School Choice: Academic, Financial, and Societal Implications

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Dedication

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ABSTRACT

School choice is a contentious issue in the United States. Based on a free market system where competition drives performance, supporters believe that underperforming schools should be forced to close if they are unable to keep up with the higher performing districts. However, schools are founded on the institutional theory, which inhibits their responsiveness to innovation and competition. Proponents of school choice argue that families have the right to decide where their children are educated, and many school districts benefit financially when they gain student enrollment. Supporters believe that choice provides families with opportunities to seek schools that provide a higher quality of education than their residential districts. Those who oppose school choice believe that choice is a divisive tool separating rich and poor, Black, and White. Opponents believe that the fiscal implications that result from students exiting their residential districts leave the neediest students without access to the education they're entitled to. Opponents believe that additional implications, such as social and transient repercussions, add to the negative impact of school choice on our most at-risk population: impoverished and minority students. Based on research, there is little evidence to support a causal relationship between school choice and a leveled playing field for needy students; however, benefits are noted for some students who consistently open enroll. Positive effect size estimates were noted in math only, reading only, and math and reading combined; school choice across time after the first year a student participated in open enrollment;

the 5-8 grade band; and for achievement by race. Because this study utilized a meta-analysis, there are limitations to consider. Specifically, data are limited to what is available in existing research. Publication bias and heterogeneity may also impact results as they skew data. In this study, test scores were utilized to measure achievement; however, test scores are not always indicators of achievement.

Chapter 1

Lobbyists, legislators, tax incentives, and for-profit are most likely terms that most would not associate with education in the United States – but the current climate proves otherwise. Historically, local and state laws governed public education and district matters were handled by individual boards. Today, education is big business. According to the National Center for Educational Statistics (NCES, 2019 May), in the 2015-2016 school year, $706 billion were spent on education in the United States, which equates to over $13,000 per student (2019).

Education, specifically, school choice, is often at the center of heated debates, political platforms, and hidden agendas. Lobbyists campaign for school choice under the guise of equal access for all to better educational opportunities. The movement has empowered parents to exercise their right to choose where to send their children to school. Schools have been driven to compete with one another instead of collaborating for the advancement of all children, and the clear line that once divided church and state has been blurred by public funding of private schooling.

The history of school choice dates back to the 1800s when Black children did not have access to public education until after the Civil War. As a result, segregated schools were established for Black students. They were run by Black people, for Black people, and they were established to teach Black history, civics, and politics. The decision to start schools that were separate is what laid the groundwork for what we know as open enrollment (OE) (Forman, 2005).

Throughout U.S. history, lawsuits continued to shape the educational landscape. *Plessy v. Ferguson* (1896) was the first major court case that sought clarity into the Fourteenth Amendment's equal protection clause, which provided separate but equal accommodations for Blacks and Whites (Duignan, 2020, Plessy v. Ferguson Section). Henry Billings Brown, Associate Justice, penned the majority position which cited that the Fourteenth Amendment was only intended to provide "legal equality" for Blacks, but not "social equality" (Duignan, 2020, Plessy v. Ferguson Section). In 1938, Charles Hamilton Houston, a Black attorney for the NAACP, challenged the *Plessy* ruling by focusing on its impact in public schools. He was successful at arguing *Missouri ex rel. Gaines v. Canada*, in which he maintained that Black students were being denied their legal right to education as a result of the University of Missouri's decision to send minority students to out of state schools (Linder, n.d.). This monumental win required that Missouri provide Lloyd Gaines, a Black student, with admission to law school since Missouri did not have a law school for African Americans (Shetterley, 2005).

During that time, in 1925, a key lawsuit, *Pierce* v. *Society of Sisters* (1925), challenged the law that education must be public; the sisters won the lawsuit and the Supreme Court ruled that parents had the right to decide what was best for their children (Mead, 2008).

School choice was thrust to the forefront again in *Brown* v. *BOE* (1954, 1955). Educational segregation was ruled unconstitutional, and, just one year later, an economist, Milton Freedman, shared his idea of educational competition through

a free-market system where only the strongest would survive (Phillips et al., 2012). Just five years later, the freedom to choose led southern Whites to choose private schooling for their children, and integration took a back seat. School choice was now fully rooted in our nation.

Choosers, or families who exercise school choice, often cited their disappointment with the public school system (Forman, 2005). By the 1970s, educational choice was hotly contested at the state and federal levels. In 2002, in the case of *Zelman* v. *Simmons-Harris* (2002), the right to utilize and implement vouchers that provided students with access to private schools using public dollars was upheld in the Supreme Court (Mead, 2008). This decision blurred the separation between church and state and created a completely new facet to school choice.

Problem Statement

Those who lobby for educational choice have been successful at creating a stigma about the performance of many public schools – most of which are high in either poverty or minority. In Ohio, and throughout the nation, schools with both high poverty and high minority are subject to higher gaps in achievement (Reardon et al., 2019). The stigma against public schools without a focus on the issues of socioeconomic status (SES) and racial segregation has proven to be a problem for public school districts. The disparity between wealthy, White districts and poor, minority districts, coupled with a promise of a higher quality education in neighboring districts and private schools, has created even more problems for poor and minority districts.

There is a dichotomy between perspectives in education in the United States. The opposing perspectives are best explained utilizing two theoretical frameworks: Market Theory and Institutional Theory.

One perspective is explained by Friedman's Market Theory. Friedman argued that the cost to educating students in Grades K-12 should be covered by the government, however, he supported using vouchers so that parents had the ability to choose where to send their children to school (Berends, 2015). Proponents of choice argue that choice provides access to better schools for all students. Choice enables students to leave their residential, low-performing schools and attend "better" schools (Neal, 1997; Phillips et al., 2012, p. 265). However, research shows that most students who participate in school choice options are from White, non-impoverished families, not families of students who attend impoverished, low achieving districts (Carlson & Lavertu, 2017; Jacobs, 2011; Lauen, 2007; Phillips et al.; Roda &Wells, 2012).

According to Meyer and Rowan (1977), institutional theory describes a framework where organizational structures are based on

> ...positions, policies, programs, and procedures of modern organizations [that] are enforced by public opinion, by the views of important constituents, by knowledge legitimated through the educational system, by social prestige, by the laws, and by the definitions of negligence and prudence used by the courts. (p. 343)

Understanding institutional theory allows one to understand the formalization of the educational system; processes, rules, and culture that are engrained in the US educational system result in legitimacy, stability, and faith in that very system. Rules and formal structures developed within the educational system lead to enculturation into the system. Schools build themselves around these powerful, engrained "myths" (Meyer & Rowan, 1977, p. 1), usually through the development of goals and processes. This results in institutional isomorphism, or the similarity of systems to each other. In the US, schools operate under the bureaucracy of the government. When this happens, local control, innovation, regional considerations, and evaluation of systems and processes are foregone because the institutions are granted legitimacy, regardless of their outcomes (Meyer & Rowan, 1977).

Choice has created problems for some districts in our nation. The exodus of students from high poverty and/or high minority schools has the potential to create SES and racial segregation and further the financial and racial divide the plagues our nation. It has also caused disparity in funding and achievement between districts. Ozek (2009) connected student achievement with SES. Knowing that those who choose are typically from non-minority, non-poverty backgrounds, and knowing that those are also the students who tend to perform at higher levels, districts that are high minority and/or high poverty are charged with educating a student body in crisis. The phenomenon known as the skimming effect (Altonji et al., 2015) has created a disadvantage for schools that are losing high achieving students. Districts who lose high achieving students are being

labeled as failing with no way out. Their funding is reduced, access to quality programs is eliminated, and our most needy population is being ignored.

Purpose of the Study

The purpose of this study is to examine the impact of school choice on student achievement, the fiscal implications of choice, and potential societal consequences of choice. This study will focus on education in the United States over the past 20 years. School and student performance will be measured by state tests and district report cards. SES will be measured by the percentage of free and reduced lunches in each district. Similarly, minority will be reported in percentage based on student population.

Research Questions

1. What is the effect of school choice on diversity, finances, and academics when examined simultaneously, when school choice is exercised?
2. What is the impact of school choice on academics, across different grade levels?
3. What is the impact of school choice on academics, across different core subject areas?
4. What is the impact of school choice on academics across time?
5. What is the overall effect of school choice on year of research reporting?
6. What is the overall effect of school choice on source of dissemination?

Limitations of Study

This study will utilize existing research pertaining to student achievement, racial identification, and SES of students in tested grades in the United States.

The meta-analysis will focus on test results of students whose families exercise school choice, or choosers. The study will also attempt to determine if school choice is exacerbating SES and racial segregation by disaggregating racial and SES data pertaining to choosers. The following limitations apply:

1. Data are limited to what is available in existing research (Glass et al., 1981).
2. Test scores will be utilized to measure achievement but are not always indicators of such.
3. Heterogeneity in meta-analysis will skew data (Glass et al.).
4. Publication bias may impact the available studies for analysis (Glass et al.).

Overview of Methodology

A meta-analysis including a comprehensive search of literature databases will be utilized. Each study will be analyzed following a three-step process. Only studies that meet predetermined criteria will be incorporated into the research. A nationwide search will be conducted. Information from the articles will be abstracted. Each study will be critically analyzed to determine if it meets internal validity requirements.

Rationale and Significance

This study could provide valuable information about school choice to districts and legislators. If the intention of choice was to provide a higher quality of education for those who cannot access a quality education in their residential districts, and, if those students are not taking advantage of the opportunity for better education, and, if there is a skimming effect that removes wealthier, higher achieving, and/or non-minority students, an argument can be made that choice contributes to segregation, both socio-economic and racial.

Researcher Assumptions

As an advocate of public schools and a county superintendent, the researcher approached this study with bias. The perspective of the Urban 8 in Ohio, which are Akron, Canton, Cincinnati, Cleveland, Columbus, Dayton, Toledo, and Youngstown, is that they are unjustly targeted as failing, especially considering that research shows that student achievement and socioeconomic status are correlated. Teachers, administrators, and students are criticized for performance measures that are beyond their control as a result of school choice and an exodus of higher-achieving students. Hidden in the definition of "good schools" are the identifiers White, wealthy, and high achieving. As a result, school choice is causing harm to minorities; it is resulting in continued oppression throughout our nation.

Key Definitions

Choice: "a program or policy in which students are given the choice to attend a school other than their district's public school (as at a charter school, private school, home school, or at a public school in a different district)" (Merriam-Webster, n.d.)

Choosers: Parents, as consumers, who choose to enroll their students outside of the residential district. Choosers are separated into three categories: skilled, semi-skilled, and disconnected. The categories are class related (Robenstine, 2001) and are indicative of a family's ability to navigate the choice process.

Inter-district open enrollment: When a family chooses to send their child to another school district that is outside of their residential district, but does not pay tuition (Aldis & Churchill, 2017)

Intra-district open enrollment: When a family chooses to send their child to another school within the residential school district, but not within the boundaries of their residential school (Education Commission of the States [ECS], 2020)

Residential district: The school district in which the family/custodial parent lives (Stedronsky, 2014)

Voucher: A method of school choice that allows public dollars to be spent on private schooling (EdChoice, 2020)

Organization of Study

This study will be organized into four additional chapters. In Chapter 2, a thorough review of the literature is presented. The history and policy of school choice throughout the United States and Ohio are examined. Opposing viewpoints are discussed. Reasons for choice are cited. Academic, societal, and financial implication are discussed as are implications for leaders.

In Chapter 3, the methodology, instrumentation, variables, procedures, and threats to validity are detailed.

Chapter 4 focuses on the results for each of the research questions. Specific data are shared, analyzed, and scrutinized for significance. Chapter 4 also contains a summary of the data.

The last chapter focuses on the purpose of the study and the conclusion. Additionally, implications for legislators and educational leaders are discussed. A summary of the study functions as the conclusion.

Chapter 2

Review of Literature on School Choice

This review of literature on school choice begins with a review of policy and history in both the United States and, more specifically, Ohio. Early laws that governed where people could live, policies supporting the desire to teach children about religion and culture, and parents' demand for the right to make educational decisions on behalf of their children are reviewed. Viewpoints, which are contentious and polarizing, are explored from each perspective – those who support choice and those who oppose choice. Lastly, this review will analyze the impact choice has on academic achievement, society, and district finances.

History and Policy

A vast history pertaining to school choice dates back to more than 150 years. Since then, policies and laws have been developed, modified, and challenged – and they all contribute to the educational choice landscape. To further complicate matters, some laws are national, like the right to free public schooling, and others are state level, like school choice.

Since the 1800s, Horace Mann endeavored to create a system to educate our unique country comprised of both immigrants and natives. According to Lumen Learning (n.d.), in *Education, Society, & The K-12 Learner*, Horace Mann believed it was our nation's duty to ensure the education and literacy of our students. By 1870, his leadership led to free, public elementary schools in every state. Mann supported a statewide curriculum to ensure all students had access to

quality education, and he pushed that schools were supported financially by local taxes (Lumen Learning, n.d.).

School Choice History and Policy in the United States

Dating back to the 1800s with "Black Codes", laws that determined where Blacks could work and live, and through the 1970s with "red-lining", a way of districting Black communities, Black people in the U.S. have been subjected to laws packaged as something beneficial but in reality delivered oppression and reduced the likelihood of breaking through poverty (Mullen et al., 2019). Historically, education has been at the center of political tug-of-war regarding equal access to minority and impoverished students.

History. In the 1860s, Black students did not have a school system, so Blacks began to build their own schools. According to Historian Herbert Gutman,

> …in the fall of 1866, at least half of the schools in Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, and Texas were sustained by Blacks. In Alabama, the Carolinas, Tennessee, and Virginia, Blacks supported twenty five to forty-nine percent of the schools. (Forman, 2005, p. 1292)

Progressive northerners joined the movement and conflict began. The idea of missionary and White support of Black schools conflicted with the idea that the schools would be supported and run solely by Blacks. As a result, the schools were unable to sustain themselves and they closed. Shortly thereafter, the number of Black children attending schools declined.

In 1954's *Brown* v. *BOE*, the U.S. Supreme Court declared educational segregation unconstitutional. Just one year later, in 1955, economist Milton Friedman posited that education should be a free-market system. Friedman (1955, 1962) believed that competition and efficiency would drive a higher quality of education (Phillips et al., 2012). The market model of school choice assumes that choice forces schools to compete to attract students. This competition stimulates innovation and improved school performance as schools contend for the membership of students and their parents. Friedman's (1955, 1962) position that schools should compete, and hence will improve to attract students, became the foundation for school choice options.

In the late 1960s, freedom of choice led to de facto segregation in the south when Whites overwhelmingly chose private schools to send their children as a way to avoid minorities (Moe, 2008). While freedom to choose instigated segregation more than 60 years ago, modern day proponents of school choice believe that choice will enhance equity in education.

> Hypotheses regarding educational equity suggest that school choice has the potential to liberate students from low-performing neighborhood schools and give them access to better schools without moving to a different neighborhood. Hence, school choice creates educational equity because it offers educational options to all students, including disadvantaged students who lack the financial resources to attend private schools or move to different neighborhoods with

> presumably better public schools. (Friedman 1955; Neal, 1997; Phillips et al., 2012, p. 265)

Friedman (1955), as well as others who supported choice, believed that creating competition between educational entities forces schools to improve; the belief was founded on the idea that schools were deemed ineffective because of something they were failing to do.

Shortly thereafter, in 1964, another form of privatized schooling known as Freedom Schools emerged. These schools were alternative summer school programs led by Civil Rights workers and were established to educate Black youth on Black history, civics, politics, etc. While these schools only lasted for a brief period, they openly shared their disappointment in the public school system and laid the foundation for OE (Forman, 2005).

The 1960s and 1970s brought the "free school movement" (Cooperative Catalyst, 2011, para. 1). These schools were supported by those who believed that the educational system was harming children. As a result, they implemented their own policies, curriculum, and systems. The push for community control resulted citing inflexibility in our public system and, as a result, failure of students, specifically city youth (Forman, 2005). Between 400 and 800 "free schools" opened throughout the US, and they, "…were a direct challenge from left-leaning reformers and progressive educators to the existing educational establishment" (Forman, 2005, p. 1300).

Historically, school choice began with liberal backing. Within a few decades, there was a change that brought forth stronger conservative backing. Under

President Bush, educational decisions were being based on the liberation model, which asserted that students in impoverished or disadvantaged situations could be liberated from disadvantaged situations by accessing a quality, equitable education (Foreman, 2005). It aimed to provide disadvantaged families with the same opportunities that other, non-disadvantaged families have. The market model sparked discussion about many options for school choice: vouchers, tax credits for private schools to families who send their children and businesses who support them, charter schools, magnet schools, and OE.

Policy. School choice policy began with parents challenging the then current norms regarding education of their children. When formal, public education began in the 19th Century, compulsory educational standards were implemented under the *parens patriae* provision. *Parens patriae* is Latin for "father of his country" and refers to the common law doctrine that the state serves as parent to us all (Mead, 2008, p. 1) This provision provided the government with the authority to act on behalf of the best interests of their citizens and that those interests may outweigh the interest of individual citizens. The provision caused tension among those who wanted the ability to choose how to educate their children (p. 1).

Several lawsuits contributed to school choice legislation and programming. By 1925, private school providers challenged that parents should be able to choose a private education for their children in the groundbreaking case surrounding school choice – *Pierce* v. *Society of Sisters* 268 U.S. 510 (1925). In Oregon, the statute that children must attend schools that are only public was

challenged; the Supreme Court opined that parents should be able to direct their children's education and that the state could not mandate public schooling as the only option (Mead, 2008). Several years later, *Brown* v. *BOE of Topeka*, 347 U.S. 483 (1954) proved to contribute to intentional segregation and the need to legislate purposefully against such action. In Prince Edward County, Virginia, residents closed public schools, provided vouchers to private schools, and used "Academies" as a way to continue segregating schools (Green, 2019). The Supreme Court ruled these behaviors unconstitutional. Five years later, in 1969, the ruling from *Green* v. *The County School Board of New Kent County*, 391 U.S. 430 (1968) declared that public officials must take calculated steps to desegregate public schools and that officials should not rely on parental choice as the only method of desegregation (Mead, 2008).

Legal issues stemming from religious clauses, discrimination, due process, varying state constitutions, and students with disabilities helped change the landscape of the *original parens patriae* provision (Mead, 2008). For example, in 2002, *Zelman* v. *Simmons-Harris*, 536 U.S. 639 (2002), the court upheld the Cleveland Voucher Program, which allowed public dollars to be spent on religious education because the choice to use dollars for religious schooling is made by private individuals (parents) and not the state. In *Parents Involved in Community Schools* v. *Seattle School District Number 1*, the court stated that the school had the right to disallow entry of students to their school of choice because they were attempting to maintain racial balance (Parents Involved in Community Schools v. Seattle School District Number 1, 2007). In January, 2020, in

Michigan, a 1970 state constitutional amendment was challenged because the amendment prohibited taxpayer dollars from funding private schools (Oosting, 2020).

Early supporters of school choice wanted to exercise the right to choose where to educate their children, but, throughout the years, the arguments had turned into accusations of mediocrity and an attack on public education. Many studies have been conducted on the results of student achievement and school choice, and overwhelmingly, research reveals that there is little evidence supporting that choice increases student achievement (Levin, 2017).

Fervent federal involvement began in the 1970s when Friedman's market economy voucher idea was implemented (Spalding, 2014). During this decade, the focus on school competition and formal steps to end segregation created a petri dish of experimentation and public funding commitments to schools that were alternative to the typical public option. Shortly thereafter, in 1983, Terrel H. Bell, Education Secretary to President Reagan, commissioned a cabinet-level panel to investigate the state of education in the U.S. – the National Commission on Excellence in Education ([NCEE], Hartman, 2012). Following the panel's investigation, Reagan's famous speech was released. He indicted public education as mediocre and lodged allegations of rampant illiteracy while calling for national educational comparisons. This spotlight was the beginning of state level legislative frenzy and federal involvement in funding choice options for families in the U.S.: vouchers, charter schools, virtual schools, scholarships, and, by the mid-1990s, 100% of all states in the U.S. permitted homeschooling.

History and Policy in Ohio

In Ohio, intra-district and inter-district OE was established in 1989 (Ryan, 2013). The law required the Ohio Department of Education (ODE) to maintain supervision of the process. Additionally, rules regarding how and when to inform the public, timelines, local level limitation, the application process and selection of candidates, athletic stipulations, special education, and transportation were created and signed into law (Procedures for Enrolling Students from Adjacent Districts or Other Districts, 2000/2005/2007). By 1997, Ohio's first charter school was established (ODE, n.d.). Ohio was the 28th state in the nation to support charter schools. Under Ohio Revised Code (ORC) 3314, charter schools were labeled as part of the state's publicly funded, non-religious school choice option that was open to all students (Community Schools, 2009). Soon enough, vouchers and scholarships were implemented as were scholarships for students with special needs.

According to Ohio law (ORC 3313.98), the boards of education in every city, local, and exempted village school district are required to have policy regarding OE. The policy must entirely prohibit OE, permit OE from adjacent districts, or permit OE from all Ohio districts. The policy is also required to outline the procedures, including deadlines for application, transportation, etc. ORC 3313.98 further directs that districts may not discourage or prohibit their students from applying elsewhere. The state board of education is charged with monitoring districts to ensure compliance (Procedures for Enrolling Students from Adjacent Districts or Other Districts, 2000/2005/2007).

Viewpoints

The current state of funding was designed to support a consumer approach. Based on a free market system where competition drives performance, supporters believed that underperforming schools should be forced to close if they are unable to keep up with the higher performing districts. Parents argue that families have the right to decide where their children attend school. Some districts agree, especially those who benefit financially when they gain student enrollment.

Opponents indicate that school choice is a divisive tool separating rich and poor, Black and White. Implications, such as social and transient repercussions, add to the negative impact of school choice on our most at-risk population, impoverished and minority students. Based on student achievement, little evidence supports the assertion that school choice is a way to access a higher quality education.

Researchers have spent time analyzing the pros and cons of school choice. They have studied the effects on graduation rates, racial and socioeconomic stratification, taxpayers, and achievement. There is substantial research and evidence to support both views.

Reasons for Choice

Those who choose to open enroll often choose to attend school districts with high academic achievement and wealthy communities. Parents make decisions about schooling based on the benefits they perceive, such as extracurricular offerings, educational opportunities, safe environments, test scores, religious preferences, socioeconomic composition, and racial makeup.

Overall, the research points to OE being impactful among affluent Whites. "Advantaged families choose from among the most affluent schools with the highest academic records, while disadvantaged families choose away from the schools with the highest poverty rates and the lowest academic records to attend schools that are slightly better" (Phillips et al., 2012, p. 287). According to Lavery and Carlson (2015), Welscha and Zimmer (2010) determined that a positive correlation exists between scores on the state test and the number of students who transfer into a district, the amount of per-pupil spending, and lower disadvantaged indicators, such a higher percentage of free and reduced lunch, poverty, and minorities.

For some families, it is a matter of finances. OE and school choice allows families to live in communities with lower property taxes and send their children to communities with higher per pupil spending power where residents often pay higher taxes. Reback (2008) noted that demand for school choice is driven by, "…idiosyncratic household preferences and by attempts at free-riding (i.e., living in a less expensive district but transferring the child into a district with premium services)" (Reback, 2008, p. 403). Local taxes, especially in wealthier districts, place a higher burden on taxpayers in the community. When schools are funded by levies, as is such in Ohio, voters may show their concerns at the polls. With fewer students walking the hallways that actually live in the district, there is potential for reduced voter support of local districts. "As local boards continue to struggle with budget shortfalls and mounting capital needs, they may need to further weigh their own communities' interest in supporting local public schools

in the wake of increased students' mobility in and out of districts" (Pogodzinski et al., 2018, p. 2).

In Ohio, a phenomenon called "donut holes" persists around the Big 8 urban districts (Carlson & Lavertu, 2017). Those "donut holes" indicate closed enrollment policies and perpetuate the inability of disadvantaged youth to access a school of choice. The state per pupil funding contribution (a share index of $6,200) does not cover full costs, and districts, especially those in communities that receive a large portion of local revenue, are not interested in financially supporting out of district students utilizing local tax dollars.

In addition to discerning why some families choose to participate in school choice, EdChoice expansion in Ohio has spawned new discussion about what kind of private institutions will participate in vouchers. DeAngelis et al. discovered that private institutions with higher tuition costs are less likely to participate in voucher programs (2018). Thus, parents will likely not be afforded high quality options through the voucher system. They found that schools with higher tuition and higher attendance are less likely to participate in voucher programs (2018).

Implications

As the contentious debate surrounding school choice persists, implications regarding choice are investigated. Researchers are investigating whether students are making academic gains as a result of their choice to enroll in districts other than their residential district. Researchers are also analyzing the societal and financial impact of OE.

Academic Gains

Ozek discussed the social components to OE and the positive correlation between achievement and socioeconomic status (2009). He studied student data and determined that it is impossible to measure the impact of an "intrinsic motivation to excel" (p. 4) on student achievement. He compared the data between students who stayed in their home district and those whose parents who opted out to move their students to another school via OE. "The findings reveal no significant benefit of opting out on student test scores and that the students who opt out of their default schools often perform significantly worse in reading than similar students who stay…" (Ozek, 2009, p. 5). Even more concerning, parents chose to open enroll their children closer to the termination of their high school career experience significant decreases in achievement. He blamed this on the "outsider effect" (Ozek, 2009, p. 6), or the impact of social-emotional transition and lack of acceptance into established friend groups. He believed that increases in achievement are a direct result of the family's reasoning for making the choice. "The extent to which exercising the school choice provided by OE translates into higher student achievement depends on the households' primary motives behind opting out and households' ability to exercise higher-quality schooling options" (Ozek, 2009, p. 15). Like many researchers, Ozek (2009) believed that when parents are invested in their child's education, results in increased achievement are noted. Others concurred. Malugade posited that OE requires parents to take a more active role in their child's education, which may in itself improve student achievement (2014). Phillips et al. (2016) observed

positive correlations between choice and student outcomes, but after controlling for differences in variables, such as capability and demographics, there is no statistical significance noted. In fact, they cited, "…a lack of evidence suggesting that OE programs have a measurable effect on the performance of transfer students compared with peers remaining at their home school" (Phillips et al., p. 6).

In northeastern Ohio, Iarussi and Larwin (2015) conducted a study to determine how scores of students who did not open enroll compared to scores of peers who open enrolled. Differences for 10 of 11 districts were not statistically significant; the lowest performing district was the only one that yielded a significant difference and the significant differences in scores were detected in Grades 8 and 12, which represented less than 2% of sample. Epple et al. (2017) reported on data obtained in a three-year study by Figlio and Karbownik (2016) on student achievement in reading and math of students who received EdChoice Vouchers in Ohio. They found, in both reading and math, large and negative significant effect size estimates.

When student achievement is measured comparing those who open enroll and those who do not, "…consistent open enrollers score at substantially higher levels in subsequent years" (Carlson & Lavertu, 2017, p. 32). The problem with this is that we do not know why this is happening. Parental involvement, socioeconomic status, and reason for choice may be more of an indicator for student success than the receiving district's ability to provide a better education.

Black students who consistently open enroll show gains in reading and math; however, they are less likely to take advantage of school choice. "Together, these findings create something of a paradox: those who are most likely to benefit from inter-district choice are least likely to have access to the program" (Carlson & Lavertu, 2017, p. 40). School choice was designed to help those who could not access a quality education at their local school district access it elsewhere, but barriers were not accounted for.

Societal Impact

The market economy and liberation models assert that school competition drives higher quality schools. Those models further indicate that students in impoverished or disadvantaged situations can be liberated from those situations by accessing a quality, equitable education. School choice is intended to provide disadvantaged families with the same opportunities that other, non-disadvantaged families have (Phillips et al., 2012). Much research has determined that families who exercise choice are wealthier and more educated, and that the students were higher performing academically (Lavery & Carlson, 2015).

According to Phillips et al. (2012), the liberation model includes several barriers:

- lack of information available to parents,
- transportation issues,
- inability to understand or navigate the choice process,
- reliance on social media, and
- friends with similar viewpoints to make decisions for their children.

Therefore, school choice legislation has done little to level the playing field.

> Despite the hypothesis that school choice programs can provide equal access to high-quality educational opportunities to all students, these policies often simply provide a new avenue of choice for families who already possess the means to exercise school choice in some other form. (Phillips et al., p. 267)

They also discovered that students are more than one- and one-half times more likely to participate in intra-district OE if the school is more non-White than White in their racial makeup. Moe (2008) is one of many who argued that school choice does not level the playing field, but instead, believed that "…educational choices produce a creaming effect that adds to social inequities" (p. 564). School choice is not being utilized by impoverished individuals who are marginalized by their socio-economic status or race; it is being utilized by those who could likely otherwise afford the option.

Those who support OE argue that it levels the playing field in education and provides equal opportunities for all students to access a quality education. "Theories related to school choice propose choice reforms as ways to enhance efficiency, effectiveness, and equity in education" (Friedman 1955; Neal, 1997; Phillips et al., 2012, p. 265). Since the demand for access to wealthy White districts is higher than non-wealthy or minority districts, Carlson (2014) used Monte Carlo simulations to measure the probability of impact that choice has on socioeconomic and racial stratification in Colorado. Specifically, he evaluated whether space constraints for students to open enroll increased socioeconomic and

racial stratification. Utilization of the Monte Carlo Simulation model allowed him to understand risk as it pertains to prediction (Kenton, 2020). His simulations debunked the belief that space constraints in high performing districts increased stratification. Carlson (2014) found that those constraints increased integrating behaviors and decreased racial stratification more than if students would have attended their residential school. He found that, while high achieving districts usually have less seats available for inter-district choice, inter-district choice reduces stratification levels in up to 67% of the simulation trials. Without supply constraints, inter-district choice reduces stratification levels in up to 95% of the trials. Although students who utilize choice seek schools with less poverty and a greater percentage of White students, only a slight increase in socioeconomic and academic stratification was discovered through his trial.

However, according to a study completed by Roda and Wells (2012), the majority of White families making more than $200K per year choose private schools, $100K-$200K per year choose gifted programs, and $50K-$100K per year were divided between schools outside of their neighborhoods or gifted programming. They also asserted that affluence and race define good or bad schools. As a result, districts have become more racially and socioeconomically segregated. As communities and schools deteriorate, students who have the means to leave poorer, "underperforming" districts tend to do so leaving the most impoverished, at-risk students behind. "At the end of the day, [school choice is] a system that pits one public school against another, thereby creating winning and

losing school districts, inequitably impacts schools and families" (Malugade, 2014, p. 850).

There is substantial research that examines why students and families choose to leave their neighborhood districts. Choices most often cited are social and economic disadvantage, academic achievement, and peer interactions, which refutes the economic theory disposition that competition creates better schools and parents make schooling decisions based on that. In fact, decisions are made on other preferences not accounted for. This is supported by the minimal number of disadvantaged students utilizing OE and further exacerbates the problem of segregation. "Nationally, White students attended schools that were, on average, 9% Black, whereas Black students attended schools that were, on average, 48% Black" (Bohrnstedt et al., 2015, p. 23).

Home environments and social implications are barriers for students in urban areas who do not participate in OE. The culture of the community reflects the culture of the schools. Those within the community share similarities in expectations, friendships, support, and socioeconomic status. Much like schools,

> Neighborhoods also shape the educational careers of students through access to criminal subcultures, extra-familial mentors and youth advocates, peer groups that have been educationally and occupationally successful, and geographic centrality that may permit feasible commutes to a wide range of schools. (Lauen, 2007, p. 180)

In a report completed by Carlson and Lavertu in 2017 and submitted by the Thomas B. Fordham Institute (2020), it was noted that approximately 80% of districts in Ohio participate in OE. Most of those who participate are from rural, White, and economically disadvantaged (ED) districts. Seventy-three percent of students in Ohio are White as are 86% of students participating in OE. The majority of Black students in Ohio are enrolled in Big 8 districts. Only one-third of students studied were considered consistent participants while two-thirds were deemed transitory. Transitory students face issues with socialization, stability, and graduation. They also performed lower on reading and math assessments. Black students who open enroll attend schools that have a lower growth score than their home districts. White students who open enroll attend schools with higher growth than their home districts. There is research to support sustained OE on student achievement. These data indicate that more White, affluent students participate in school choice. However, in 2017, Swanson investigated whether schools in the Cleveland metropolitan area that participated in vouchers experienced stratification. He found that those who participated in vouchers were more integrative by 18%. Seven of eight studies he completed show increased racial integration in voucher schools. Swanson (2017) stated that the purpose of vouchers was to increase access of at-risk students to private schools; as such, one should expect they produced an integrative effect. The same effects were not noted in district choice and charter school results.

One study painted a picture of purposeful segregation when it came to a charter school in Arizona. They found that overall, students and families of

Whites, Blacks, and Native Americans appear to be self-segregating. According to Garcia (2008), Carnoy et al. (2005) discovered that charter schools enrolled a lower percentage of students eligible for free and reduced lunch regardless of race. The implication is clear - advantaged students are leaving impoverished districts, and, in some situations, self-segregation is occurring across races. Further research concluded that the performance scores of charter schools were significantly less than the residential district scores and students chose schools with a higher concentration of same race peers. Garcia (2008) credited good advertising. He believed that charter schools make claims that are not true and some parents are not good consumers. While there is no accountability in charter schools, economically disadvantaged students who are left behind often have special needs and experience a tremendous amount of external stressors, which often decreases their likelihood of achievement. The failing grades of our public districts and the decline of public education in our country may be due to the fact that our brightest students leave for promises of better education. Charter schools are not required to ensure diversity. Many of them use surrounding districts as a "point of reference" for how diverse they should be (Garcia, 2008, p. 810). Frankenberg et al. agreed that district boundaries work in opposition to educational opportunity expansion (2017).

A study completed by Weiher and Tedin (2002) of over 1000 charter schools in Texas found that various cultures cited several reasons for leaving their school of residence for charter schools. White parents cited test scores as most important, Black parents cited morals and values, and Hispanics cited discipline.

The one thing all of these parents had in common was their ranking of racial diversity as least important.

To further complicate the issue of segregation in schools, districts are not permitted to refuse students based on racial balance. State laws were previously in place allowing districts to deny OE in or out of the district if it caused a racial or socioeconomic unbalance, but that law was recently overturned and schools are not permitted to consider race when making OE decisions. "Integration by student achievement and parental education may be of particular importance given the 2007 Supreme Court rejection of race-based preferences in school assignment decisions in Seattle and Louisville" (Koedel et al., 2010, p. 10). Supreme Court Justice Kennedy's decision recommended a greater emphasis on integration based on socioeconomic factors instead of any other factors thought to be segregating.

Districts have very little influence over students open enrolling into their districts but have more control over keeping them from leaving. "If policy makers pursue the issue of charter schools and racial segregation, they must consider racial segregation from a more inverse perspective than historical desegregation policies and begin to contemplate the implications of minority self-isolation in school choice environments" (Garcia, 2008, p. 827). The decision to self-segregate cannot be legislated, and thus proves to provide roadblocks to true integration.

Financial Impact

Another less frequently discussed impact of OE is transient enrollment patterns. According to Lavery and Carlson, only 62% to 75% of students continue to open enroll and Black students are less likely than both White and Hispanic students to continue (2015). This is also true of students on free and reduced lunches across all grades. Research regarding the impact of transiency is ongoing. As a result, the impact is unclear (Ledwith, 2010). When students return to their home district, courses may not align, credits may not have been earned, and graduation may be delayed. This puts a financial burden on the residential district and has the tendency to negatively impact the district report cards.

School choice opponents argue that those left behind in districts that are underperforming are hurt by a decrease in funds and reduced programming. In this way, school choice creates a downward spiral for districts who lose funding from students leaving and cannot recover. They become less efficient and less thorough in their ability to deliver quality programming and the most vulnerable students left behind. School choice opponents cite skimming the highest achieving public school students who are most often wealthy and higher achieving, leaving the equivalence of financial crumbs to a vulnerable portion of students who are unable to seek better (Welsh et al., 2005; Epple et al., 2017; Ledwith, 2010). Powers et al. (2012) studied whether the market system created a high percentage of winners and losers when it comes to student choice and funding. In the Arizona sample, districts balanced the number of incoming and

outgoing students. They found no evidence of skimming (except in one school building). While no stratification was observed, they did note a "revolving door" (p. 224) of students entering and leaving schools, which presents different concerns. They also noted a higher rate of students moving between suburban buildings and charter schools than urban movement. An interesting finding is that Black, Hispanic, and American Indian students participated more in school choice than did White students.

Those who benefit from school choice will experience an increase in funding with additional student enrollment, which should translate into less reliance on taxpayer funding. Research connects some academic benefits of leaving underperforming districts, but the belief is that the increase likely results from family commitment - not that the district of choice actually provides better opportunities (Roda & Wells, 2012).

What are the big problems? As noted by Carol Burris, former Educator of the year in New York and current executive director of the Network for Public Education, a nonprofit advocacy group, choice that is implemented to promote racial and socioeconomic integration, or those who provide a specialized service such as vocational education or alternative settings are directly beneficial to both students and communities. She argued that privatized choice, in which public dollars are utilized to support private schools run by corporations, has very little to no oversight (Strauss, 2017). The basis for this system is modeled from the competition model first introduced by economist Milton Freidman, even though there is no evidence supporting that student achievement is increased as a result.

Taxpayers and school districts suffer consequences if they are the losers in OE. "Backpack funding" (Krainin, 2015, para. 2-7) , or portable funding that follows students where they decide to go, will result in less school funding for community districts. Districts will increase their reliance on taxpayers or be forced to reduce programming for students.

Proponents argue that community districts will not be hurt because they can reduce costs; however, school districts are not necessarily able to reduce costs when they lose students. They may not be able to reduce bus routes, electricity, teachers, administrators, etc. Yet, they lose funding when students choose to leave. Strauss (2017) compared this to when a child leaves home for college. Although the family now pays more than $15,000 per year for their child to attend a state college, the family does not save $15,000 because their child left home. Mortgages, utilities, and the like are still necessary. The difference in money that leaves a district when a student chooses to attend school elsewhere versus the amount of money that is saved by the student leaving is referred to as "stranded costs" (Strauss, 2017, Answer Sheet). A Bethlehem, Pennsylvania, school district spent $26 million of its budget in backpacks, but if those students were required to be educated in Bethlehem schools, it would only cost $6 million (Strauss, 2017). In Ohio, the state aid for a child to attend school is $6,200. The state does not fund any child at that level. Instead, funding is based off of housing valuation and the community's ability to pay. Wealthy districts, such as Canfield, Ohio, and Poland, Ohio get a small portion of that $6,200 - about 35%, or $2,170. However, when a student leaves their community district, the district is required

to place the total of $6,200 “in a backpack” to whichever school the student chooses to attend. That additional $4,030 comes directly out of the district’s general fund, which is supported by taxpayers. The impact of this:

- causes a greater reliance on community taxpayers to support the schools in their communities,
- lowers home values in districts that are deemed underperforming, and
- greatly impacts programming for remaining students

The benefit of 0E for districts who receive an influx of students is that they will experience an increase in funding with additional student enrollment, which should translate into less reliance on taxpayer funding.

Similar to inter-district OE, vouchers, which are relatively new to the landscape of education, are touted as, “…decoupling residence and school choice…” to provide families, specifically of low income, with better educational options (Epple et al., 2017, p. 444). Like traditional school choice arguments, supporters believe that vouchers are another opportunity to level the playing field. Critics of vouchers believe that students who are supposed to benefit likely will not. As a result, the students with the highest needs will be left without the proper fiscal support and programming to meet their needs.

Vouchers are typically funded by tax revenue, tax credits, and private foundations. Lawmakers in Louisiana commissioned a review of the Louisiana Scholarship Program (LSP) to determine if eliminating the scholarship would save money in Louisiana’s education budget. What they found was that the LSP

voucher program has reduced the impact to a state budget since most private school tuition is less than the state funding for such programs (DeAngelis & Trivitt, 2016). In Oklahoma, the Equal Opportunity Education Scholarship Act provides significant tax credits to individuals and businesses who donate money toward the scholarship, which allows students to attend private K-12 schools. Similar to vouchers elsewhere, there are requirements to qualify, such as poverty level and residing in a school district that is underperforming (based on various models) (Dearmon & Evans, 2018).

Implications for Leaders

Supporters of OE note increased district funding as a benefit, but moreover they believe that competition for students forces districts to be more innovative and to thrive for customer satisfaction. Those who support school choice believe that when schools have to fight for students, many think outside of the box and threaten the existence of other schools that have the "if it's not broke, don't fix it" mentality. But it is not that simple. As Bagley stated, "…the complexity of the policy process and the opportunity for the contestation and reworking of dominant discursive frames can work to promote as well as oppose market pressures" (2006, p. 360). In reality, research reveals no long-term benefits for students who open enroll.

> While they observed a positive correlation between the choice to opt out of the assigned school and student outcomes (e.g., higher graduation rates), any measurable benefits for transfer students faded after controlling for difference among students related to

> capability and demographics. Overall, there is a lack of evidence suggesting that OE programs have a measurable effect on the performance of transfer students compared with peers remaining at their home school. (Phillips et al., 2016, p. 6)

Most economists agree that without deliberate structure, such as transparency, assistance understanding and navigating the process, multiple modes of communication, and mandatory district sponsored transportation, problems will arise. The market model has sparked many options for school choice: vouchers, tax credits for private schools to families who send their children and businesses who support them, charter schools, magnet schools, and OE.

State laws determine whether OE is mandatory or voluntary, but the policies have three things in common: policies that outline the process for OE, a list of reasons that a district may choose not to allow someone to openly enroll, and the way state aid will be utilized in the transfer of districts. Transportation policies are less legislated and are either fully expected to be the district responsibility, the parent responsibility, or there is no direction. The current system relies heavily on residential locations where more advantaged families can afford housing costs in high performing districts, the ability to afford private schools, or the ability to transport studies to alternative locations.

There are ways to ensure all students have access to quality education. Moe argued,

> …through appropriate design, choice plans can become vehicles by which social equity, common schooling, and other basic social values

> can be aggressively pursued – and far more successfully, it is reasonable to expect, than they are being pursued under the current system, which is clearly failing in these regards, and is the baseline against which all reforms must be judged. (2008, p. 568)

The RAND Corporation completed an evaluation of the Regional Choice Initiative (RCI). The RCI is comprised of four options for students to access courses and educational opportunities outside of their district while maintaining their enrollment in the district of residence. RCI solves many problems that OE has created. An "Open Seats" agreement among school districts allows students from other districts to take coursework outside of their district of residence while maintaining enrollment in their residential district. This initiative solves issues that those opposed to OE present:

- tax-payers are not paying to educate students whose families do not pay taxes in district,
- it reduces economic and racial segregation that results from OE,
- it provides access to coursework virtually, via provided transportation or reimbursement of self-transportation,
- it does not create winner and loser districts,
- it encourages collaboration among districts,
- it allows students to maintain social relationships in district while forging new ones outside of their comfort zone, and
- there is a social emotional benefit (Phillips et al., 2016).

Alternatively, public schools have high fixed costs, and when students leave, they may not be able to make reductions. Funding a system so as not to debilitate the districts' ability to serve the students that were unable to seek a better education would also benefit those who have been left in failing districts. However, market advocates would argue against this because they view that it would constitute rewarding poor performance.

A similar study in San Diego, California, Voluntary Ethnic Enrollment Program (VEEP), analyzed purposeful integration that was designed to bring racial equity to individual schools to represent the district's diversity.

> After Proposition 209 in 1996, it became illegal to provide programs that gave racial preferences. The VEEP program continued, but took a broader view of integration, focusing on economic disadvantage. District-provided busing is available to students who participate in the VEEP program, and the busing pattern is designed to move students between less affluent and more affluent neighborhoods. (Koedel et al., 2010, p. 2)

Similarly, the magnet program was established to attract students from White neighborhoods to minority neighborhoods by offering special curriculum and programming. Transportation is provided. Unlike the magnet program and the VEEP program, busing was not provided to those who chose OE. The results indicate that the VEEP and magnet programs have an integrating effect, and the OE program has a segregating effect. One could conclude that offering innovative programming may attract students to districts that are impoverished.

Critics of choice today site not only racial segregation as an issue, but also socioeconomic segregation as wealthy families tend to congregate in similar communities and take advantage of OE to attend better schools. "The reason choice often operates perversely within the current education system is precisely that this system was not designed to take advantage of choice, nor of markets generally, but rather to keep markets out of education entirely" (Moe, 2008, p. 565).

At the root of all educational decisions are parents who are looking out for what they deem is the best interest of their children. The unfortunate results of the inequitable system of school finance and educational choice has left a disparity among the educational experiences available for students in our country, a lack of transparency with private and charter schools, and political interest groups impacting what students learn and how they are taught.

Implementing performance expectations for all schools (including private and charter), committing resources, human and fiscal, to districts that are deemed failing would likely reduce the have and have not educational system in our country. To continue school choice without supporting segregation, deliberate policies must be established to assist disadvantaged families. Warren Buffet suggested this to Michelle Rhee, school reformer, to solve the dilemma: "Make private schools illegal and assign every child to a public school by random lottery" (Cook, 2012).

Outreach to impoverished communities, free transportation to districts, and help navigating the process would likely increase participation in school choice

by disadvantaged families. The lack of purposeful goal setting and planning has contributed to an increase in racial and economic segregation. Without such purposeful planning, OE contributes to segregation of race and class.

Additionally, increased transparency on how taxpayer money is being utilized in private and charter schools is necessary. According to Strauss (2017), several for-profit, charter companies have benefited with excessive salaries ($600,000 per year), signing bonuses ($400,000), and utilization of taxpayer money to support their personal companies, all the while children are losing programming and opportunities and communities are struggling to help their students. In 2017, Progress Ohio published *An Incomplete (Yet Totally Terrifying) Ohio Charter School Scandal Chronology* depicting many stories of fraud and hard-earned, taxpayer dollars.

Summary

At the root of all educational decisions are parents making decisions based on what they deem is in the best interest of their children. The unfortunate results of the inequitable system of school finance and educational choice has left a disparity among the educational experiences available for students in our country. Implementing performance expectations, committing resources, human and fiscal, to districts that are deemed "failing would likely reduce the have and have not educational system in our country. To continue school choice without supporting segregation, deliberate policies must be established to assist disadvantaged families. Outreach to impoverished communities, free transportation to districts, and help navigating the process would likely increase participation in school

choice by disadvantaged families. The lack of purposeful goal setting and planning has contributed to an increase in racial and economic segregation. Without such purposeful planning, OE contributes to segregation of race and class:

> …mounting evidence suggests that when school choice policies are not designed to promote racial integration – which most newer school choice policies are not – they generally manage to do the opposite by leading to greater stratification and separation of students by race and ethnicity across schools and programs. (Roda & Wells, 2012, p. 262)

Chapter 3

Methodology

The meta-analysis method was chosen for this study because it allows the researcher to analyze data from established research utilizing both large and small contributing samples (Boyd et al., 2017). The systematic analysis allows the researcher to create a sample that produces a quantitative estimate that is generalizable to the entire population (Boyd et al.). Meta-analysis establishes significance with studies that may have different results, expresses an estimate of the magnitude of combined studies, and provides a complex analysis to closely examine subgroups that, alone, are not statistically significant (Glass et al., 1981). The quantitative systematic analysis will provide statistical power because it provides information from many results to get an overall picture, determines the effect size estimate and the weight of effected sizes, makes more accurate generalizations, and reduces study bias.

This chapter will begin by reviewing the purpose of the study. Next, the research questions and the corresponding hypothesis will be addressed. The target population will follow with rational for the sample. The researcher will discuss the research design and the process for data collection and analysis as well as the instruments used and scoring procedures. This chapter will conclude with a summary.

Research Purpose and Questions

In the United States, federal law allows for families to choose how and where their children are educated. School choice comes in many forms: OE,

chartered public, non-chartered/non-public, private, online, homeschooling, vouchers, and scholarships. All 50 states allow for choice, but 37 states in the United States adhere to Blaine Amendments, which are laws prohibiting the use of public dollars for religious, private education (Bindas et al., 2020). The educational choice movement is pushing for expansion to utilize public dollars for private schooling. The issue is contentious. Parents have the right to choose, but could the impact of their "choice" be encroaching upon previously established federal legislation that prohibits segregation?

The purpose of this study is to determine the impact of school choice on student achievement, school funding, and integration (both racial and socioeconomic). Utilization of a meta-analysis to conduct this research employed the effect size estimate statistic (Cohen's *d)*, which allowed the researcher to standardize and summarize the results of multiple studies that were carried out in multiple ways with varying subjects (Guskey, 2019). The measure of variability is reported to explain to compare the data's variability from the mean and the consistency of that variability across various studies.

This study should provide reliable insight into the following research questions:

Research Questions

1. What is the effect of school choice on diversity, finances, and academics when examined simultaneously, when school choice is exercised?
2. What is the impact of school choice on academics, across different grade levels?

3. What is the impact of school choice on academics, across different core subject areas?
4. What is the impact of school choice on academics across time?
5. What is the overall effect of school choice on year of research reporting?
6. What is the overall effect of school choice on source of dissemination?

Target Population

This study was designed to generalize answers to the research questions throughout the United States. The samples analyzed were drawn throughout various regions in the U.S. The sample included for analysis was drawn from a search of literature databases utilizing ERIC, MAAG Library, Google Scholar, Google, and similar sites. Studies from samples of all U.S. students in Grades 5-12 who participate in annual state testing and school choice were compared to U.S. students in Grades 5-12 who participate in annual state testing and do not exercise choice. Samples were analyzed to determine who exercises choice based on socioeconomic status and ethnic identifiers. Additionally, students were compared to themselves for the purpose of determining impact of school choice on individual student achievement. The variables in this study included socio-economic status, parental level of education, ethnicity, student achievement, funding increase, funding decrease, student grade level, and type of choice (charter, private, public, etc.). Each variable was coded for consistency to increase homogeneity.

Research Design and Procedures

A meta-analysis is an analysis of results of many studies that were

conducted on the same idea or concept to compute effect size estimates, increase precision, reduce bias, and generalize to specific populations. This method allows the researcher to establish significance with studies that may have different results, determine an estimate of the magnitude of combined studies, provide a complex analysis, and closely examine subgroups that, alone, are not statistically significant (Glass et al., 1981). Conducting a meta-analysis provides statistical power because it synthesizes information from many results to get an overall picture. This allows the researcher to determine the effect size estimate and the weight of effected sizes, make more accurate generalizations, and reduce bias (Glass et al.).

Predetermined criteria was implemented prior to selecting studies for incorporation: relevance to the research questions, relevant population, comparison groups, and outcomes that are comparable for the purpose of this study (Glass et al., 1981). Each study selected for analysis follows a three step process: read the title and assess with criteria, then reading the abstract and assess with criteria, and lastly read the full text and assess with criteria. Only studies that meet the criteria through a full text reading were incorporated in the study.

The meta-analysis was conducted utilizing a 9-step process outlined by Glass et al. to

1. Develop a question based on theory and specific population
2. Search for research pertaining to question (Cochrane Library)
3. Read the abstract and title from each article - decide what to include
4. Gather information

5. Determine the quality, based on internal validity, of the articles
6. Determine the extent of heterogeneity of each article using Cochran's Q Statistic
7. Estimate the summary effect size using random effect models and construct a forest plot
8. Determine any publication bias
9. Conduct moderator analysis

Data Collection Procedures

The research began by conducting a nationwide search of previously conducted research that pertained to the research questions listed above and met the pre-established criteria. Information from the articles was abstracted, including the names of the author, the year, the sample, and the outcome. Each study was critically analyzed to determine if it met internal validity requirements. Sample sizes, determination of biases (using a Funnel Plot), theories, hypothesis, and control of confounding variables are evaluated. Each study was critiqued for heterogeneity using Cochran's Q. Random effects models were inspected through the creation of a Forest Plot (Glass et al., 1981).

Data Analysis Procedures

Outcomes were coded as such:

Published Status

1 = published

2 = not published

Manuscript Type

1 = journal articles

2 = dissertation/thesis

3 = presentation

4 = social media/blogs

5 = report

Grade Levels

1 = K-4

2 = 5-8

3 = 9-12

4 = Mixed

Race

1 = all

2 = Black

3 = Hispanic

4 = White

5 = multiracial

7 = Asian

Focus

1 = Race

2 = Fiscal

3 = Academic

Subject

1 = All

2 = Math

3 = Read

4 = Math and Reading combined

Time

0 = This year or year of open enrollment

1 = 1st year after OE

2 = 2nd year after OE

3 = 3rd year after OE

4 = 4th year after OE

-1 = 1 year pre-open enrollment

-2 = 2 years pre-OE

-3 = 3 years pre-OE

-4 = 4 years pre-OE

Instrumentation

State test scores acted as the scoring instrument to determine whether student achievement was impacted as a result of school choice. While tests may vary between states, they are normed and standardized, thus lending to high reliability and validity. This assumption of normal distribution allowed for the use of a random-effects model (Higgins et al., 2009). Additionally, students were compared to their own prior achievement and not compared to one another.

Internal and External Validity Limitations

Conducting a meta-analysis requires the researcher to find appropriate studies for analysis. Each study is carefully analyzed for data that are appropriate. The researcher is limited to including data that are provided in published studies. If that data are incomplete, the study may not meet inclusion criteria. A meta-analysis requires advanced statistical techniques to ensure there is no misinterpretation of the data (Glass et al., 1981). Bias of the researcher and publication bias can impact a meta-analysis. Homogeneity must be established in the sample.

Chapter 4

Results

The purpose of this quantitative study is to analyze the impact of school choice on students; specifically, whether relationships exist between school choice and achievement, race, and socioeconomic status. To achieve this, a random effects meta-analysis was conducted. The following research questions were constructed:

1. What is the effect of school choice on diversity, finances, and academics when examined simultaneously, when school choice is exercised?
2. What is the impact of school choice on academics, across different grade levels?
3. What is the impact of school choice on academics, across different core subject areas?
4. What is the impact of school choice on academics across time?
5. What is the overall effect of school choice on year of research reporting?
6. What is the overall effect of school choice on source of dissemination?

A system was established utilizing multiple external reviewers. The initial analysis included a review of 140 articles. This first level of review was conducted to determine which articles focused on open enrollment and included quantitative results. All charter, voucher, and magnet schools were excluded. A second level of review was conducted in which all quantitative data were examined in each article. Specifically, manuscripts were examined for their inclusion of quantitative data focusing on race, fiscal, and academic information.

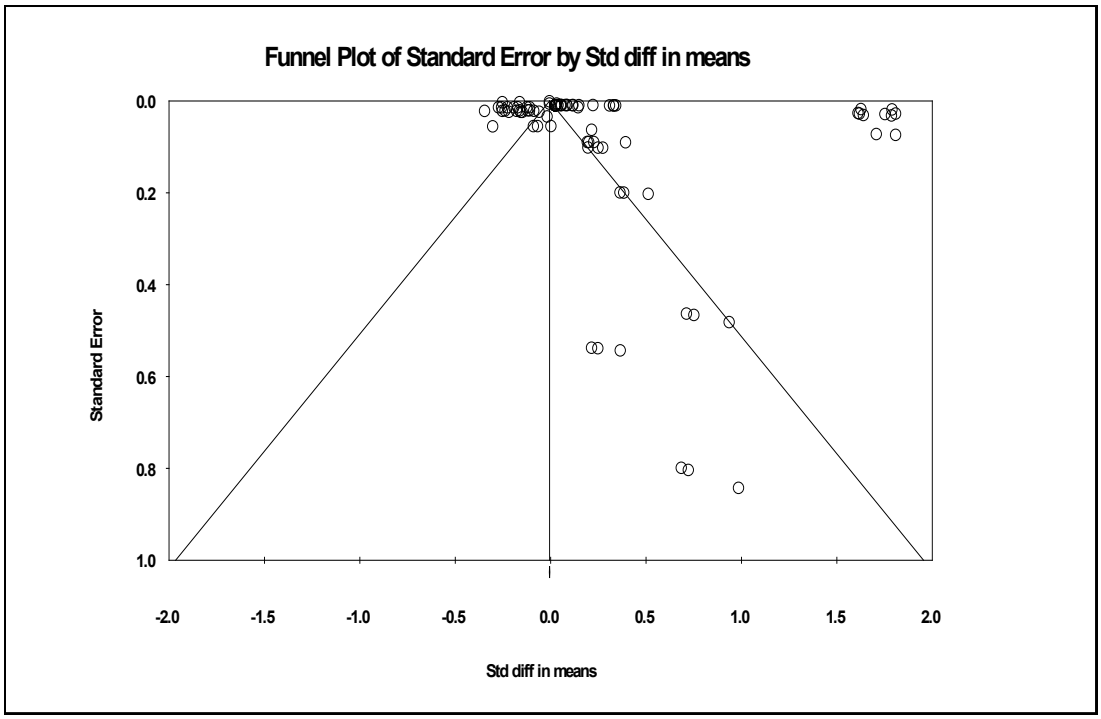
Articles that did not meet the established criteria were eliminated. One hundred and twenty-seven articles were omitted. Of the 13 remaining studies, a total of 268 potential effect size estimates focused on the impact of race, fiscal, and academic achievement in school choice were considered. The final level of analyses examined the potential of computing a Cohen's d from the data that were provided in each study. This resulted in three more manuscripts being eliminated from inclusion. The resulting 10 studies included 158 effect size measures. This resulted in a total sample size of 27,127,206. Of the 158 manuscripts utilized for the random effect analysis, 115 were extracted from journal articles, 29 were extracted from dissertations, and 14 were extracted from reports. Appendix A provides the overall effect size estimate for each study included in this research. Data were imported into the Comprehensive Meta-Analysis ® software for analysis.

Initially, the data were examined for the potential of publication bias using Egger's regression intercept and a funnel plot. Eggers (1997) assessed bias by using precision (the inverse of the standard error) to predict the standardized effect size estimate (effect size divided by the standard error). In this equation, the size of the treatment effect is captured by the slope of the regression line (B1) while bias is captured by the intercept (B0). This method is considered to be the most robust approach to examining publication bias, as it incorporates sample size, as well as the within and between variance found with moderators. In this case the intercept (B0) is 3.55812, 95% confidence interval (-0.87916, 7.99540), with t=1.58392, df=156. The 1-tailed p-value (recommended) is 0.05762, and the

2-tailed p-value is 0.11524. Specifically, the results indicate that no publication bias exists. A funnel plot of the data is provided in Figure 1 for a visual representation of the distribution of the study effect size estimates.

Figure 1

Funnel Plot of Manuscript Effect Size Estimates



The *p* value represents the measure within the moderator (race, finance, academics). The *p* value answers if all the studies with each moderator produce the same outcome. A significant *p* value indicates that there are differences in outcome within the moderator. The effect size estimate, as measured by the Cochran's Q test based on chi square distribution, indicates the outcome across groups. The overall effect size estimate for the impact of school choice on race, finances, and academics, based on the current investigation, is $d = .110$, $p < .001$.

This indicates that when examining the available data for the three areas of focus, there is a small significant positive effect size estimate on race, finances, and academics, when examined simultaneously. A closer examination of each primary variable indicates that the impact of school choice on race, fiscal, and academics is most positive for academics. A negative effect size estimate is calculated for impact of school choice on race, or diversity of representation, (d=-0.05) and school finances (for schools that participate in school choice) (d = -0.13). However, results indicate that there is a small positive effect estimated for academics (d = 0.17). These results are presented in Table 1.

Table 1

Focus

Focus	Number of Measures	Effect Size	Lower Limit	Upper Limit	Within sig.
Race	45	-0.05	-0.07	-0.02	0.000
Fiscal	12	-0.13	-0.49	0.22	0.461
Academics	43	0.17	0.11	0.23	0.000

Note. These analyses were limited to those data points that were focused on specifically one of the three variables

The impact across all three of these variables is significantly different, Q(99) = 68549.51, p < .001, however, those differences are based on small effect size estimates and may not be practically significant. When analyzing the effect size estimate for academics, race, and fiscal independently, rather than comparatively as is presented in Table 1, the overall effect size for academics is d = 0.18 (p<.001) , for race is d = 0.20 (p<.001), and for fiscal is d = -0.11 (p>.05).

The data were further analyzed by examining the estimated effect size estimates by core subject area, time since participating in school choice on academics, level of academics, and the effect of diversity by race. When evaluating the academic impact of school choice, core subjects were coded: all (1), math (2), reading (3), and math and reading (4). Effect size estimates were calculated to determine the size of the difference in achievement by subject area between the treatment group (students who open enroll) and the control group (students who do not open enroll). A moderate effect size estimate is noted in math (d = 0.26), reading (d = 0.25), and math and reading combined (d = 0.30). All three measures were significant ($p < .001$). The "all" measurement was not significant (p =.184). These results are presented in Table 2.

Table 2

Core Subject Area by Academic Achievement

Subject	Number of Measures	Effect Size	Lower Limit	Upper Limit	Within sig.
All	11	0.06	-0.03	0.15	0.184
Math	32	0.26	0.17	0.35	0.000
Read	30	0.25	0.12	0.39	0.000
Math and Reading	15	0.30	0.20	0.40	0.000

The impact across all four of these variables is significantly different, Q(4) = 93.37, $p < .001$, however, those differences are based on small effect size

estimates and may not be practically significant.

The measurement of time is conducted to determine the impact of school choice on academics, relative to the year in which students participated in school choice. Year zero represents the subjects' first year of open enrollment. Time "-1" indicates data compared the academics to one year prior to exercising school choice. Time "-2" indicates data compared to the academics to two years prior to exercising school choice. Likewise, time "-3" and time "-4" indicate data utilized compared to the academics to three years prior to exercising school choice. Times "1", "2", "3", and "4" represent the impact of school choice on academic achievement one, two, three, and four years after the decision to open enroll was made and the subjects remained in their school of choice. These results are provided in Table 3.

Table 3

Time Enrolled in School Choice on Academics

Time	Number of Measures	Effect Size	Lower Limit	Upper Limit	Within sig.
-4	2	0.02	0.01	0.04	<.001
-3	2	0.02	0.01	0.04	<.001
-2	2	0.02	0.01	0.04	<.001
-1	2	0.32	0.3	0.34	<.001
0	4	0.18	0	0.36	.044
1	2	0.02	0.01	0.04	<.001
2	2	0.02	0.01	0.04	<.001
3	2	0.02	0.01	0.04	<.001
4	2	0.02	0.01	0.04	<.001

All measures of time since enrollment are statistically significant. A small effect size estimate is noted in year zero (d = 0.18). A medium effect size estimate is noted in time "-1" (d = 0.32). No impact is noted in any other time measures. The impact across all nine levels of time were significantly different, Q(9) = 703.39, p < .001, and are practically different as well. Table 4 represents the impact of school choice on grade bands.

Table 4

Academics by Grade Level Band

Level	Number of Measures	Effect Size	Lower Limit	Upper Limit	Within sig.
K-4th	2	0.04	0.02	0.06	<.001
5th-8th	42	0.35	0.18	0.52	<.001
9th-12th	25	-0.01	-0.04	0.03	.746
Mixed	85	0.00	-0.03	0.03	.888

As indicated in Table 4, Grades K-4 show there is no measurable effect size estimate (d = 0.04). In Grades 5-8, a significant positive medium effect size estimate was shown (d = 0.35). In Grades 9-12, no measurable effect was revealed (d = -0.01). The impact across all nine levels of time were significantly different, Q(4) = 27.75, p < .001. This difference is based on the 5-8th grade band that revealed the largest effect size estimate.

The effect of racial change or diversity was examined for those effect size estimates that specifically isolated the race of the students who were migrating for

school choice. Table 5 represents the impact of school choice by race.

Table 5

Race Only Effect Measures

Race Only	Number of Measures	Effect Size	Lower Limit	Upper Limit	Within sig.
All	50	0.19	0.13	0.24	<.001
Black	13	0.29	-0.07	0.65	.110
Hispanic	13	0.28	0.08	0.47	.005
White	10	0.38	0.13	0.63	.003
Multi	3	0.79	-0.13	1.71	.092
Asian	3	0.28	-0.34	0.89	.377

A positive effect size estimate was noted in every category indicating an increase in the number of students from the respective races. In the "all" category, a small positive significant effect size estimate was noted (d = 0.19). Among Black, Hispanic, and Asian students who utilized school choice, a medium positive impacted was calculated (d = 0.29, d = 0.28, and d = *0.28,* respectively). White students showed a high, positive medium effect size estimate (d = 0.38). Multi-racial students produced a high effect size estimate of school choice (d = 0.79).

Peripheral Moderators

The first peripheral moderator examined was the year that the research was reported, published, or disseminated. Studies were included from 2006 to 2018. Results indicated that manuscripts utilized in 2006, 2009, and 2010 showed

a positive medium significant effect size estimate in all three years ($p < .001$, $p < .001$, and $p < .001$, respectively). Three years (2013, 2015, and 2018) showed no significant effect size estimates, while studies from 2015 and 2017 showed negative effect size estimates. These results are presented in Table 6.

Table 6

Year of Publication

Year	Number of Measures	Effect Size	Lower Limit	Upper Limit	Within sig.
2006	34.00	0.39	0.15	0.64	0.001
2009	4.00	0.33	0.31	0.34	0.000
2010	17.00	0.23	0.16	0.31	0.000
2011	28.00	0.01	0.00	0.01	0.008
2013	29.00	0.02	-0.02	0.06	0.290
2015	16.00	-0.17	-0.37	0.03	0.095
2017	7.00	-0.06	-0.11	-0.01	0.011
2018	23.00	0.03	-0.02	0.07	0.260

Overall, the reported effect of school choice by year was significantly different across the years of the studies, $Q(7) = 1926.40$, $p < .001$.

A second peripheral moderator was type of manuscript. A small effect size estimate was noted with journal articles ($d = 0.12$) and reports ($d = 0.15$), and both were statistically significant. These results are presented in Table 7.

Table 7

Type of Manuscript

Source	Number of Measures	Effect Size	Lower Limit	Upper Limit	Within sig.
Journal	115.00	0.12	0.09	0.15	0.000
Dissertation	29.00	0.02	-0.02	0.06	0.290
Report	14.00	0.15	0.09	0.22	0.000

Overall, the reported effect of school choice by year was significantly different across the years of the studies, $Q(2) = 21.37$, $p < .001$.

Summary

The findings of this random effects meta-analysis were derived from a nine-step process that started with 140 articles. After a two-step review process, exclusions were determine. Ten studies with 158 effect size measures remained. Each study centered upon the impact of school choice on race, fiscal, and academics in a public-school setting. A sample size of more than 27,000,000 students was achieved. The Comprehensive Meta-Analysis ® software was utilized for analysis.

After examination of the available data as it relates to race, finances, and academics, there was a small significant positive effect on race, finances, and academics when the three areas of focus were viewed concurrently. When separating the variables, the highest impact was noted for academics. A negative effect size estimate was noted for race and school finances; however, these

negative effect size estimates were small, and, while race was statistically significant, neither effect size estimate was practically significant.

Data were also examined to determine the impact of school choice by subject area (math, reading, and math and reading). A significant moderate effect size estimate was noted in math (d = 0.26), reading (d = 0.25), and math and reading combined (d = 0.30).

Time spent in open enrollment was also measured to compare the impact of school choice on academics with the year(s) in which students had been involved in school choice. Data were utilized to compare current year of exercising open enrollment with 1, 2, 3, or 4 years prior to school choice as well as 1, 2, 3, or 4 years after the decision to open enroll. Data comparing current year to one year prior indicated the largest effect size estimate (d = 0.32). This finding suggests that a positive academic effect is present one year after the student is open-enrolled.

The academic impact of open enrollment was evaluated by grade band. Students were grouped K-4, 5-8, 9-12, and mixed. There was no measurable effect for the K-4, 9-12, or mixed grade bands. In Grades 5-8, a significant positive effect size estimate (d = 0.35) was noted.

The moderator "race" was isolated to examine which students were choosing to open enroll. The categories All, Black, Hispanic, White, Multi, and Asian were created. Each category showed a positive effect size estimate. The Black, Hispanic, and Asian categories showed a medium positive impact whereas the White category showed a high positive medium effect size estimate. The

largest beneficiaries of impact were the Multi-race group.

Chapter 5 will further explain the research findings, explain the results, discuss implications for leaders, and recommend future research.

Chapter 5

Discussion and Conclusions

Chapter 5 of this study is derived from five sections: summary, context, and interpretation of the findings, implication of the findings, limitations of the study, and direction for future research. The summary section will analyze whether the findings supported the research questions. The context and interpretation section will review the expectations of the findings versus the actual findings, what those findings mean, and whether the findings are supported by research. In the implications' section, research findings will be examined to determine how they fit into the literature review. Data from this study will be compared to existing data for further comparison. Information pertaining to the findings' alignment with current theories and the framework utilized in this study. Implications for school leaders, legislators, school boards, and other stakeholders will be addressed.

The limitations' section will address the limitations of the study and the limitations of the findings. The design limitations of a meta-analysis, such as internal and external validity, will be reviewed as will any issues pertaining to effect size estimates and measurements that were utilized in the statistical analysis. Chapter 5 will conclude with directions for future research. In this section, the generalizability to other populations and ideas for expansion will be entertained.

Summary

This study set forth to answer the impact of school choice on diversity, finances, and academics. Processes were developed to ensure a multi-tiered approach to article selection. The research began with an initial analysis of 140 articles containing quantitative results pertaining to open enrollment. The first level excluded all articles that did not meet the initial criteria as well as articles that included information pertaining to non-public and charter schools. The second level of review narrowed the manuscripts further by focusing on the type of data for the study. Articles that did not contain quantitative data related to race, fiscal, and academic achievement were excluded. Of the 140 initial articles, 13 remained. The 13 studies contained 268 potential effect size estimates that focused on the three areas of the study. Three additional studies were eliminated because information was not available to compute an effect size estimate. In the end, 10 studies with 158 effect size measures were utilized yielding a sample size of 27,127,206 for the study.

First, data were calculated to determine the impact of school choice on all three moderators simultaneously. While there is significant research on the impact of school choice on student achievement, this study attempts a simultaneous analysis of the impact of school choice on academic achievement, diversity, and fiscal impact. When considering school choice, very few families consider the overall impact of the decision. Understandably, families that choose to leave their residential districts do so for a variety of reasons that focus on the wellbeing of and benefit to their child. What is likely not considered is how those

decisions impact the district's financial ability to continue to provide for those students who remain in the district and the increased reliance on taxpayers in both the receiving and losing districts. Additionally, the consideration of school choice on diversity is not likely on a family's radar when making the very personal decision to move their child. According to a study conducted by Weither and Tedin in 2002, low income and minority parents agreed that diversity was not an important factor when considering where to educate their children. For some, school choice has been used as a tool to deliberately segregate schools. In the 1960s, the ability to exercise school choice was utilized as de facto desegregation in the south; a vast number of Whites chose to send their children to private schools shortly after segregation was declared unconstitutional. Fiscally, many studies have been conducted that explain the importance of analyzing district open enrollment as a way to optimize district savings. This will be addressed in the implications section.

When reviewing the data simultaneously, the analyses were narrowed and the data were purified to ensure that the data specifically pointed to one of the three variables. This allowed for an equal comparison amongst all three variables to determine the impact of the effect. When comparing these three variables, specifically, a small positive effect size estimate was revealed for achievement; both race and fiscal revealed small negative effect size estimates. Based on this analysis, it is reasonable to conclude that the greatest impact is found for academics when considering all three of these variables simultaneously. The second largest effect size estimate was found for race (diversity), followed by

fiscal impacts. The effect size estimate for academics and race were statistically significant; however, the effect size estimate for race alone is not practically significant.

In the analysis of school choice on academics by subject/content areas, subject/content areas were broken down and coded accordingly: all core subjects of math, reading, science, math only, reading only, and math and reading combined. The analysis set forth to determine if there were differences in achievement between those who open enroll (treatment group) and those who do not (control group). A significant, positive, moderate, effect size estimate was noted in math only, reading only, and math and reading combined. There was no significant effect size estimate for the "all" measure. These findings are supported by research that resulted in positive effect size estimates for reading and math, but not other areas (Houk, 2017; Roland, 2020; Thompson, 2020; Carlson & Lavertu, 2017; Iarussi & Larwin, 2015). Research also suggests that the increases in achievement are more likely related to the active involvement of parents than programming available in the receiving school (Ozek, 2009; Malugade, 2014; Phillips, 2016).

The impact of school choice on academic achievement across time measured whether there were varying effect size estimates on achievement based on the time that subjects participated in open enrollment. Data were utilized to compare current achievement with achievement in previous and past years. Previous years are indicated as -1 (one year prior), -2 (2 years prior), -3 (3 years prior, and -4 (4 years prior). Similarly, data were analyzed to determine years

after open enrollment was exercised; 1, 2, 3, and 4 are utilized to represent the years spent exercising choice. Zero represents current year achievement. The effect size estimates were both statistically and practically different, which indicates that there is a definite impact based on time spent participating in open enrollment. Specifically, the data show a positive, moderate, effect size estimate for student achievement to have occurred after the first year a student participated in open enrollment. This is the largest effect size estimate noted in the time measurement analysis. The only other impact noted throughout the years analyzed was based on current year of open enrollment, and it was a positive, small, effect size estimate. No other impact was noted for achievement across time spent exercising school choice; specifically, based on the results of the current investigation, there is a time impact that is realized when compared to the year prior to open enrolling, or during the current year of open enrollment.

Other studies have shown an increase in achievement for those who remain in schools of choice. Carlson and Lavertu (2017) found that Black students who open enroll on a consistent basis show gains in reading and math. Consequently, they also discovered that Black students are less likely to exercise school choice than others (2017). This creates a paradox for the market theory that is based on school choice leading to a leveled playing field that provides equitable access for all.

Data were run to analyze the impact of school choice on achievement specifically across various grade levels. Samples were categorized in grade bands (K-4, 5-8, 9-12, and mixed). A significant, positive, moderate effect size estimate

was noted in the 5-8 grade band. No other effect size estimate was revealed in the current investigation in other grade bands. Ozek (2009) cited decreases in achievement for students who enroll in advanced grades (high school). He believed that the social component of the school system creates a barrier for students of advanced ages to be engaged socially.

Lastly, the impact of school choice on achievement by race was examined. Subjects were coded accordingly: all, Black, Hispanic, White, Multi, and Asian. A positive, effect size estimate on achievement was noted in every category. The subjects coded as "Multi" revealed the greatest effect size measurement that was a positive, large, significant effect size estimate. The academic impact of school choice on "White" students revealed a positive, high, moderate effect size estimate. All other racial codes indicated a positive moderate effect size estimate. In Ohio, minority students who consistently open enroll score significantly higher than their peers who remain in urban settings (Carlson & Lavertu, 2017).

Data were utilized to analyze peripheral moderators: the overall effect size estimate of school choice on the year of publication and the type of manuscript. The results from the year of publication are significantly different across all of the years. Additionally, the effect size estimates range from a positive, low, moderate, effect size estimate in 2006 (first year of publication in analysis) to a negative, low, effect size estimate in 2015. The other peripheral moderator, manuscript type, indicated a small effect size estimate in both journal articles and reports, but no effect size estimate with dissertations. The high effect size estimate from reports is likely a result of the reports not being peer reviewed.

While differences were found for peripheral moderators, the year of the study and the form of the dissemination should not have an impact on what effect size estimates are found.

Context and Interpretation

The outcomes of this study that pertain to achievement of students who exercise school choice coincides with available data. Substantial research supporting gains in achievement related to open enrollment exists; Carlson and Lavertu (2017), Iarussi and Larwin (2015), Ozek (2009), and Malugade (2014) assert as such. Carlson and Lavertu (2017) studied the impact of school choice and discovered that minorities, specifically Black students, showed gains in reading and math when they exercised school choice. In a similar study performed in Ohio, Iarussi and Larwin (2015) discovered the lowest performing district yielded significant differences in scores for students in grades 8-12. Ozek (2009) and Malugade (2014) believed that family support and parental involvement in a child's education are the likely reasons behind the increase in achievement amongst those who chose to open enroll.

In a study done by Hastings et. al, they determined that children from families who demonstrate an inclination for academic quality pertaining to their children experience high testing gains in their school of choice (2008). Proponents of school choice believe that the free market system applied to education affords parents the opportunity to become more involved in their children's educational endeavors. This is supported by Godwin and Kemerer (2002) who accused parents who do not participate in school choice of being

disengaged consumers in their children's education. Malugade (2014) pointed out that those who choose to open enroll their children are often disillusioned with their children's current schooling situation. He posited that parental perception of what is defined as a quality school is a driving force in the decision to open enroll, and parents typically chose districts that are wealthier, perform better on assessments, have a higher per-pupil spending, and a low minority population. Parental perception of increased spending leading to a higher quality education is a motivating factor for involved parents to choose open enrollment for their children.

Lavery and Carlson (2015) researched the enrollment patterns of students who exercise school choice. They discovered that only between two-thirds and three-quarters of all students continue to open enroll in subsequent years, and Black students are less likely to reenroll than their White and Hispanic classmates. Lauen contributed this to the communities in minority neighborhoods (2007). The Thomas B. Fordham Institute (2020) released a study in 2017 on open enrollment in Ohio. In that study, they found that the vast majority (86%) of students who exercise school choice are White students from rural areas and the vast majority of students enrolled in the Big 8 urban districts are Black. Additionally, only one-third of students were considered consistently open enrolled. The remainder are considered transitory. Carlson et. al suggested that one should expect levels of achievement differences between consistent open enrollers and those who are transient (2017). According to the Fordham study (2020), students who are transitory face many obstacles, not the least of which is

lower achievement on reading and math assessments. Districts that have high transient populations face many obstacles that continue to act as barriers to providing quality education. Transiency disrupts classroom instruction, impedes district and building reform, and wreaks havoc on state achievement scores. It also causes problems for the social-emotional wellbeing of students. Students may become disengaged, experience loss of friend groups, and suffer from learning gaps and academic losses as a result of missed instruction during moves.

This current investigation shows that the highest impact for achievement is noted in the first year of open enrollment. The next highest impact is noted in the second year of school choice, but there is no impact noted in any other years. Data also showed that Multiracial and White students benefited the most in achievement when this measure was examined individually. Ozek (2009) connected socioeconomic status with student achievement. Considering that Black students are disproportionately more impoverished than White students, these findings are expected. Additional support to help transition and reduce barriers may prove beneficial for student achievement and may afford minority students an opportunity to exercise choice. Programming to deliberately incorporate integration and support racial equity should be analyzed for fidelity and utilized as models to increase diversity.

The grade band analysis yielded results that were expected. There was no impact in the K-4 grade band or the 9-12 grade band. Often times, students either start their elementary careers in their family's school of choice or they move at the beginning of middle school. Elementary schools throughout the state are

charged with unpacking the core areas: reading, writing, math, science, and social studies. They are usually in specific classrooms with one teacher throughout the day. A 95% passage rate on the third grade reading guarantee is indicative that elementary schools throughout the state are educationally consistent. However, parents tend to begin to question their children's safety and quality of education during the middle school years. Additionally, many districts transition students from elementary age buildings to new buildings where several elementaries merge. This provides parents with an opportunity to place their child in a new environment without much notice as an outsider/new student. By high school, most students are rooted in their schools; they're involved in clubs, athletics, and social events that squelch their desire to exercise choice. Ozek (2009) noted a detrimental impact on students who chose to open enroll toward the termination of their high school career. He blamed the social-emotional component of schooling on that negative impact.

The flat effect size estimate of school choice on finances was expected. In Ohio, schools are funded largely by the state (43%). Local revenue, through various taxes and levies, make up an additional 42% of school funding. The remaining 15% is supplied by federal and other non-tax revenues (Thomas B. Fordham Institute, 2020). The state aid for a child to attend school is $6,200; however, the state does not fund any child at that level. Instead, funding is based on housing valuation and the community's "ability to pay". Wealthy districts receive a small portion of that $6,200 and poorer districts receive a larger portion. If a student leaves their residential district, the district is required to provide the

total $6,200 to whichever school the student chooses to attend. While the full state funding follows students who choose to leave districts, the local tax dollars do not. According to the Thomas B. Fordham (2020) report in 2017, per pupil spending varies based on where the student is educated:

- Urban average per pupil spending: $14,377
- State average per pupil spending: $12,472
- Suburban average per pupil spending: $12,312
- Rural average per pupil spending: $11,823
- Small town per pupil spending: $11,044

The additional dollars required to educate students who are not funded by the state come directly out of the district's general fund, which is supported by taxpayers. If districts manage to accept students up to the point where no additional staff will be required, they are able to benefit from school choice. For those who lose students to school choice, and for those who over accept open enrollment students, a negative financial impact will be observed.

In 2016, the Ohio Auditor of State, Dave Yost, at the request of four districts in northeastern Ohio, completed a performance audit. This audit was intended to identify opportunities to improve operational efficiencies. Upon evaluating the impact of open enrollment for the four Ohio districts, which spanned four counties, he discovered that some districts were losing money by accepting students without consideration of how that impacts district resources (Yost, 2020). When districts accept students to fill empty seats in classrooms, for example, they can expect to generate revenue for the district. When districts

accept students at a level that requires additional staffing, buses, or physical space, then districts face a significant likelihood of financial loss.

Implications

The data in this study are consistent with the data that exist pertaining to achievement and school choice. While gaps exist in achievement and school choice by race, the overall impact of school choice on achievement is positive. When race, academics, and finances are analyzed simultaneously, a negative, but practically not significant impact is noted on race and finances. This study confirms the need for school district leaders in Ohio to understand the delicate balance of how open enrollment pertains to diversity and school funding.

Disregard for the fiscal nuances of school choice will result in a greater reliance on community taxpayers to support the schools in their communities. Additionally, it is imperative for leaders to understand the role of school choice and home values, which are largely based on the districts in which they are located. Increases or decreases in property values will impact district programming for students.

Additionally, districts should consider the implications when allowing for open enrollment, especially as the implications refer to diversity. There are significant understandings that resulted from race and school choice. While all races in the sample from this study experienced a positive effect size estimate related to school choice, Multiracial and White students faired the best. In a recent Ohio Thomas B. Fordham study (2020), Black students benefited the most when they left their urban districts. The implications are that consistency and equitable access are the keys to successful school choice.

This study has also identified that the grade band of students who exercise choice is important. Students who exercise choice during the elementary and high school years show no academic benefit of choice. However, those who exercise choice during the middle school years (Grades 5-8) show a positive impact on academic performance. Leaders should consider, for the benefit of students, limiting the ages in which students can exercise choice. While the data in this study showed no effect size estimate for high school students exercising choice, there is existing research that indicates negative outcomes for high school choice (Ozek, 2009).

Limitations

This study is designed to analyze the impact of school choice in Ohio on academic achievement, school finances, and race. Since a meta-analysis was utilized, there are limitations to consider when interpreting the results.

1. Data are limited to what is available in existing research (Glass et al., 1981).
2. Test scores will be utilized to measure achievement but are not always indicators of such.
3. Heterogeneity in meta-analysis will skew data (Glass et al.).
4. Publication bias may impact the available studies for analysis (Glass et al.).

There are other limitations as well. The use of a meta-analysis does not allow for the implication of causation. The data analysis is based on correlation and does not assume that a causal relationship exists.

Directions for Future Research

School choice is based on the liberation model which asserts that competition drives betterment. Proponents of choice further stress that this competition will eventually liberate impoverished and disadvantaged students from sub-par educational offerings. What the model does not account for are the barriers that exist. More research regarding what those barriers are and how to overcome them is needed. Research that identifies the gaps in understanding the process for choice and processes to overcome those gaps will produce skilled consumers. Additionally, the impact of those barriers on students who are unable to exercise choice deserves attention.

Opponents of school choice believe that school choice is not the answer. Those who do not believe in school choice cite the disproportionate number of White students who participate in choice as an indicator that the playing field has not been leveled. They believe school choice is a ruse to gloss over the problems that persist in our poorest communities. Future research should involve the investigation of evidence based processes and programs to increase community engagement, parental involvement, and student achievement. When considering the per-pupil spending in Ohio is the highest in urban settings, funding is available to provide a high quality education. Ensuring that the financial investment in every district, specifically our neediest, is properly pointed and utilized to secure the highest quality staffing, opportunities, and programming.

Schools that lose an abundance of students are often financially challenged as a result and less able to provide quality programming for the students who

remain. This further complicates one's ability to access an equitable education. The funding model for school choice causes a plundering of district resources and creates a sub-par environment for some of our state's districts. Future research should include an analysis of successful schools with high poverty and minority percentages should be investigated. For example, the RAND Corporation's Regional Choice Initiative (RCI) allows students to access courses in several locations outside of the residential district through an interdistrict agreement. This allows for a flow of students in and out of various districts, which increases integration and accessibility (Phillips et. al, 2016).

Further research is needed on the efficacy of school choice as it pertains to student success. According to this study and other studies cited in this work, the academic impact for those who choose to open enroll is modest at best. For districts that lose funding, but not enough funding to reduce expenditures (staffing, busing, etc.), students who remain in that district suffer consequences of reduced funding. More research must be done to ensure that school choice is not directly harming some at the modest benefit of others.

Conclusion

Education in the United States has the interest of many parties: parents, educators, legislators (local, state, and national), for profit companies, interest groups, and other business/industry. Everyone seems to think they know what is best for the education of students, but unfortunately there is often a clash of opinions. The libertarian model, which is based on the free-market system, asserts that competition will drive betterment. The institutional model, on which

the U.S. educational system is based, does not allow for such competition to ensue. The two models are at odds with one another, and caught in the middle are educators, educational leaders, and parents who are making decisions that they believe are best for the education of children in their care.

There has been significant legislation approved in recent years that is harmful to the public school institution and the students who count on their public schools for an educational foundation. The marginalization of students in poverty and minority students must come to an end so that all of our students have the opportunity to receive a quality education.

The Thomas B. Fordham Institute study conducted by Carlson and Lavertu regarding the impact of school choice in Ohio is compelling (2020). The study indicated that affluent schools are often not among the 80% of schools that are open for interdistrict enrollment. Affluent schools are sought after because they often have higher per-pupil spending. When considering the open enrollment study completed by the auditor of state in Ohio, one can understand the onus on district boards and leaders to ensure that students are not accepted if it causes an increased reliance on community members and taxpayers. If a student open enrolls to a district that is operating at or near capacity and the revenue generated is less than the expenditures to educate by accepting open enrollment students, then a financial loss will cause that district to struggle.

The Ohio Thomas B. Fordham study also shows modest-to-no academic gains for students who consistently open enroll. They ran two analysis; one indicated modest gains in achievement while the other indicated no statistically

significant results (2020). A conundrum exists – Black students disproportionately do not participate in school choice (only 6% in Ohio), yet according to the Ohio Thomas B. Fordham (2020) study, they are the only real direct beneficiaries when they do. Black students in Ohio who consistently exercise choice gain an average of about 10 percentiles as compared to their peers who remain in urban settings.

Creating additional opportunities to fund school choice is creating larger gaps in our society between those who are impoverished and/or minority and those who are not. We must endeavor to believe that all students deserve access to high, quality education, and we must stop indulging in the belief that a high, quality education can only be achieved in affluent White neighborhoods. Invest in our communities and invest in the children within those communities; do not abandon them.

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APPENDIX A

Study	Number of Measures	Effect Size	Lower Limit	Upper Limit	Within sig.
Ozek	4	0.33	0.31	0.34	0.000
Welscha	16	0.00	0.00	0.01	0.257
Crawford	4	0.25	0.16	0.34	0.000
Cowen	7	-0.06	-0.11	-0.01	0.011
Morris	25	-0.01	-0.04	0.03	0.746
Godwin	2	1.71	1.55	1.87	0.000
Carlson	23	0.03	-0.02	0.07	0.260
Iarussi	10	0.08	0.05	0.12	0.000
Phillips	6	-0.59	-0.99	-0.18	0.005
Ledwith	3	0.24	0.12	0.35	0.000

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August 27, 2020

Dr. Karen Larwin, Principal Investigator
Ms. Traci Hostetler, Co-investigator
Department of Teacher Education and Leadership Studies
UNIVERSITY

RE: HSRC PROTOCOL NUMBER: 010-2021
TITLE: School Choice: Financial and Societal Implications

Dear Dr. Larwin and Ms. Hostetler:

The Human Subjects Research Committee has reviewed the abovementioned protocol and has determined that it does not require further IRB oversight because it does not meet the definition of human research as stated in the Code of Federal Regulations, 45 CFR 46.

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,

XXXXXXXXXXXX

Dr. Severine Van Slambrouck
Director Research Services, Compliance and Initiatives
Authorized Institutional Official

SVS:cc

c: Dr. Marcia Matanin
Department of Teacher Education and Leadership Studies