COLLEGE GRADS, YOUNG MOMS, BIG BUCKS, STATE REPS AND RACIAL COMPOSITION: EVALUATING THE IMPACT OF SOCIAL, POLITICAL AND ECONOMIC FACTORS ON STATE-LEVEL HEAD START UPTAKE RATES

An Undergraduate Research Scholars Thesis

by

ANGELA NICOLE ALLISON

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ABSTRACT

College Grads, Young Moms, Big Bucks, State Reps and Racial Composition: Evaluating the

Impact of Social, Political and Economic Factors on State-Level Head Start Uptake Rates.

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Angela Nicole Allison
Department of Political Science
Texas A&M University

Research Advisor: Dr. Kenneth Meier
Department of Political Science

The Head Start Program aims to equip pre-school age children from low-income families with

the social, academic and emotional development that is essential upon entry to Kindergarten.

While much research and debate exists about whether or not Head Start instills students with a

lifelong advantage, research has consistently shown that short-term benefits follow Head Start

graduates into elementary school. Despite evidence that Head Start participation gives students

an advantage over non-preschooled peers, the uptake rate for this program remains low at the

national level and a large disparity exists between state-level uptake rates. Previous Head Start-

related research has neglected to explore why some states boast program uptake rates that exceed

fifty percent while Head Start Programs in other states have uptake rates that languish in the

single digits.

In the present study, I will make an effort to identify social, political and economic factors that

influence state-level Head Start uptake rates. Using a dataset that spans ten years and includes

eleven variables such as resident education level, Head Start funding and race-based population

percentage, I will examine how each factor effects state-level Head Start uptake rates. This study is innovative in several ways. First, it explores how a variety of state-level factors play into the rate at which eligible students enroll in the Head Start Program. Whereas the major focus of previous research has identified academic advantages of being a Head Start graduate, the first step to securing these benefits is the parental decision to enroll an eligible child into the program. Secondly, my research will examine factors that explain the great state-level disparity in Head Start uptake rates. By identifying one set of traits that are common amongst high-uptake states as well as another set that is common amongst low-uptake states, my goal is two-fold: to offer details that about factors that enhance Head Start uptake rates as well as a set of guidelines that could be used to predict which states are likely to incur low uptake rates in future years so that these states can be targeted for increased recruitment and enrollment support.

DEDICATION

To Summer Skye and Lansing Fate—*my own Head Start grads and two of my favorite teachers*

To the College Station Head Start Community— *I wish you well!*

CHAPTER I

INTRODUCTION

Background

Studies have shown that children who attend Head Start as three and four-year olds are less likely to be required to repeat a grade when compared with peers who were kept at home during their preschool years. It has also been demonstrated that children who participate in the Head Start Program have more extensive vocabularies as elementary students and white Head Start students mature into teens who are less likely to drop out of high school than their classmates who did not attend any type of preschool program (Currie 354). Although some people dispute the findings that Head Start equips students with a lifelong academic edge, the majority of these people would not claim that Head Start participation hinders the program's students who come from socio-economically disadvantaged homes. In fact, the Head Start Program enjoys broad public support even in today´s volatile economic and political environments. According to a 2011 poll published by Democracy Corps, three-quarters of Americans oppose or strongly oppose reducing federal funding for Head Start.

Despite evidence that Head Start enrollment provides a tangible academic benefit for young children and the program's broad public support, many Head Start-eligible children simply do not participate in the program. What factors contribute to the likelihood that a three or four-year-old from a low-income family will get a head start on their educational path? Do non-manipulable issues like maternal age drive Head Start uptake rates or are they manipulated by public policy-based actions like spending? This paper will explore multiple theories about why

some states like Alaska and North Dakota consistently enroll more than half of their Head Start-eligible students while other states like South Carolina and Nevada routinely fail to get just ten percent of Head Start-eligible children to sign on.

Theoretical Arguments and Hypotheses

The individual dependent variables included in the model can be classified as indicators associated with two broad theories that might help explain Head Start uptake rates: citizen willingness to participate in government programs and government openness to implementing a program to correct a societal problem.

The dependent variables that measure citizen willingness to participate in the Head Start program all relate to the receptiveness of certain population groups to government and its efforts to assist them. Each of the citizen populations in this study are theorized to possess a unique level of willingness to participate in government programs like Head Start. Association with certain groups, for example living amongst highly educated residents and being a young mother, is theorized to have a positive effect on a citizen's willingness to enroll eligible children in Head Start. However, belonging to a racial minority group that has endured discriminatory government policies likely has a negative effect on a person's willingness to participate in government programs. The following hypotheses offer an in depth explanation of why each citizen-related variable might be related to state-level Head Start uptake.

The first hypothesis included in this study posits that when a state's adult population is more highly educated, this causes its Head Start uptake rate to be higher. The independent variable for

this hypothesis was operationalized as the percentage of a state's adult population that held a Bachelor's degree and data for this variable were obtained from the American Factfinder website. This variable takes on values ranging from 12.35% to 55.6%, has a mean of 26.6% and standard deviation of 5.9. The dependent variable for each hypothesis in the model was operationalized the percentage of income-eligible students in each state who actually enroll in the Head Start Program. Data for the dependent variable were obtained from the National Institute for Early Education Research website. This variable's values range from 4.4% to 62.4% with a mean value of 24.3% and standard deviation of 8.7. The reasoning behind this hypothesis is based on the prediction that adults who had the opportunity and motivation to attend college will be more likely to support educational opportunities for others than adults who do not hold a college degree. These college-educated adults could be more likely to directly encourage parents of Head Start-eligible children to take advantage of the Head Start Program. Also, parents of Head Start-eligible children who live in more highly educated areas are more likely to observe the economic advantages of obtaining an education through their daily interactions with highly educated community members. These observations might enhance a low-income parent's willingness to enroll children in Head Start with the hope that his or her children will be enabled to become academically successful and economically independent adults.

My second hypothesis proposes that a state which has a higher rate of first-time mothers who give birth as teenagers will also have a higher Head Start uptake rate. The independent variable was operationalized as a state's percentage of mothers whose first birth occurred before age 20. Data were collected for the years 2001-2010 from the Kids Count Data Center website. Observed values for this variable range from 6% to 18% with a mean value of 10.4% and standard

deviation of 2.7. The reasoning behind this hypothesis is that when a woman's first birth occurs in her teen years, this mother is more likely than older mothers to still have contact with school district staff. These school district staff members like social workers and counselors could encourage Head Start involvement and assist young mothers in navigating the arduous enrollment process. Thus, a state that has a higher percentage of young mothers might have an advantage because more of its Head Start-eligible students live in families that are easier for schools to reach out to and recruit.

Another hypothesis related to citizen willingness to participate is that higher minority representation in a state's legislature causes a state to have a higher Head Start uptake rate. This variable was operationalized as the percentage of each state's legislature who self-identify as African American, Hispanic, American Indian/Alaska Native or Asian/Pacific Islander. Data for this variable were obtained for the years 2001-2010 from the National Conference of State Legislatures website. Values for this variable range from 0% to 46% with a mean of 11.22% and standard deviation of 10.27. Citizen willingness to elect minority representatives might be a good indicator that a population is civically engaged and believes government is working for its constituency's best interest. The theoretical reasoning behind including this variable in the model is that minority legislators are more likely to favor government programs designed to alleviate poverty and enhance educational opportunities among low-income residents. Having a higher percentage of minority legislators is theorized to make a legislature more amenable to adopting state-level education policies that facilitate higher Head Start uptake than states where minorities comprise a smaller percent of state legislators.

The last independent variables included as indicators of citizen willingness to participate are

black population percentage and Hispanic population percentage. Each variable was

operationalized at the state level and data was collected from the Centers for Disease Control and

Prevention website. Observations for the black population percentage variable range from 0.4%

to 37.3% with a mean value of 10.3% and standard deviation of 9.4. Values for the Hispanic

population percentage variable range from 0.73% to 48.1% with a mean of 9.3% and standard

deviation of 9.5. The black and Hispanic population percentages are theorized to be negatively

related to Head Start uptake rates. Discrimination directed at these two groups has caused many

blacks and Hispanics to distrust the government and adopt a skeptical attitude about whether or

not the government can and wants to help them. This might cause eligible blacks and Hispanics

to be less likely to take interest and participate in needs-based government programs than their

white counterparts. Thus, states where blacks and Hispanics comprise a higher percentage of the

population are likely to have lower Head Start uptake rates than states where black and Hispanic

population percentages are lower.

My second broad theory posits that Head Start uptake rates are a function of government's

openness to fixing societal issues. This study's remaining dependent variables serve as indicators

of the degree of responsibility a governing body feels in regards to helping its constituents solve

their problems. I theorize that individual governing bodies possess varying degrees of openness

to assisting constituents, especially low-income constituents that comprise most Head Start-

eligible households. I theorize that increased government openness to solving citizen problems

leads to an increase in Head Start uptake. For example, governments more open to problem

solving on behalf of low income constituents might be more willing to spend money in an effort

to combat poverty-related problems. However, government that feels less obligated to help vulnerable citizens might decry similar spending measures as deviating from its perceived core purposes. The following set of hypotheses offer an in depth explanation of how government openness to helping citizens could affect state-level Head Start uptake.

The first hypothesis related to government openness projects that when a state offers more needs-based aid for its residents to attend college, this causes that state's Head Start uptake rate to be higher. This hypothesis's independent variable was operationalized as the average amount of non-repayable, needs-based financial aid a state offered per eligible student in the years 2001-2010. Data for this variable were obtained from the National Association of State Student Grant and Aid Programs. Values observed for this variable range from $0 to $1,326.51 with a mean of $291.69 and standard deviation of 260.26 The reasoning behind this hypothesis is that when a state offers more needs-based financial aid, it signals a commitment to extend educational opportunities to low-income residents; this commitment might indicate that preschool for low-income children is also a priority. Further, parents of Head Start-eligible children, who likely qualify for needs-based college funds, can more easily afford to go to college if they desire to attend. An increase in the college attendance rates among low-income parents could cause a higher Head Start uptake rate because these parents will need to place preschool age children in some type of facility while they attend classes. It follows that the Head Start Program, which is free and operates during typical college meeting times, would be a popular placement choice for parenting college students whose children are eligible to attend.

Another hypothesis is that when a state receives a higher amount federal Head Start funding per student, this will cause its Head Start participation rate to be higher. The independent variable was operationalized as the state's dollar amount of federal Head Start funding per participant in 2010. Data for this variable were obtained from the National Institute for Early Education Research. This variable's observations range from $5507 to $12,345 with a mean of $7782.20 and standard deviation of 1281.45. The reasoning behind this hypothesis is that states that boast higher per-child federal Head Start funding levels might have an easier time attracting eligible children to the program than states where funding levels are lower. States that receive more per-child federal funding might be able to attract more students because they are better able to bear the expenses associated with hiring better educated, more culturally competent Head Start teachers and facilitators or purchasing more enticing classroom equipment.

A second spending variable is included in this study: state-level Head Start funding. This independent variable was operationalized as the dollar amount of per-pupil funding that is awarded to Head Start Programs by state governments. Data for this variable were obtained from the National Institute for Early Education Research. This variable's values range from $0 to $4,132.92 with a mean of $302.22 and standard deviation of 675.59. The causal mechanism behind this hypothesis is similar to the reasoning behind the federal spending hypothesis: more funding creates a more appealing program and fuels uptake. Additionally, state-level Head Start funding is theorized to represent local investment in and commitment to the program's goals. It would follow that states where Head Start is fortunate enough to have higher levels of local support would see higher uptake rates than states where governments are not financially invested in their Head Start programs.

Finally, my model includes several control variables that are hypothesized to be positively related to state-level Head Start uptake rates: income, welfare spending and citizen ideology. The variable for income was operationalized as per capita income by state and values ranged from $22,815 to $70,710 with a mean of $35,424 and standard deviation of 7,013. Welfare spending was operationalized as a state's per capita amount of welfare spending. Its values ranged from $402.53 to $2,557.50 with a mean of $1,206.05 and standard deviation of 383.5. Data for the income and welfare spending variables were collected from the U.S. Bureau of Economic Analysis. The citizen ideology variable was operationalized using the updated Berry's Citizen Ideology Index found on Richard C. Fording's website. Values of this variable ranged from 8.5 to 96 with a mean of 53.1 and standard deviation of 15.8.

CHAPTER II

METHODOLOGY

This study entailed creating a panel dataset contains a total of 12 variables observed over a 10 year period from 2001-2010. After conducting a Harris-Tzavalis test for panel stationarity, I found evidence against the test's null hypothesis of the presence of a unit root and concluded that the panels in my dataset are stationary. With panel stationarity established, I proceeded with constructing two models using two different regression methods. First, I conducted a random-effects Generalized Least Squares (GLS) regression with standard errors clustered by state and dummy variables for all but one of the ten years included in this study. I felt the inclusion of this model was beneficial because it corrects for the presence of heteroscedasticity and autocorrelation. I also created a model using two-way fixed effect regression. Like random effects GLS model, this one contains a set of dummy variables and also corrects for the presence of heteroscedasticity and autocorrelation. Additionally, it allows for an examination of how each independent variable affects within-state Head Start uptake rates when all other independent variables are held constant.

CHAPTER III

RESULTS

Table 1:Explaining State-Level Head Start Uptake Rates Using Two Regression Methods.		
	GLS Model	Two-Way Fixed Effects Model
College graduates	-.0995	-.03569
	(.228)	(.312)
Needs-based college aid	.00051	.00064
	(.381)	(.388)
Teen births	.1871	-.37058
	(.314)	(.128)
Minority representation	.05345	-.00648
	(.262)	(.498)
Federal spending	-.00088*	-.00171**
	(.014)	(.000)
State spending	.00261**	.00308**
	(.001)	(.000)
Black population percent	-.37765**	-.51349
	(.004)	(.217)
Hispanic population percent	-.32702**	-.06853
	(.000)	(.413)
Welfare spending	.00076	-.00214
	(.351)	(.076)
Citizen ideology	.01146	.06229*
	(.401)	(.016)
Income per capita	.00209	.00011
	(.263)	(.125)
Intercept	28.89811**	42.52974**
	(.005)	(.000)
R-squared within state	.2574	.2188
n	500	500
Note: dependent variable is state-level Head Start uptake rate. * indicates p-value <.05. ** indicates p-value < .01.		

Random Effects GLS Model

The regression results for each model are presented in Table 1. My initial discussion will center on the results found using the GLS regression method. When performing hypothesis testing, the resulting p-values for several variables exceed the .05 significance level. Finding a p-value greater than .05 for the college graduation rates, teen birth rates, needs-based college aid, and minority representation variables leads me to fail to reject the null hypothesis of no relationship between each of these variables and state Head Start uptake rates. Ultimately, I conclude that when using the GLS model and all other independent variables are held constant, no statistically significant relationship exists between state-level Head Start uptake rates and college graduation rates, teen births, needs-based college aid or minority representation in state legislatures. Furthermore, this model shows that no statistically significant relationship exists between Head Start uptake rates and the state-level control variables of welfare spending, per capita income and citizen ideology.

While the GLS model leads me conclude there is no relationship between several of my independent variables and Head Start uptake, it also provides statistically significant evidence relating to my remaining theories. According to this model, a state's black population percentage has the most influence on state-level Head Start uptake. The p-value for this coefficient estimate, which was halved because my theory is directional, is .004. This p-value indicates that there is a 4 in 1000 chance I am making a mistake by rejecting the null hypothesis of no relationship. Therefore, I conclude that a statistically significant relationship exists between a state's black population percentage and its Head Start uptake rate and proceed to examine its specifics. The regression results indicate a positive relationship exists between these two variables.

Specifically, it predicts that for every 1 percent increase in a state's black population percentage, this state can expect to see a .37765% decrease in its Head Start uptake rate if all other independent variables are held constant.

Similarly, a state's Hispanic population percentage is shown to be related to state-level Head Start uptake when the GLS method is employed. The results of my hypothesis test yield a statistically significant p-value of .000, which leads me to reject the null hypothesis that these two variables are unrelated and conclude that a statistically significant relationship exists. A further examination of the results shows that there is a negative association between a state's Hispanic population percentage and its Head Start uptake rate. In fact, the GLS model predicts that when all other independent variables are held constant, as a state's Hispanic population percentage goes up by 1%, you can expect to see its Head Start uptake rate decrease by .32702%. Next I analyzed the GLS model to determine whether or not there was support for my theory that relates state-level Head Start funding to Head Start uptake. The hypothesis test for this variable produced a halved p-value of .014, which leads me to reject the null hypothesis that no relationship exists between these two variables. Conclusively, a relationship does exist; however the coefficient estimate indicates it's negative, not positive as I had predicted. The model predicts that when all other independent variables are held constant, every additional dollar of federal spending a state receives results in a .00088% decrease in that state's Head Start uptake rate.

Moving on, to evaluate my next theory proposes a link between state-level Head Start spending and program uptake, I conducted a hypothesis test. This test produced a p-value of .001, which

allows me to reject the null hypothesis that no relationship exists between these two variables and conclude that there is a statistically significant relationship between these two variables. The coefficient estimate for state-level Head Start funding using the GLS model indicates that when all other independent variables are held constant, state-level Head Start funding is positively associated with state Head Start uptake. More specifically, when all other variables are controlled for, the GLS model predicts that for every additional dollar of state Head Start funding, a state can expect its uptake rate to increase by .00261%.

Finally, the overall fit of the GLS model is indicated by the within-state R-squared statistic, which indicates that the model predicts 25.74% of the within-state variation of Head Start uptake rates. This R-squared statistic is respectable, considering the difficulty associated with obtaining high R-squared values when modeling socio-political variables.

Two-Way Fixed Effects Model

The two-way fixed effects model renders results which both contradict and support the findings associated with the previously discussed in the GLS model's findings. For example, although the GLS model indicated that the black and Hispanic coefficient estimates were statistically significant, this effect proves spurious when using the two-way fixed effects model. Hypothesis testing using the latter model yields a p-value of .217 for the black population percentage coefficient estimate and .413 for the Hispanic population percentage coefficient estimate. Both of these p-values exceed the .05 significance level, leading me to fail to reject each null hypothesis that no statistically significant relationship exists between either black population percentage or Hispanic population percentage and state Head Start uptake rates. Ultimately, the two-way fixed

effects model predicts that when all other independent variables are held constant, there is no statistically significant relationship between any state's black population percentage and its Head Start uptake rate. Likewise, the same conclusion can be drawn about the nature of the relationship between any state's Hispanic population percentage and its Head Start uptake rate: the model indicates that when you control for all other independent variables, a statistically significant relationship between these two variables cannot be found.

When using the two-way fixed effect model to analyze the strength of my college-related theories, again I failed to find evidence to support these theories. Conducting hypothesis testing on the college graduation theory produces a halved p-value of .312 while the halved p-value for the needs-based college aid theory is reported as .388. The p-values for each variable exceed the .05 significance level and means I fail to reject the null hypothesis associated with each of these variables. Basically, when all other independent variables are held constant, there is no evidence that a statistically significant relationship exists between any state's college graduation rate and its Head Start uptake rate. The fixed effects model also indicates that when all other independent variables are controlled for, there is no statistically significant relationship between the amount of needs-based college aid offered by any state and that state's Head Start uptake rate.

The teen birth and minority representation theories also fail to garner support in the fixed effect model. Using hypothesis testing on the teen birth theory yields a halved p-value of .128, which exceeds the .05 significance level and means I fail to reject the null hypothesis that no statistically significant relationship between teen births and state Head Start uptake rates. Similarly, hypothesis testing on the minority representation produces a halved p-value of .498,

which also exceeds the .05 significance level and means I fail to reject the null hypothesis of no relationship between these two variables. Ultimately, I conclude that when all other variables are controlled for, there is no statistically significant relationship between state Head Start uptake and teen births or state Head Start uptake and state-level minority representation.

Examining the results associated with the control variables of state welfare spending and per capita income indicate that neither of these two variables can be linked to state-level Head Start uptake. First, hypothesis testing the state welfare spending variable yields a halved p-value of .076, which exceeds the critical value of .05. I fail to reject this hypothesis and must conclude that there is no statistically significant relationship between welfare spending and Head Start uptake at the state level. Likewise, hypothesis testing on the per capita income theory also produces a p-value of .125. Again, this p-value exceeds the .05 significance level and I fail to reject the null hypothesis that no relationship exists between these two variables. Accordingly, I conclude that no statistically significant relationship exists between any state's per capita income and its Head Start uptake rate when all other independent variables are held constant.

The two-way fixed effects model indicates there is a link between the third control variable, citizen ideology, and Head Start uptake. Hypothesis testing on this theory produces a halved p-value of .016, which means there's a 1.6 % chance of mistakenly rejecting a null hypothesis when I shouldn't. This is an acceptable level of risk, so I reject the null hypothesis and conclude that when all other independent variables are held constant, there is some statistically significant relationship between a state's citizen ideology score and its Head Start uptake rate. The model indicates that this relationship is positive. Specifically, the two-way fixed effects model predicts

that when all other independent variables are controlled for, for every additional point a state's citizen score on the ideology scale, you can expect to see that state's Head Start uptake rate increase by .06229%. This result lends support to the theory that proposes a causal relationship between a state's citizen ideology and its Head Start uptake rate.

Another theory that garnered support when using the two-way fixed effects model posited a link between federal spending and state-level Head Start uptake. A hypothesis test on this theory produced a statistically significant p-value of .000 and leads me to reject the null hypothesis of no relationship. The coefficient estimate indicates that the relationship between federal spending and state-level Head Start uptake is negative. In fact, it indicates that when all other independent variables are controlled for, for every additional dollar of federal funding a state receives, it can expect that its Head Start uptake rate will fall by .00171%.

The two-way fixed effects model supports my theory linking state-level Head Start funding with state Head Start uptake. Hypothesis testing this theory produces a p-value of .000, which does not exceed the .05 significance level and allows me to reject the null hypothesis that no statistically significant relationship exists. Conclusively, the model indicates that there is a statistically significant and positive relationship between state-level Head Start funding and state-level Head Start uptake. When all other variables are held constant, for every additional dollar of Head Start funding awarded by a state, this state can expect to see a .00308% increase in Head Start uptake.

Finally, the two-way fixed effects model's overall fit is expressed by the within-state R-squared statistic. This R-squared statistic indicates that the model explains 21.88% of the within-state variation in Head Start uptake rates. Again, this is a fairly respectable R-squared statistic considering this study is attempting to model a socio-political phenomenon.

Before concluding my discussion of the regression results, I would like to bring attention to several special cases identified by my study. While these outliers are unable to distort the fixed-effects regression model and bias the coefficient estimates, these special cases are still worthy of mention and exploration. The first and perhaps most interesting outlier is the state of Mississippi. Examining the studentized residuals shows that in every year from 2001-2010, the regression model under predicts Mississippi's actual Head Start uptake rate. This is a perplexing finding. Why would Mississippi's uptake rate be higher than predicted on such a consistent basis? Could it be that this red state has developed a unique and innovative Head Start recruitment scheme? To consider another possibility, perhaps Mississippi's childcare subsidy program is chronically underfunded or too cumbersome for low-paid working families to comply with. If so, this could force many low-paid families to enroll their children in Head Start so that they have reliable, affordable childcare while they work. The curious case of Mississippi Head Start uptake is definitely a question I am interested in exploring further.

Examining the studentized residuals also led to the discovery of the Dakota outliers. The regression model underpredicts North Dakota's Head Start uptake consistently from 2001-2008 and South Dakota's uptake for 5 of the 10 year period covered by this study. This duo of outliers might appear as unlikely hotbeds for Head Start interest and uptake. However, one policy expert familiar with North and South Dakota politics was unsurprised at this finding, asserting that

these residents are especially enthusiastic about educational programs and opportunities. This very likely could explain why North and South Dakota's Head Start uptake rates are higher than predicted by the model.

CHAPTER IV

CONCLUSIONS

The regression models do not support several of my original hypotheses. The lack of statically significant findings leads me to reject my hypotheses concerning how college graduation, college aid, teen births, minority reps, black and Hispanic population percentage affect state-level Head Start uptake rates. With the exception of college aid, the rejection of this group of hypotheses allows me to also dismiss my general theory that citizen willingness to participate in the Head Start program influences state-level uptake rates. Basically, this means that Head Start participation is not driven by citizen desire to participate in the program. This is an encouraging finding: if uptake was influenced by citizen willingness to participate, it would be much more difficult to control through policy decisions.

I must also reject my hypothesis related to federal spending. Basically, both models show that federal spending negatively impacts state-level uptake rates. This finding is interesting because it contradicts my original hypothesis and presents new a provoking question: why would an increase in federal Head Start funding dampen a state's Head Start uptake rate?

The two-way fixed effects model leads me to conclude that citizen ideology positively affects state Head Start uptake as originally hypothesized. Perhaps a more liberal citizenry is more likely to elect legislators who are more open to adopting educational or fiscal policies that are effective at boosting uptake rates. States that experience a downward shift on the citizen ideology scale might anticipate a corresponding dip in Head Start uptake. Those state governments invested in retaining their Head Start uptake levels might take proactive measures to combat the predicted

uptake dip by increasing state funding for the program or intensifying Head Start outreach and recruitment efforts.

Finally, the model provides support for my state-level spending hypothesis: increased state-level Head Start funding does, in fact, improve uptake rates. The importance of this finding is that it indicates that Head Start uptake can be manipulated at the state government level. This is good news for Head Start students and program proponents as uptake can be enhanced as states are become more generous with their Head Start spending. States should consider increasing Head Start funding if they would like to promote uptake and reap the benefits of Head Start participation both for individuals and for society in general. Further, this finding supports my more general theory that government openness to solving the public's problems influences Head Start uptake. Basically, state governments that are more active in finding and vested in fixing constituent troubles will have an easier time filling Head Start classroom with eligible students.

CHAPTER V

FUTURE WORK

Going forward, I intend to explore several interesting findings from this study. First, I intend to identify factors that might cause Mississippi's Head Start uptake rate to outperform the model estimates. If Mississippi has concocted a highly effective Head Start outreach and enrollment system, it should certainly be implemented other states, especially those with low uptake rates. I will also investigate the state's childcare subsidy program for low-income families and whether or not it meets citizens' demands. If not, I will explore the possibility that low-income families are using the Head Start program as a source of childcare so that they will able to work outside the home.

I also want to investigate why federal spending is negatively related to state uptake. One way I could explore this relationship is by introducing a dummy variable for states that routinely decline to apply for federal supplemental/expansion grants to investigate. This modification might help to clarify how federal funding impacts uptake rates.

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