. Such a model could provide more explanatory power in the IVF policy arena. Finally, incorporating specific case studies dealing with the individual states and their perceptions of IVF would also be welcomed in the literature on IVF policy adoption. Future studies on this topic should consider these types of methodological techniques for explaining IVF policy adoption that can provide insight to policymakers across the states.

5. Conclusion

The purpose of this study was to apply an empirical test to an area of IVF policy regulation across the fifty states to demonstrate that policy liberalism is an important indicator of policy adoption and policy regulation. The findings suggested that we satisfied this task. By applying what we have learned from these findings, states, including Tennessee, should consider drafting new legislation that considers the various elements of policy liberalism and political culture over time. Careful consideration of the language and provisions in drafting these policies is needed because certain aspects of a state's culture are changing. Some are becoming more progressive while others are remaining conservative and, in some cases, moving further to the right based on recent political elections. Take for instance Lyons's work, on Tennessee's political culture, and the role of religiosity in defining its culture, especially how the Southern Baptist Convention in Tennessee passed a resolution in their conference opposing IVF treatment.

Despite legislative efforts in 2024 to pass IVF protection in the Tennessee General Assembly, it dramatically failed to make it out of committee. Surprisingly in 2025, the Tennessee General Assembly passed legislation protecting IVF treatment in the state. However, 37 Republican's voted against the bill [32]. Tennessee is considering legislation that will require employers to pay a portion of the IVF expense through insurance coverage and it is expected that this bill will be considered in the next General Assembly meeting. Passage of the IVF bill in Tennessee was possible because the Republicans who sponsored the bill took out the language protecting abortion and simply focused on IVF and certain forms of birth control in order to gain enough democratic support for the bill. Without provisions in the bill for birth control, there were not going to be enough democratic support for the legislation [32]. These recent occurrences in Tennessee legislation

in reference to IVF policy further supports our study suggesting that policy liberalism is a good measure for understanding policy adoption across the fifty states [33-37].

References

1. Advocacy Resources. (2024). What support for IVF looks like. *American Society for Reproductive Medicine*
2. Associated Press. (2024). Alabama's IVF embryo ruling explained. Moreover, what's next? AP News.
3. Brooks, Brad. (2024). US Southern Baptists condemn IVF procedure. Reuters. Catholic News Agency. (2024). What is the Catholic Church's position on IVF?
4. NBC News Online, (2024). TN bill meant to protect IVF treatments, further define 'abortion' in state law, fails in House subcommittee.wbir.com.
5. Almond, G. A., & Verba, S. (2015). The civic culture: Political attitudes and democracy in five nations.
6. Dittmer, L. (1977). Political culture and political symbolism: Toward a theoretical synthesis. *World politics*, 29(4), 552-583.
7. Elkins, D. J. (1979). A cause in search of its effect, or what does political culture explain?. *Comparative politics*, 11(2), 127-145.
8. Elazar, D. J. (1984). American federalism: A view from the states. (*No Title*).
9. Schiltz, T. D., & Lee Rainey, R. (1978). The geographic distribution of Elazar's political subcultures among the mass population: A research note. *Western Political Quarterly*, 31(3), 410-415.
10. Sharkansky, I. (1969). The utility of Elazar's political culture: A research note. *Polity*, 2(1), 66-83.
11. Clynch, E. J. (1972). A Critique of Ira Sharkansky's "The Utility of Elazar's Political Culture". *Polity*, 5(1), 139-141.
12. Savage, R. L. (1981). Looking for political subcultures: A critique of the rummage-sale approach. *Western Political Quarterly*, 34(2), 331-336.
13. Nardulli, P. F. (1990). Political subcultures in the American states: An empirical examination of Elazar's formulation. *American Politics Quarterly*, 18(3), 287-315.
14. Black, E., & Black, M. (1987). *Politics and Society in the South*. Harvard University Press.
15. Wright Jr, G. C., Erikson, R. S., & McIver, J. P. (1987). Public opinion and policy liberalism in the American states. *American Journal of Political Science*, 980-1001.
16. Klingman, D., & Lammers, W. W. (1984). The "general policy liberalism" factor in American state politics. *American Journal of Political Science*, 598-610.
17. Gray, V., Hanson, R. L., & Kousser, T. (Eds.). (2017). *Politics in the American states: A comparative analysis*. Cq Press.
18. Gilardi, F., & Wasserfallen, F. (2019). The politics of policy diffusion. *European Journal of Political Research*, 58(4), 1245-1256.
19. Berry, F. S., & Berry, W. D. (1990). State lottery adoptions as policy innovations: An event history analysis. *American political science review*, 84(2), 395-415.
20. Pierce, P. A., & Miller, D. E. (1999). Variations in the Diffusion of State Lottery Adoptions: How Revenue Dedication Changes Morality Politics 1. *Policy Studies Journal*, 27(4), 696-706.
21. Maven, (2024). In what states does insurance cover IVF?: A comprehensive guide for HR leaders.
22. Mladovsky, P., & Sorenson, C. (2010). Public financing of IVF: a review of policy rationales. *Health Care Analysis*, 18(2), 113-128.
23. French, P. E., & Stanley, R. E. (2002). Lotteries, the american states and the federal government: a formula for perpetual success or inevitable destruction in education policy?. *Journal of Public Budgeting, Accounting & Financial Management*, 14(1), 27-52.
24. French, P. E., & Stanley, R. E. (2004). The recent adoption of the voluntary tax in the volunteer state. *Journal of Public Budgeting, Accounting & Financial Management*, 16(4), 570-588.
25. Stanley, R. E., & French, P. E. (2009). Evaluating increased enrollment levels in institutions of higher education: A look at merit-based scholarship programs. *Public Administration Quarterly*, 4-36.
26. Official Presidential Election Results, (2024).
27. Sobel, R. S., & Dove, J. A. (2012). State regulatory review: A 50 state analysis of effectiveness. *Arlington: Mercatus Center at George Mason University*.
28. Jones, T., & Wolfson, J. (2024). National Regulatory Reform Progress Rankings Report.
29. Dickert, Chris. (2023). Mapping US Urbanization, by State.
30. Furlong, E. J. (1998). A logistic regression model explaining recent state casino gaming adoptions. *Policy Studies Journal*, 26(3), 371-383.
31. Caughey, D., & Warshaw, C. (2016). The dynamics of state policy liberalism, 1936–2014. *American Journal of Political Science*, 60(4), 899-913.
32. Jones, Vivian. (2025). Tennessee House passes protection for fertility care, birth control; 37 Republicans oppose. The Tennessean.
33. Catholic News Agency. (2024). What is the Catholic Church's position on IVF?
34. Justia US Law. LePage v. Center for Reproductive Medicine, P.C.: (2024): Supreme Court of Alabama Decisions: Alabama Case Law:: Alabama Law:: US Law: Justia.
35. Kenton, Will. (2024). What Is Per Capita Income? Uses, Limitations, and Examples. Investopedia. What Is Per Capita Income? Uses, Limitations, and Examples
36. RESOLVE (2024). Insurance Coverage by State | RESOLVE: The National Infertility Association.
37. World Population Review. (2024). Per Pupil Spending by State 2024.

Copyright: ©2025 Rodney E Stanley. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.