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Catholic Schools And Covid-19: Paycheck Protection Program (Ppp), Leaders And School Closure

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CATHOLIC SCHOOLS AND COVID-19: PAYCHECK PROTECTION PROGRAM (PPP),
LEADERS, AND SCHOOL CLOSURE

A Dissertation

Presented to the

The Faculty of the School of Education

The College of William and Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

By

Vincent Bradley

October 2022

CATHOLIC SCHOOLS AND COVID-19: PAYCHECK PROTECTION PROGRAM (PPP),
LEADERS, AND SCHOOL CLOSURE

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October 19, 2022

Submitted to

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Dedication

This dissertation is dedicated to my wife, Susan, and my two sons, Eamonn and Declan. I cannot thank you enough for your love, encouragement, and patience throughout this experience at The College of William and Mary.

I would also like to dedicate this dissertation to my parents, Thomas Bradley, and Marianne Bradley. My parents' sacrifice, hard work, love, and dedication for each other and their family provided a model for me and a strong foundation in life.

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Abstract

This explanatory sequential mixed methods study focused on the impact of the COVID-19 pandemic on Catholic school survival, the efficacy of the Paycheck Protection Program (PPP), and the views and actions of Catholic school leaders during this period. A significant body of literature has documented Catholic schools' success in educating children, particularly minority students in inner cities. Catholic schools, however, have faced declining enrollment and substantial school closures since 1965. Few studies have explored in granular detail the factors that contribute to school closure. The quantitative phase of this mixed methods study examined variables related to school closure in prior studies within a large sample ($N=1,200$) of schools in the mid-Atlantic and Northeast during the COVID-19 pandemic from 2019-2021. In addition, I evaluated the efficacy of a new federal program: the PPP forgivable loans that Catholic school leaders could access to assist with payroll. PPP was a significant variable related to Catholic school survival, though not highly predictive. In addition, the enrollment of Catholic schools, school type (elementary/high school), and the Hispanic population of the school's census tract proved to be statistically significant variables related to school closure. Finally, I examined the views of Catholic school leaders on enrollment, PPP, and pandemic-related issues as they guided their schools through the pandemic.

Keywords: Catholic schools, COVID-19, Paycheck Protection Program (PPP), school closure

CATHOLIC SCHOOLS AND COVID-19: PAYCHECK PROTECTION PROGRAM (PPP),
SCHOOL CLOSURE, AND LEADERSHIP

CHAPTER 1

INTRODUCTION

Since the 19th century, American Catholic schools have offered an alternative educational model to the public sector and other private schools. In seeking to identify effective school outcomes, researchers have focused on Catholic schools for their academic achievement, success with minority students, the strength of their school communities, and their contribution to democratic society (Bryk et al., 1993; O’Keefe & Goldschmidt, 2014; O’Keefe & Scheopner, 2007). Although the literature on the strengths of Catholic schools stretches back at least 40 years and remains robust, recently Catholic schools have grappled with significant challenges, including: falling enrollment, economically squeezed working- and middle-class families, overall decline of the Catholic Church, and the Catholic sexual abuse crisis (DeFiore, 2014; Murnane & Reardon, 2018; O’Keefe & Goldschmidt, 2014).

Weakened and fragile, American Catholic schools faced the threat of the Coronavirus Disease of 2019 (COVID-19) pandemic (Wodon, 2020). Reflecting across this period, the Catholic school literature traces two simultaneous and contradictory narratives: first, the persistence of school effectiveness and, second, a parallel narrative has chronicled these schools’ decline (Brinig & Garnett, 2014; Bryk et al., 1993; Coleman et al., 1982a; Fleming et al., 2018; O’Keefe & Goldschmidt, 2014; Rodriguez & Briscoe, 2019).

Background Issues Related to Catholic Schools and Implications From COVID-19

Catholic School Effectiveness

Catholic schools educated generations of largely immigrant Catholic students, expanding dramatically in the nineteenth century in response to nativism and the prejudice of the dominant culture. The Catholic school system enrolled about 405,000 students in 1880 and expanded to 2.5 million and 10,000 schools in 1930. The system peaked at over 13,000 Catholic schools and 5.5 million students, educating 12% of all American students in 1965 (Bryk et al., 1993).

The Catholic school system exists today as a loose federation of schools within the same historical tradition and dedicated to the mission of education infused with Catholic values and teachings (Bryk et al., 1993). The hierarchy of the system features a superintendent, hired by the religious bishop or cardinal, in each Catholic diocese. The superintendent holds the ability to coordinate among principals and develop broad policies, but the office retains little traditional power of funding and budgeting (Miller et al., 2020; Neumerski & Cohen, 2019; Uhl, 2020). In the 1950s and 1960s, Catholic schools were centralized under bishops, who led fundraising drives, built schools, and commanded religious faculty and staff: nuns, priests, religious brothers. As the institutional Catholic Church declined, Catholic schools became increasingly independent and market-driven, responsible for their own budget and viability (Bryk et al., 1993; DeFiore, 2014; Lundy, 1999; McGreevy, 1996). Buffalo Catholic School Superintendent Tim Uhl (2020) observed that in many Catholic schools, “the Central Office/diocese rarely interferes, and the schools are site-managed” (p. 98).

Despite Catholic schools’ presence throughout the country, little was known about them through the 1970s. Educational researchers began earnestly evaluating and debating Catholic schools after a series of studies by James Coleman touting these schools’ impact on student

academic achievement through immersion in strong, cohesive school communities. Using the High School and Beyond data set, Coleman et al. (1982a) argued that Black students in Catholic high schools closed the achievement gap among Black students and non-Hispanic White students better than in public schools.

Bryk et al. (1993) extended the analysis of Coleman et al. (1982a) in their landmark study, *Catholic Schools and the Common Good*. Placing Catholic schools within a historical context, Bryk et al. (1993) argued that post-Vatican II Catholic schools embodied “pursuit of the common good” (p. 11) through their organization, community, and inspirational ideology. By bringing together diverse students and families, Catholic schools served social and democratic goals, Bryk et al. (1993) argued. The concept of a Catholic School Advantage (CSA) held that Catholic schools helped students, particularly minorities, gain an edge in secondary and postsecondary achievement because of the schools’ cohesive and inclusive social structure (Freeman & Berends, 2016; Rodriguez & Briscoe, 2019).

Catholic high schools demonstrated strong academic outcomes, and a persistent strand in this literature has identified Catholic schools’ effectiveness educating minority children. Catholic Nativity model schools serving urban African American and Hispanic children helped build key academic skills, resilience, and agency (Fenzel & Richardson, 2019; O’Keefe & Schoepner, 2007; Proehl et al. 2017). In addition, urban Catholic schools have been credited with instilling within immigrant and African American students the habits, structure, and norms needed for success (Fenzel & Richardson, 2019; Figlio & Ludwig, 2012; Louie & Holdway, 2009). Finally, Catholic high school attendance raised the probability of graduation from secondary school, particularly for minority students (Altonji et al., 2005) and resulted in higher GPAs in college for minorities (Fleming et al., 2018).

Catholic School Decline

Catholic schools faced a paradox: at the time researchers began to identify their positive contributions to society, the entire system had already begun to experience a precipitous decline in enrollment and a school closure crisis. The decline in Catholic schools can be attributed to a long-simmering crisis spurred by the waning of the Catholic Church as an institution, demographic shifts, financial pressure, and the clergy sexual abuse scandal.

The institutional Catholic Church deteriorated after the Second Vatican Council, resulting in a decline in Catholic institutions. The social changes in American society in the mid-1960s coincided with dramatic shifts in the Catholic Church: rise of feminism and new opportunities for women, liberalized social values, end of Latin Mass, and the diminished status the clergy. Consequently, the number of religious (priests, nuns, and religious brothers) working full-time for the Catholic Church declined, and weekly mass attendance fell from 70% of Catholics in 1964 to 50% in 1975 (DeFiore, 2014). In turn, these developments led to a decline in full-time religious staff as an effective and cheap source of labor for Catholic schools and a decline in subsidies for Catholic schools. For example, religious staff decreased from 73.8% of full-time faculty and administration in 1960 to 29% in 1980 (McDonald & Schultz, 2020). As a result of Catholic Mass attendance declining, the Catholic Church subsidy for schools fell from 63% of school income in 1970 to 35% by the mid-1990s (DeFiore, 2014). Lay teachers, expecting more remuneration than a vow of poverty or a modest stipend, needed to be hired, pushing up the cost of tuition for Catholic families.

Demographic shifts in American society also affected Catholic schools. Although Catholic school enrollment crested in the mid-1960s, Catholic families experienced upward mobility and moved out of urban centers to newly built suburbs, which often did not have

Catholic schools. Other Catholic families moved from the Northeast and Upper Midwest to the South and West. In addition, between 1970 and 1977, the American elementary population of students declined by 12% (DeFiore, 2014). The decline in Church finances and in full-time religious priests, nuns, and brothers created general disarray within the Catholic Church and prevented the widescale construction of new schools in the suburbs (Cooper & D’Agustino, 2014; DeFiore, 2014).

The Catholic Church clergy abuse crisis occurred with the publishing of *The Boston Globe*’s Pulitzer Prize-winning series of articles detailing sexual abuse by priests and the calculated cynicism on the part of the Church hierarchy. O’Keefe and Goldschmidt (2014) argued that the clergy abuse crisis represented “the most significant crisis of the U.S. Catholic Church” (p. 227). For context, it is important to note that Catholic school enrollment stabilized in the 1990s (see Appendix A) and increased by 1.5% nationwide for the decade ending in 2000 (McDonald & Schultz, 2020). Although the enrollment decline may have resumed after the effects of the baby boomlet peaked, the clergy sex abuse crisis appears to have affected the size of the school closures and exacerbated weak financial giving to Catholic institutions. Hungerman (2013) estimated that this “shock” (Hungerman, 2013, p. 228)—the clergy abuse crisis—led to a decline of 2 million Catholics from the United States Church, or 3% of its total. This loss of membership resulted in the reapportionment of \$2.8 billion in donations to non-Catholic religious organizations over the ensuing 5-year period (Hungerman, 2013). Further, one study estimated up to 66% of the school closures from 2002 to 2010 were related to the press coverage of the abuse scandal and loss of trust in Catholic schools (Moghtaderi, 2018).

Catholic School Finances

Catholic schools today are mostly financed through tuition revenue, which is supplemented by fundraising and some government funding. Through much of their history, Catholic schools were primarily operated by religious clergy, brothers, and nuns who worked for modest stipends and often took vows of poverty. Since the 1960s, the presence of religious staff has declined, and the tuition needed to fund Catholic schools has increased. In the 2019-2020 academic year, the National Catholic Education Association (NCEA) reported that the mean tuition for parish elementary schools was \$5,178, which was 82.3% of the cost per student of \$6,293. The mean tuition for high schools was \$10,575, which was 64.7% of the actual cost of \$16,357 per student. The difference has been made up at the elementary level through fundraising and, at times, a parish subsidy. Catholic high schools, numbering about 19% of all Catholic schools, often feature endowments and fundraising operations to subsidize tuition costs. In recent decades, Catholic high schools have served fewer working- and middle-class students as tuition has increased. Catholic schools also receive some government funds, including Title I, Title II, nutrition, and transportation programs. Finally, Catholic schools in some states, including Ohio and Wisconsin, participate in school voucher programs (DiFiore, 2014; Huber, 2007; McDonald & Schultz, 2020; Russo, 2014).

Catholic Schools and the New Threat of COVID-19

While scholars have debated these challenges for decades, Catholic school leaders faced the threat of COVID-19. Like other industries affected by the pandemic, the prospects for Catholic schools appeared challenged. While the existing Catholic school crises percolated, this new, potentially more ominous crisis exacerbated the underlying threats to this sector. The COVID-19 pandemic continues to devastate the world, with a spiraling death toll of over

1,000,000 in the United States (Stein, 2022). Unemployment peaked at nearly 15% and over 13 million jobs vaporized, representing the greatest economic shock since the Great Depression (Chaney, 2020). Most American schools paused activities and attempted remote learning in March 2020. Some families who lost jobs because of the pandemic struggled to pay tuition at Catholic schools. Set against the backdrop of a long, slow decline, Catholic school leaders' response to COVID-19 proved critical as this crisis period played out during the 2020-2021 and 2021-2022 school years.

Catholic Schools and COVID-19 Spring and Summer 2020

In the spring and summer of 2020, the pandemic's economic destruction ricocheted through Catholic schools nationwide. Boston Catholic Schools Superintendent Thomas Carroll argued that the Catholic schools serving the neediest families were the most at risk. Eleven of 110 schools in the Boston archdiocese closed in the spring of 2020 with Boston Catholic school enrollment initially falling seven percent in the spring and early summer of 2020—the most significant decline in 50 years, according to Carroll (Associated Press, 2020).

Similar scenes of Catholic school closure reverberated throughout the country. In New Jersey, the state's dioceses announced that 19 schools would permanently close, and another five schools would be consolidated (Heyboer, 2020). In Baltimore, the oldest Catholic girls' school in Maryland closed. After more than 170 years, the Institute of Notre Dame shut its doors as students sobbed on Zoom while hearing the news. The institution educated former U.S. Senator Barbara Mikulski and House Speaker Nancy Pelosi. Although the school had struggled for years in troubled East Baltimore, it closed “in the midst of a pandemic that prevents anyone from spending time inside the building during the school's last days” (Bowie et al., 2020, para. 2). In Los Angeles, nearly 10% of the enrollment of the nation's largest archdiocesan school system

did not return for school in August of 2020, resulting in a decline of 7,195 students (Campa, 2021; McDonald & Schultz, 2021).

In New York City, 26 Catholic schools closed for the pandemic never reopened because of financial stress related to COVID-19. Declining church collections and high unemployment harmed Catholic school finances with significant uncollected tuition payments. The New York closures affected approximately 2,500 students. Superintendent of Schools Dr. Thomas Chadzutko said that “the devastation caused by the coronavirus pandemic is insurmountable” (Murn, 2020, para. 9). Noting the closures, Archbishop Timothy Cardinal Dolan said, “I’ve kept a hopeful eye on our schools throughout this saga and my prayers are with all of the children and their families who will be affected by this sad news” (Murn, 2020, para. 3). Cardinal Dolan and other members of the Catholic Church hierarchy, however, were doing more than praying.

Catholic Schools and Federal Aid

Facing school closures and a spiraling economic crisis, Catholic Church leaders moved aggressively to lobby the federal government for aid to Church institutions, including Catholic schools. While Catholic leaders pursued a multi-pronged strategy, they recognized a unique opportunity with the President of the United States. In a Zoom call, Cardinal Dolan of New York, Cardinal Sean O’Malley of Boston, and Los Angeles Archbishop Jose Gomez lobbied former President Trump and administration officials for federal aid. Catholic Superintendents Elias Moo of Denver and Paul Escuela of Los Angeles also participated in the call. In this remarkable “off the record” (Catholic News Service, 2020, para. 12) exchange, the Catholic prelates provided former President Trump a lesson on Catholic social services, including the education delivered at the 6,190 Catholic schools confronting the uncertainties of the pandemic in the spring of 2020. The call between Catholic officials and former President Trump

demonstrated an unusual confluence of interests. President Trump assured the Catholic officials that he, Trump, ranked the "best [president] in the history of the Catholic Church" (White, 2020, para. 1). Reciprocating, New York's Cardinal Dolan noted to President Trump that his 90-year-old mother felt a little jealous because "I call you more than I call her" (White, 2020, para. 17). The tenor of the call represented the lengths to which the Catholic hierarchy and Superintendents pursued federal aid and the unique moment that a pandemic and tight election season provided (Miller et al., 2020).

By the summer of 2020, Church officials recognized the deepening crisis and estimated the catastrophic potential impacts on Catholic school closures. American Catholic schools faced the most pressing challenge of global Catholic schools because of a lack of consistent state funding and persistent affordability issues that could potentially drive financially strapped parents to public schools (Wodon, 2020). The United States Conference of Catholic Bishops lobbied Representative Karen Bass of the Congressional Black Caucus for funding for inner city schools serving African American children. By July of 2020, 130 schools had shuttered, many serving low-income minority children in inner city areas. In a letter to Congresswoman Bass, Bishops Michael Barber of Oakland, Shelton Febre of Houma-Thibodaux, and Auxiliary Bishop Joseph Perry of Chicago argued that an additional 500 Catholic schools or more remained at risk of closure prior to September 2020 (Barber et al., 2020). Catholic officials continued to lobby Congressional leaders of both parties for aid to Catholic schools, touting the research on their effective service to communities of color in inner city areas (Barber et al., 2020). Further highlighting the danger to Catholic schools in summer of 2020, Cardinal Gomez of Los Angeles and his fellow Cardinals noted that 140 schools had closed permanently and that "hundreds more are in danger of not being able to open in the fall" (Gomez et al., 2020, para. 4).

The lobbying effort to gain access to federal aid to buoy Catholic schools, long in a period of crisis, represented a concerted strategy to leverage political alliances built over decades and the documented record of Catholic schools serving communities in need. As Catholic leaders mobilized internally to address the COVID-19 pandemic (Miller et al., 2020), they began to realize a long-held policy goal of leaders and advocates of American Catholic schools: public funding.

New Public Policy for Catholic Schools

Reports indicated that dioceses organized and assembled guides for Catholic schools to apply for federal relief (Dunklin & Rezendes, 2020). Catholic superintendents prepared online learning guides, lobbied lawmakers, and organized petitions for lawmakers to ensure Catholic schools received federal aid (Miller et al., 2020; Wodon, 2020). Press reports indicated that the Catholic Church and its institutions received over \$3 billion in Paycheck Protection Program (PPP) funds from the federal government, the country's biggest beneficiary of the Small Business Association's pandemic relief program (Dunklin & Rezendes, 2021, para. 6).

While Catholic Church institutions vigorously pursued the PPP funds, with 12,000 churches applying for PPP funds and 9,000 receiving them, it was unclear how individual Catholic schools employed these forgivable loans (Miller et al., 2020). Press reports, however, suggested that Catholic schools accessed PPP funds at a high rate. For example, all Catholic schools accessed the PPP funds in Boston, according to Superintendent Tom Carroll (Gjelton, 2020). In Los Angeles, 46 of 50 high schools in the archdiocese received PPP loans (Campa, 2021). If these localized trends in PPP access reflected all Catholic schools, Catholic school leaders may have accessed PPP funding at a higher rate than in other sectors. Some dioceses were initially skeptical of PPP aid because of the Church and state entanglements, but Catholic

superintendents helped spread information about the funding (Miller et al., 2020). In comparison, the smallest businesses experienced challenges accessing PPP funding because of a lack of knowledge and awareness (Humphries et al., 2020). A survey indicated that 90% of diocesan leaders and 78% of school leaders accessed PPP funds (Reyes, 2020). This study sought to determine the extent to which a large sample of Catholic schools used PPP funding.

PPP Policy Effectiveness and Distribution of Loans

Congress passed the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), which created the PPP on March 27, 2020. Businesses could take loans equaling 2.5 times their average monthly payroll. The forgivable loans were distributed by banks and backed by the government. The loan could be used for payroll and benefits, rent, utilities, and mortgage interest if 60% was spent on payroll, the workforce remained the same, and compensation was not reduced by more than 25%. Congress initially funded PPP with \$349 billion and expanded the program by another \$320 billion (Hubbard & Strain, 2020).

The PPP initiative represented a unique program designed for a pandemic-induced economic recession. In the early stages of the COVID-19 pandemic, a significant number of firms believed permanent closure would occur if the shutdown lasted more than a few months (Bartik et al., 2021). While, in retrospect, the economy bounced back relatively quickly, it is essential to recognize the economic damage wrought by the pandemic in the spring and summer of 2020. Real Gross Domestic Product decreased 31.4% in the second quarter of 2020, compared with 8.4% during the worst quarter of 2008's Great Recession. The Dow Jones Industrial Average dropped 31% from March 4, 2020, to March 23, 2020. Policymakers became concerned about a wave of small business failures, which accounted for 47% of payrolls (Bartik et al.,

2021; Hubbard & Strain, 2020). As private schools operating in an educational marketplace, Catholic schools were not immune to economic pressure.

The effectiveness of the PPP program has been an important area of inquiry in initial research on this pandemic era federal policy. Firm survival and equitable access to PPP have emerged as themes in this nascent field. Initial studies focused on PPP argued that the program reduced business closure by a significant amount (Bartik et al., 2021; Hubbard & Strain, 2020). Additionally, some evidence indicates that Black and Hispanic-owned businesses accessed PPP loans at a lower rate than White-owned businesses (Chernenko & Scharfstein, 2022).

Catholic Schools in COVID-19 Pandemic 2020-2021

The Catholic school sector garnered praise for its performance during the pandemic. Catholic schools quickly transitioned to online learning in the spring of 2020, experienced episodic enrollment gains, and earned political praise for in-person instruction in the fall of 2020 (Editorial Board, 2020; Jonas, 2020; Martin, 2020). Seen by some as antiquated and intolerant (Gazette Editorial Board, 2020), Catholic schools appeared to be meeting the needs of families, particularly those on the margins, during a time of crisis. Catholic schools, like Boston's Mission Grammar, a K-6 elementary in the Mission Hill neighborhood, opened to educate children in need, like single mother Arlyea Marin's 7-year-old daughter (Jonas, 2020).

By opening for in-person instruction in the fall of 2020, Catholic schools provided an academic and emotional safety net for urban students at schools like Boston's Mission Grammar. McKinsey and Company estimated that Black, Hispanic, and low-income students would experience the most learning loss because of the continuation of low-quality remote instruction in urban districts, thus exacerbating the achievement gap by 15% to 20% (Dorn et al., 2020). More recent evidence, however, indicates that an academic gap exists but may be less dramatic

than originally predicted. Northwest Evaluation Association testing data found, for example, in 2020 that reading scores mirrored the fall of 2019, but math scores across elementary grades declined (5–10%) slightly (Kuhfeld et al., 2020). Nonetheless, the social and emotional toll of virtual learning during the pandemic appears significant. Black and Hispanic students and parents reported a higher incidence of remote instruction. Parents of remote students reported concerns surrounding their child’s emotional, mental, and physical well-being, including less social time outside engaged in physical activity (Verlenden et al., 2020). Students in high-poverty districts (often urban) that remained remote through the winter and spring of 2021 experienced significant learning loss in reading compared to those districts in-person, thus widening the achievement gap along racial and socioeconomic lines (Goldhaber et al., 2022).

Politicians and journalists favoring a return to in-person learning lauded the effort. Prodding urban districts to re-open in the fall of 2020 and spring of 2021, Massachusetts Governor Charlie Baker praised Catholic schools’ ability to reopen without significant issues (Morison, 2021). “There is very little evidence that this virus spreads in schools...and in fact we have one of the best active demonstrations about in-person learning going on anywhere right now, which is parochial schools,” (Jonas, 2020, para. 11) said Governor Baker. Serving 30,000 students, many in urban areas, the Archdiocese of Boston Catholic school system ranks as the second largest in the state behind Boston Public Schools (Morrison, 2021). *Wall Street Journal’s* William McGurn (2021) found that Catholic schools provided a “lifeline to hundreds of thousands of children who would otherwise be out of class and losing ground” (para. 12).

To the extent that Catholic schools were open, the sector appeared to have adopted a research-based approach to in-school instruction during the pandemic. A need for better, more complete data, however, exists. A survey in the fall of 2020 from the NCEA indicated that over

90% of Catholic schools operated in-person learning; a large majority of those schools operating virtually were under government restrictions in California (Reyes, 2020). Through the fall and winter of 2020-2021, a growing body of research on the transmission of COVID-19 in schools indicated that open schools did not transmit the virus at a greater rate than the wider community (Falk et al., 2021; Goldhaber et al., 2021; Harris et al., 2021; Pavilonis et al., 2021). Shrouded in the tradition of an ancient Church, Catholic schools appeared to “run toward the danger” (Reyes, 2020, para. 4) in their response to COVID-19.

Catholic Schools and COVID-19 Pandemic Impact on Enrollment and School Closure

The COVID-19 pandemic significantly affected Catholic schools from Spring 2020 through September 2021. After the 2019-2020 school year, the NCEA reported that 209 Catholic schools closed or consolidated, more than double the recent historical average of school closures. Catholic school enrollment plunged 6.4% from 2019-2020 to 2020-2021—the largest drop in the last 50 years (McDonald & Schultz, 2021). The academic year of 2021-2022 represented some improvement. Seventy-one Catholic schools closed or merged, though enrollment increased by 3.8% from the 2020-2021 low of the early pandemic. Enrollment, however, was still 2.8% less than that in 2019-2020. Overall, the NCEA (2022) reported that Catholic schools closed or consolidated 280 schools nationwide in the 2019-2021 period.

Statement of the Problem

From the spring of 2020 through the summer of 2021, Catholic school leaders faced a significant challenge, given the health crisis and financial devastation wrought by COVID-19. The largest school system within the private school sector, Catholic schools boast a tradition of educational effectiveness but have suffered significant school closures in recent decades (Brinig & Garnett, 2014; Bryk et al., 1993; McDonald & Schultz, 2021). The COVID-19 pandemic

presented new threats to already weakened Catholic schools. Catholic Church leaders and school heads developed a response, which will be the focus of this study. Catholic Cardinals, Church officials, and Catholic superintendents lobbied former President Trump and Congress for inclusion in the federal government's response to COVID-19, particularly access to the Small Business Association forgivable loans through PPP federal aid (Dunklin & Rezendes, 2020; Wodon, 2020). Catholic school leaders appeared to have used PPP loans during the pandemic to a significant extent.

It is important to identify the characteristics of viable Catholic schools and the factors that lead to school closure. Significant numbers of Catholic schools have already closed, and more will continue to close. Catholic school leaders recognized the global pandemic as a critical inflection point driving a “fiscal calamity” (Tracy, 2020, para. 1) that affected these schools. The problem that was investigated in this explanatory sequential mixed methods study (Creswell & Creswell, 2018) is the continued health of Catholic schools in the face of the coronavirus pandemic crisis and the identification of variables that drive viable Catholic schools (location, size, demographic data, enrollment, school type, and PPP). In addition, the federal government's PPP program, which provided widespread public money to private religious institutions, including Catholic schools, deserves evaluation. As the primary focus of this investigation, I evaluated the impact of the coronavirus pandemic crisis on Catholic schools' institutional health, specifically focusing on school viability, school leadership's perceptions of their schools, and the efficacy of PPP federal aid on Catholic school survival.

Theoretical Framework

The theoretical framework for this study located Catholic schools in 2019-2021 within the twin narratives of Catholic school effectiveness and Catholic school decline. The nation's

Catholic schools benefitted from the narrative that identified Catholic schools as a viable choice in the educational marketplace. In addition, this narrative suggested Catholic schools could receive public funding, particularly because of their record of achievement with urban minority children (Brinig & Garnett, 2014; Bryk et al., 1993; Coleman et al., 1982a; Fleming et al., 2019; McDonald & Schultz, 2021; O’Keefe & Goldschmidt, 2014; Rodriguez & Briscoe, 2019).

This theoretical framework is shaped by these two narratives, Catholic school effectiveness and decline, which provide the context for Catholic schools entering the pandemic. A market still exists for Catholic schools because of the historical legacy of the system and the demand for alternatives to the public sector. However, the market share of the schools has weakened from its peak of 6 million students in the 1960s to 1.68 million today because of the reasons described in the decline narrative (McDonald & Shultz, 2021; NCEA, 2022).

Catholic schools experienced a significant decline over the last 50 years. A body of literature described the reasons for the decline, including the financial and institutional decline in the Church, demographic change, economic issues, and the Catholic sexual abuse scandal. As a result of the narrative touting effective Catholic schools, this declinist narrative led to advocacy for public dollars for private Catholic schools. Court cases demonstrated the evolution of Constitutional grounds for public funding for religious schools (Cooper & D’Agustino, 2014; DeFiore, 2014; McDonald & Schultz, 2021; O’Keefe & Goldschmidt, 2014).

A small but significant number of studies within the literature on Catholic school decline have focused on Catholic school closure. These studies identified variables associated with school closure, including enrollment and the demographic characteristics of school sites (Brinig & Garnett, 2014; James et al., 2008; Lundy, 1999; O’Keefe, 2000; Pandey et al., 2009). The studies were often limited to one diocese and employed data from 20 to 30 years ago. This

theoretical framework draws on these prior studies and tests the continued relevance of their variables.

The twin narratives—Catholic school effectiveness and decline—provide the context for the new challenges of the pandemic period of 2019-2021. The status of the schools in this study contributes to the literature from prior studies of Catholic school closure. In addition, this study adds to the literature in at least three critical ways. First, this study updates the periods of prior studies. Second, this study features what is believed to be the largest sample to date of Catholic school closure studies: six states and 1,200 schools. Finally, this study analyzes the impact of the new variable of PPP loans on school survival. The COVID-19 pandemic period and the availability of PPP loans represented a significant moment for the challenges of Catholic school resilience and public policy.

Research Questions

The research questions examine the impact of the COVID-19 pandemic on Catholic school institutional health, including enrollment and school closure. In addition, this study will evaluate the scope of Catholic schools' use of the federal government's PPP and its impact on school closure.

This explanatory sequential mixed methods study will address the following research questions:

1. What are the characteristics of surviving Catholic schools (size, type, location, income by census tract, demographics, change in enrollment, use of PPP loans, size of PPP aid) compared with Catholic schools that closed during the coronavirus pandemic (2019-2020 to 2020-2021)?

2. What was the influence of PPP on Catholic schools' survivability during the coronavirus related to the following issues:
 - a.) What percentage of Catholic schools accessed PPP aid?
 - b.) How was the PPP aid distributed among Catholic schools as measured by geography (city, suburban, town, rural; states), demographics (Black, White, Hispanic), income in school community, and school enrollment trends: increasing (4% or more), steady ($\pm 3\%$), decreasing (4% or more) from 2016-2017 to 2019-2020?
 - c.) During the pandemic, what variables, including PPP, were associated with Catholic school closure? What variables predicted survival?
3. What are the perceptions of Catholic school leaders regarding the importance of receiving PPP aid and Catholic schools' viability during the COVID-19 pandemic?
 - a. What are the reasons for acceptance/rejection of PPP aid among Catholic school leaders?
 - b. Was PPP an important factor in the viability (open/closed) of Catholic schools?

Significance of the Study

An analysis of the Catholic school sector's response to the COVID-19 pandemic rises to a level of educational research and public policy interest for several reasons. First, despite the long history of Catholic schools, Catholic school researchers and leaders need school-level data on the response to the pandemic and the impact of this crisis on school resilience (Smith & McDonald, 2021). Second, Catholic schools' historic effectiveness in urban areas with those most marginalized faces looming "erasure" (Catholic News Agency, 2021, para. 13). Third, the public costs of the continued decline of the Catholic school sector remain high. Finally, the experience of Catholic schools using direct federal aid in the form of PPP loans during the

pandemic (2019-2021) represented a new variable in analyzing school closure and public aid to religious schools.

Need for Data on Catholic School Survivability

This study provided robust school-level quantitative and qualitative data on individual Catholic schools and leaders, addressing a gap in the literature on the drivers of school resilience and survivability and closure during the pandemic (O’Keefe & Goldschmidt, 2014). Earlier studies on school viability were limited by focusing on one diocese and parish-based elementary schools; they failed to include high schools and the new variable of federal government aid in assessing institutional resilience (Brinig & Garnett, 2014; James et al., 2008; Lundy, 1999). Although the NCEA has provided annual reports for 50 years on the statistical state of Catholic schools, a tremendous need for disaggregated school level in addition to diocesan level data exists (McDonald & Schultz, 2021; O’Keefe, 2000; O’Keefe & Scheopner, 2007).

Catholic School Effectiveness: Service to Society

Since Vatican II, Catholic schools have been dedicated to an ecumenical spirit of serving society (Bryk et. al., 1993). From an equity perspective, Catholic schools positively affect minority students’ achievement, families, and neighborhoods; however, the Catholic schools serving those on the margins continue to close in significant numbers (Brinig & Garnett, 2014; Bryk et al., 1993; Fleming & Lavertu, 2018; del Rio, 2020; O’Keefe & Scheopner, 2007). Inner-city Catholic schools have closed at an alarming rate for the last 30 years, and the initial data from the pandemic indicated that inner-city schools were disproportionately impacted by closure (Catholic News Agency, 2021; O’Keefe & Schoepner, 2007). "If the school had a lot of low income families in it, [it] got hit really hard," (Gjeltén, 2020, para. 9) noted Tom Carroll,

superintendent of Catholic schools in the archdiocese of Boston. "For those schools that were already on the edge, it just put them over" (Gjelten, 2020, para. 9).

Public Costs: Catholic Schools and the Common Good

Operating 5981 schools serving 1.6 million students, Catholic schools save taxpayers an estimated \$22-24 billion each year (Crary, 2021; McDonald & Schultz, 2021; National Catholic Educational Association [NCEA], 2022; United States Conference of Catholic Bishops [USCCB], n.d.). The continued steep decline, or ultimate failure of this sector, would amount to a recurring annual cost equivalent to that of the pandemic airline bailout (Shepardson, 2020) and reduce competition as a potential spur for improved performance of public schools (Figlio & Hart, 2014; Hoxby, 1994). Early evidence on COVID-19 opening plans for Fall 2020 indicated that the presence of a Catholic school in proximity to a public school resulted in the greater likelihood that the public school would be open (Hartney & Finger, 2020).

Catholic schools served as a treatment group in the live educational experiment of teaching during COVID-19 as urban public school districts continued remote instruction into the fall of 2020 and spring of 2021. In New York, Chicago, Philadelphia, and Boston, public schools remained shuttered while urban Catholic schools operated during the pandemic (Editorial Board, 2020; McGurn, 2021). Within a tumultuous year consisting of the pandemic, social justice protests, and political violence, Catholic schools provided a place to support students educationally but also socially and emotionally (Bradley, 2021; McGurn, 2021).

PPP Loans: Efficacy of Public Aid to Private Religious Schools

The experience of Catholic schools during the COVID-19 pandemic assesses the policy of providing public aid for private religious schools and its impact on school survival. Catholic leaders and policy experts have long advocated in favor of public money for private schools.

While courts have allowed public monies for services and vouchers to private religious schools, the COVID-19 pandemic set in motion a policy experiment of widespread and substantial use of public money for Catholic schools' institutional survival. This study will quantify the scale of this policy experiment and evaluate its efficacy.

Definitions of Terms

The following definitions clarify the meaning of terms, concepts, and theories related to this mixed methods study.

Diocese

The USCCB ("Catholic Terms," n.d.) defined diocese as "a particular church; the ordinary territorial division of the church headed by a bishop. The chief diocese of a group of dioceses is called an archdiocese" (para. 33).

Catholic School Advantage (CSA)

Rodriguez and Briscoe (2019) defined CSA as "the superior and more equitable postsecondary achievement of Catholic school students, particularly those who come from minority, low-income backgrounds." (p. 5).

Paycheck Protection Program (PPP)

The Small Business Association (SBA, n.d.) defined PPP as "a loan designed to provide a direct incentive for small businesses to keep their workers on the payroll" (para. 1).

The Associated Press further clarified the PPP's application to Catholic schools, noting that "Congress let faith groups and other nonprofits tap into the Paycheck Protection Program, a \$659 billion fund created to keep Main Street open and Americans employed. By aggressively promoting the payroll program and marshaling resources to help affiliates navigate its shifting

rules, Catholic dioceses, parishes, schools, and other ministries have so far received approval for at least 3,500 forgivable loans” (Dunklin & Rezendes, 2020, paras. 3-4)

CHAPTER 2

REVIEW OF RELATED LITERATURE

In assessing the impact of the COVID-19 pandemic on Catholic school survival, it is important to understand why these institutions matter. Catholic schools have made significant contributions to educating generations of Catholic children and, more recently, non-Catholics. In the last 40 years, the academic literature on Catholic schools demonstrates these institutions' educational effectiveness at a time in which they have been most in jeopardy of closing. This twin narrative of strength and fragility permeates the literature on Catholic schools, illustrating the continued worth of these schools but also the factors that endanger them. One theme of this voluminous educational literature focuses on the achievement of students in Catholic schools relative to that of public schools, particularly for minority children (Bryk et al., 1993; Coleman et al., 1982a). An additional theme in the literature identifies evidence of, and causes for, the decline of Catholic schools as measured by school closure. The literature suggests, nevertheless, that the American educational sector would be weaker without Catholic schools.

The COVID-19 pandemic represented a significant threat to Catholic schools, which had already been weakened prior to the pandemic and related economic recession (McDonald & Shultz, 2021; Wodon 2020). After a gradual but persistent 50-year decline in schools and enrollment, Catholic school leaders' response to the pandemic appeared critical because the margin for error had become thinner. In the spring and summer of 2020, the institutional health of a significant number of schools in the Catholic sector was in question (Barber et al., 2020; Wodon, 2020).

The competing narratives of Catholic school effectiveness and decline provide contextual narratives for analyzing the impact of the pandemic on Catholic school closure. In their response to the pandemic, Catholic school leaders drew upon 40 years of experience, research, and policy to attempt to thwart the harms of the COVID-19 pandemic and the related economic crash. The response included a familiar call for direct public aid. Furthermore, I have hypothesized that Paycheck Protection Program (PPP) aid played a significant role in the continued survival of Catholic schools.

During the COVID-19 pandemic, Catholic schools experienced the opportunity to use public money — forgivable federal loans — for individual schools. This federal initiative, PPP, represented the culmination of decades of lobbying, state policies, and court decisions advocating for, and affirming the Constitutionality of, the use of public money for private religious schools. The initial economic research on PPP indicated a positive impact on firm survival. The policy innovation of PPP was making the program accessible to private religious institutions, including Catholic schools, through forgivable bank loans. The themes of measuring PPP's effectiveness related to firm survival and equity of access have emerged from the nascent literature (Bartik et al., 2021; Chernenko & Scharfstein, 2022; Hubbard & Strain, 2020).

A body of literature provides insight into factors related to school closure. This study sought to build on that foundation. As Catholic school leaders developed their response to COVID-19, it appeared a significant number of schools took part in the PPP federal policy experiment. The impact of PPP on the viability of Catholic schools and school leaders' perceptions of its effectiveness provides lessons for the future of Catholic schools and an evaluation of PPP's efficacy related to the persistence of private religious institutions.

Theoretical Framework

The theoretical framework for this study situates Catholic schools in the 2019-2020 school year, shaped by two competing narratives. Contextual Narrative #1 depicts Catholic schools as effective schools contributing to the common good. Contextual Narrative #2 describes Catholic schools as institutions in decline. The first contextual narrative traces the positive contributions and characteristics of Catholic schools that have led researchers to see Catholic schools as private institutions in the public interest (Bryk et al., 1993; Coleman et al., 1982a). The second contextual narrative traces the overall decline of Catholic schools and the factors that led to reduced enrollment, school closure, and persistent decline.

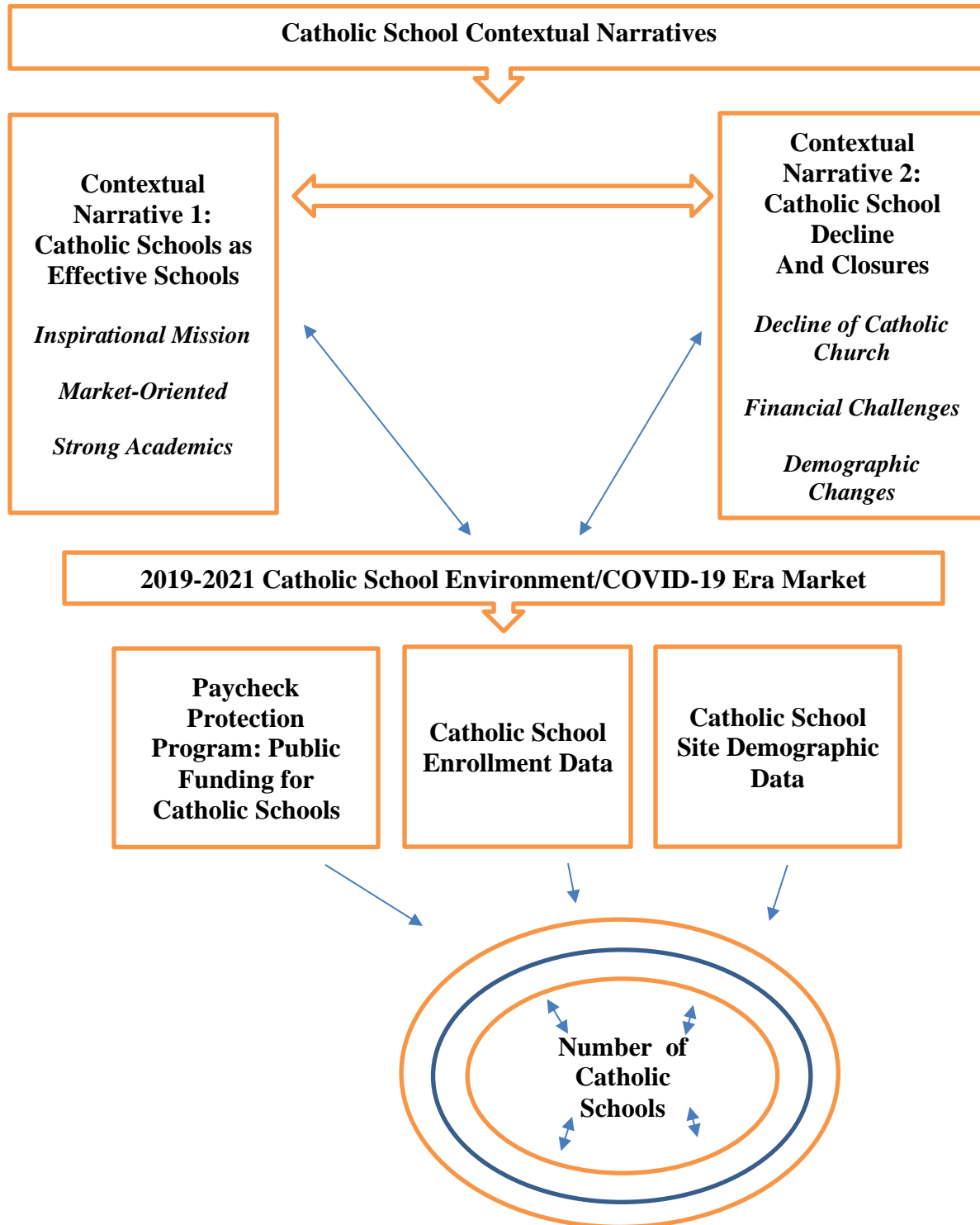
The schools in this study ($N=1,200$) are in the mid-Atlantic and Northeast states of Maryland, New York, Pennsylvania, Connecticut, Massachusetts, and New Hampshire. The theoretical framework hypothesizes that Catholic school survival in 2019-2021 drew upon characteristics associated with effective parochial schools, while the factors related to decline led to school closure. In addition, the new variable of PPP and its relationship to Catholic schools was contextualized within the trend toward public money for private schools, including the voucher movement. Finally, the contextual narratives and the background of PPP was explained given the variables utilized in this study to examine factors associated with school closure.

The theoretical framework rests on several hypotheses. First, school enrollment functions both as a measure of Catholic schools' market position and their organizational success and that enrollment is a statistically significant variable related to closure (Pandey et al., 2009). Second, that PPP aid functions as a significant variable in determining Catholic schools' survival. Third, the theoretical framework hypothesizes that the Census tract demographic variables (income, race, ethnicity, poverty) related to Catholic schools are significant variables connected to

survival status. Finally, the theoretical model further hypothesizes that Catholic school leaders would identify organizational characteristics of their school detailed in the competing contextual narratives matching their school's persistence (see Figure 1).

Figure 1

Catholic School Closure/Survival Theoretical Framework



A few notes of caution regarding this theoretical framework are necessary. The first contextual narrative of Catholic schools as effective schools relies on prior literature as part of this largely theoretical construct. However, no significant data was collected or analyzed to confirm this part of the theoretical framework. (Several qualitative questions of school leaders addressed aspects of the first contextual narrative.) The second contextual narrative of Catholic schools in decline was analyzed in significant depth using variables related to demographics, enrollment data, and PPP usage and amounts. In addition, qualitative data built on the quantitative findings related to these variables. This study addressed the contextual narrative of Catholic schools in decline in the quantitative and qualitative phases.

First Contextual Narrative: Catholic Schools as Effective Schools

The fate of Catholic schools during the COVID-19 pandemic era matters because of their long record of achievement in effectively serving students, particularly those most in need. The first contextual narrative reviews the literature associated with Catholic schools as effective educational institutions, particularly Catholic high schools serving minority children.

The publication of *High School Achievement: Public, Catholic, and Private Schools Compared* (Coleman et al., 1982a) provided academic credibility to Catholic schools and laid the foundation for future research. The Catholic sector had received little attention from educational researchers. Coleman's stature at the University of Chicago and authorship of two prior national studies boosted Catholic schools, which had seen over 3,000 schools close between 1960 and 1980 and received little academic attention (Bryk et al., 1993; McDonald & Schultz, 2021).

High School Achievement (Coleman et al., 1982a) and Coleman's subsequent reports on public and private schools were significant for several reasons. First, Coleman et al.'s (1982a) report comparing private and public schools took place within the context of the early Reagan

era and a policy environment that de-emphasized public investment in favor of the private sector.

The Coleman study reflected the policy context of the time, which shaped the debate and its focus on public and private schools. Second, the scope and tenor of this debate over Catholic school effectiveness relative to public schools established a template for discussing and researching Catholic schools for a generation. James Coleman's work, though forty years old, deserves significant attention to understand the literature on Catholic schools fully.

Coleman et al.'s (1982a) *High School Achievement* Shaped Future Scholarship and Debate

Coleman et al. (1982a)'s *High School Achievement* provided significant justification for the effectiveness of private schools, particularly Catholic schools, compared to public schools. The report used a sample of 1,016 high schools and over 58,000 student surveys; the schools were split into three groups: public, private, and Catholic. Coleman et al. (1982a) used the first waves of the longitudinal study, *High School and Beyond*, conducted through the National Center for Education Statistics. First, Coleman et al. (1982a) found that Catholic schools decreased the achievement gap between Whites and minorities while arguing that the gap widened in public schools. The study posited that overall academic achievement in private and Catholic schools was higher when compared to that in the public sector. In addition, the study identified lower Catholic school dropout rates than those in public schools. Finally, Coleman et al. (1982a) reported that students in Catholic schools exhibited a higher expectation of college attainment than those in public schools.

Coleman et al. (1982a) extended their analysis and ascribed superior organizational characteristics to Catholic schools. Coleman et al. (1982b) theorized that Catholic schools functioned "much closer to the American ideal of the 'common school,' educating children from different backgrounds alike, than do public schools" (p. 5). These findings led Coleman et al.

(1982a) to endorse policy options, including public support for tax credits and tuition vouchers, thus becoming policy advocates (Simenc & Straus, 2016). The report reflected Coleman's growing skepticism concerning the effectiveness of public institutions and policies (Coleman et al., 1975). Coleman et al. (1982b) reasoned that:

The constraints imposed on schools in the public sector (and there is no evidence that those constraints are financial, compared with the private sector) seem to impair their functioning as educational institutions, without providing the more egalitarian outcome that is one of the goals of public schooling. (p. 9)

A seminal work, Coleman et al. (1982a)'s *High School Achievement* established a dynamic that persisted for decades in which researchers measured the effectiveness of Catholic schools by comparing them to public schools. In addition, these findings provided further evidence for Catholic school policy experts to advocate for public aid for private religious schools by providing vouchers and tax credits. Coleman et al. (1982a) identified Catholic schools, which faced organizational failure, with a superior organizational model and performance. Coleman et al. (1982a) disregarded that over 3,600 Catholic schools closed, and enrollment dropped by 2.6 million from 1964 to 1980; 35.6% of Catholic high schools closed from 1960 to 1980 (Cooper & D'Agustino, 2014; McDonald & Schultz, 2021). In addition, Coleman et al. (1982a) focused on Catholic high schools, which accounted for only 15.9% of the 9,640 Catholic schools in 1980 (McDonald & Schultz, 2021). The findings of Coleman et al. (1982a) became generalized in the literature, however, to the entire system (though high schools are unique organizationally). The themes established by Coleman et al. (1982a)'s report became a significant focus of Catholic school leaders and advocates for decades.

Researchers Challenge Findings of Coleman's *High School Achievement*

Coleman et al.'s (1982a) *High School Achievement: Public, Catholic, and Private Schools Compared* generated controversy within the field of educational research (Ravitch, 1981). Researchers confirmed and critiqued its methodology and analysis, thus establishing a framework for the research of Catholic schools for decades.

Notably, Greeley (2017) found a similar impact from Catholic schools on minority students in his analysis of the *High School and Beyond* data (originally published in 1982). Greeley identified stronger discipline, less academic tracking, and more community involvement in Catholic schools as key factors in stronger academic achievement of Black and Hispanic students relative to their peers in public schools.

In evaluating the Coleman reports, however, scholars identified selection bias and methodology as issues. While acknowledging Catholic school students' higher SAT scores compared to those of public school students, Alexander and Pallas (1983) noted that Coleman et al.'s (1982a) work suffered from selection bias because Catholic schools enrolled "more capable students" (p. 178). Coleman et al. (1982a) used 17 variables to control for selection bias and family background. Employing the same *High School and Beyond* data set, Noell (1982) added four additional variables that could account for self-selection to Catholic schools: sex, handicap status, region, and eighth grade expectations of college attendance. When considering these additional variables, Noell (1982) found that the Catholic school cognitive advantage disappeared except for an advantage for Catholic school students in Grade 10 reading. Finally, Murnane et al. (1985) argued that Black and Hispanic students were oversampled in the *High School and Beyond* data set and that Coleman et al. (1982a) did not adequately control for this methodological issue, thereby inflating the positive results for minority students.

Additional critics questioned the extent of a Catholic school effect on minority children. Noting Coleman et al. (1982a)'s lack of controls for minority student ability, Keith and Page (1985) argued that Catholic school admissions might weed out lower-achieving minority students. After controlling for school selection, Keith and Page found a diminished Catholic School Advantage (CSA) for minority students. While allowing that additional selection variables may account for this outcome, Keith and Page acknowledged that Catholic schools did have a "real influence" (p. 345) on minority students' achievement because of stronger curricular requirements. However, the authors found no meaningful effect of Catholic schools on White seniors' academic achievement (see Table 1). Alternatively, Ward and Clark (1991) examined missing data techniques of prior studies. They found more modest academic achievement for private school students than Coleman et al. (1982a) but stronger achievement among Catholic school students than Keith and Page (1985).

Table 1*Catholic Schools and Public Schools Scholarship*

Study	Brief Summary of Findings
Coleman et al., 1982a	Catholic schools closed the achievement gap among White and minority students and replicated the American common school.
Greeley, 2017 (Original work published 1982)	Catholic schools closed the achievement gap between White and Black and Hispanic students through their unique culture.
Noel, 1982	Found that control variables erased most of the gains for minority students in Coleman et al. (1982a).
Murnane et al., 1985	Argued that Black and Hispanic students were oversampled in High School and Beyond data.
Keith & Page, 1985	Identified a smaller academic advantage among Catholic schools after considering selection bias.
Ward & Clark, 1991	Found that private schools offered a moderate impact by revising missing data techniques of prior studies examining the High School and Beyond data set.
Bryk et al., 1993	Found that students in Catholic schools made modest gains academically compared with public school students but emulated the American common schools.
Reardon et al., 2009	Catholic elementary school math scores trailed public school math score.

Bryk et al. (1993) Represents Most Impressive Work on Catholic Schools

As the debate over Catholic schools continued through the 1980s, a group of researchers with origins at Harvard University further developed the work of James Coleman and his colleagues. Bryk et al. (1993) confirmed the analysis of Coleman et al. (1982a) in their landmark study, *Catholic Schools and the Common Good*. This seminal work explored Catholic school effectiveness and worth to society. While the debate over Coleman's report and the Catholic

school advantage continued for decades, Bryk et al. (1993)'s field study of a representative group of Catholic high schools embodied the most nuanced, in-depth entry into this debate.

Following Coleman et al. (1982a)'s analysis, Bryk et al. (1993) explored the question of how students performed in Catholic schools compared to public schools. The authors visited seven Catholic high schools chosen to represent the diversity of this sector. The authors affirmed Coleman's analysis of Catholic schools as embodying "the common school" (Bryk et al., 1993, p. 11; Coleman et al., 1982a, p. 9). Bryk et al. (1993)'s scholarship, however, placed Catholic schools within a cultural, intellectual, and historical context, providing rich detail on the organization and function of these schools. Whereas Coleman et al. (1982a) could adopt a tone that bordered on polemical, Bryk et al. (1993)'s *Catholic Schools and the Common Good* demonstrated more nuance. Although Bryk et al. (1993)'s work grew out of the heated academic debate of Catholic schools and public schools, it succeeded in cementing Coleman's claim about achievement in Catholic schools, particularly among minority students, while transcending that discussion and staking out its own status in Catholic school literature. The mixed method study included data analysis from the *High School and Beyond* longitudinal data set but also featured two rounds of qualitative fieldwork with semi-structured interviews. It is worth exploring this work in detail given the study's significance. Taken together, the work of Coleman et al. (1982) and Bryk et al. (1993) represent arguably the most important, influential work on Catholic schools.

Placing Catholic schools within a historical context, Bryk et al. (1993) found that post-Vatican II Catholic schools embodied the "pursuit of the common good" (p. 11) through their organization, community, and theological foundation. By bringing diverse students and families together, Catholic schools served social and democratic goals, Bryk et al. (1993) argued. After

changes in the Catholic Church from the Second Vatican Council, the authors argued that Catholic schools became committed to serving society by pursuing social justice.

Importantly, Bryk et al. (1993) explored the organization of Catholic high schools. The authors found that the decentralized governance of Catholic schools and inclusive organizational structure developed high engagement levels among students with faculty members. While the instruction the authors observed in field visits was ordinary, Bryk et al. (1993) found that the social organization of the schools led to more equitable student achievement. The authors theorized that the Catholic principle of subsidiarity, which devolves authority to the lowest level possible level, created autonomy within these Catholic schools that empowered faculty and administrators to make decisions and take ownership of the community. The implication from this study was that public schools might be able to incorporate some of the organizational structures of Catholic schools, including school as community, decentralized governance, and voluntary association, reflected in the charter school movement today (Bryk, 2008; Bryk et al., 1993).

Echoing Coleman et al. (1982a), Bryk et al. (1993) touted the virtues of American Catholic high schools with limited discussion of resource constraints and the reality of school closure. Bryk et al. (1993) argued that Catholic school closures and the decline of religious as faculty resulted in the hiring of new and younger faculty open to the questioning and social justice spirit of changes in the Catholic Church since Vatican II. While this analysis may hold some truth, in hindsight, Bryk et al. (1993) underestimated the impact of school closure. From 1960 to 1990, Catholic high schools in the United States diminished from 2,392 to 1,324. Bryk et al. (1993) lauded American Catholic high schools' organizational structure and culture with a limited discussion of the fragility of the model.

Continued Debate Over CSA

In the years since the publication of Coleman et al.'s *High School Achievement* (1982a), the controversy that ensued, and Bryk et al.'s *Catholic Schools and the Common Good*, the debate over the ostensible Catholic School Advantage (CSA) has continued. To summarize, the significant body of literature on Catholic schools indicates that a CSA exists at the high school level among minority students; the studies are mixed on White students and among Catholic elementary schools.

Persistence of CSA

Despite criticisms, researchers since the initial controversy (Bryk et al., 1993; Coleman et al., 1982a) continued to identify Catholic schools with positive impacts on student achievement, or CSA, and social outcomes. Catholic high schools continued to demonstrate strong academic outcomes, particularly for minority children.

Catholic schools have been correlated with better college outcomes, including competitive college acceptances (Eide et al., 2004). In addition, the National Educational Longitudinal Study data indicated more robust graduation rates for Catholic school students than those of students in public schools and higher test scores in math and reading (Nguyen et al., 2006).

An important strain in the literature notes Catholic schools' academic success with minority children. Catholic schools' presence in urban neighborhoods positively impacts the fabric of life and safety in these communities (Brinig & Garnett, 2014). Urban Catholic schools serving minority children help students develop critical academic skills, including persistence, core study skills, and college preparation (Bempechat et al., 2002; Bempechat et al., 2008; Fenzel & Richardson, 2019; O'Keefe & Schoepner, 2007; Proehl et al., 2017). Similarly,

Anguiano et al. (2020) argued that the culture and relationships within an urban, minority Catholic school in a high crime neighborhood enhanced family engagement, academic success, and community norms. In addition, Catholic schools have been found to develop the values, motivation, and habits of self-regulation that limit incarceration among young men, curtail pregnancy among teenage girls, and limit hard drug use (Figlio & Ludwig, 2012; Louie & Holdway, 2009). In conclusion, Catholic high schools raised high school graduation rates for all students (including to a greater extent among minority students) and laid the foundation for better grades in college for Black and Hispanic students (Altonji et al., 2005; Fleming et al., 2018).

Criticism of CSA

The CSA, identified by Coleman et al. (1982a) and confirmed by other researchers in subsequent studies (Bryk et al., 1993; Greeley, 2017; Ward & Clark, 1991), notably focused on high school students. Subsequent studies have questioned the existence of the CSA at the elementary and middle school level.

Using National Assessment of Educational Progress data for elementary schools, Reardon et al. (2009) called into doubt the CSA for elementary school students. Comparing Catholic school math scores to those of public schools, Reardon et al. (2009) found that Catholic school students' scores trailed the public sector national average. Comparing Catholic schools with local public schools, the positive Catholic school effects became statistically indistinguishable. Hallinan and Kubitscheck (2012) compared public school students' achievement in Chicago to that of Catholic school students in Grades 6 and 8. The results indicated a modest mitigation of the effects of race and socioeconomic status among Catholic school students in reading, but the effects of race increased for math.

Summary of Contextual Narrative #1: Effective Catholic Schools

The richness of the debate generated critical insights into the role of school communities and school practices that were initially novel but have now become accepted in many quarters. The long debate over the effect of Catholic schools matters for parochial schools in the pandemic era for the following reasons: (a) the debate demonstrated the academic strength of Catholic schools, particularly for minority students in urban settings; (b) it made the public policy case for public money for private schools; and (c) the discussion identified the importance of Catholic schools as distinct, mission-driven institutions in the marketplace.

First, Coleman et al.'s (1982a) descriptive data on attendance, discipline, homework, and curriculum generated a discussion on learning outcomes and Catholic schools' success, particularly in closing the achievement gap. This academic debate identified the lasting benefits of Catholic schools, which were once considered inferior to public schools (DeFiore, 2014). The continued research provided legitimacy for Catholic schools, particularly in the education of minority students (Bempechat et al., 2008; Brinig & Garnett, 2014; Bryk et al., 1993; Coleman et al., 1982a; Fenzel & Richardson, 2019; Figlio & Louie & Holdway, 2009; Ludwig, 2012; O'Keefe & Schoepner, 2007). Less than half of public schools operated with in-person instruction in September 2020 and many urban public districts remained remote for up to one full year. However, the fact that 92% Catholic schools featured in-person learning combined with a history of serving city populations may have been attractive to families during COVID-19 (Porter-Magee et al., 2022).

Second, the literature on Catholic and public schools makes the case for public money for religious schools. While this important question will be treated in depth, the continued academic

question over a generation of scholars kept open Coleman’s original suggestion of vouchers and tax credits for private and religious schools (Coleman et al., 1982a; Russo, 2014).

Finally, Catholic schools as effective site-managed, market-based educational institutions with a dedication to their mission may have made them effective at pivoting and responding to the pandemic. The tuition-based model made Catholic schools more likely to open for pure survival; however, Bryk (2008) argued that Catholic schools operate in the market with a distinct tradition of educating in partnership with the family and dedicated to a tradition of valuing the dignity of all students.

Second Contextual Narrative: Catholic School Decline

While researchers highlighted the positive outcomes of Catholic schools, the viability of the sector faced significant systemic threats: declining enrollment, increasing tuition, school closures, and questions surrounding fidelity to mission. The second contextual narrative details factors related to Catholic school decline, which persisted into the pandemic. The title of Brown and Greeley’s (1970) book posed a simple question: *Can Catholic Schools Survive?* When Brown and Greeley considered the question in 1970, the Catholic sector stood at 11,352 schools and 4.4 million students (from 12,893 and 5.3 million students in 1960). Brown and Greeley’s (1970) question continues to prove prescient today, with 5,928 Catholic schools and 1.68 million students (NCEA, 2022).

The literature on Catholic school decline pointed to several interrelated factors: Catholic Church’s Vatican II reforms; Catholic Church and demographic changes; the institutional decline of the Catholic Church; clergy abuse scandal; and the pandemic. Researchers have called this pattern of successive crises the “multiple whammy theory” (DeFiore, 2014, p. 276) and the

“perfect storm” (O’Keefe & Schoepner, 2014, p. 227). The COVID-19 pandemic appeared to present one more significant crisis to the increasingly weak institution of Catholic schools.

Catholic Church and the 1960s and 1970s

The postwar period began with confidence, and Catholic schools grew by 50% in enrollment (see Appendix A). Catholic schools numbered 13,296, and enrollment peaked at 5.66 million in 1964 (Cooper & D’Agustino, 2014; DeFiore, 2014; McGreevy, 1996; Rodriguez & Briscoe, 2009). By the mid-1960s, the Catholic Church was affected internally by Vatican II reforms and engulfed by the social and political changes in the United States. The institutional Catholic Church went into free fall. The profound nature of this change cannot be underestimated. By 1970, only six years later, over 1,300 Catholic schools had closed, and enrollment plunged over 1 million students to 4.36 million (McDonald & Schultz, 2021).

Vatican II

The Catholic Church’s Second Vatican Council spanned from 1962 to 1965. The Council introduced wide reform, including changing the liturgy from Latin to the vernacular language, empowering lay Catholics to take a greater role in the Church, and directing the Church to look outward and take part in a pluralistic society and fight for social justice (Bryk et al., 1993; O’Toole, 2008). At the same time, the council coincided with the publication of Betty Friedan’s *The Feminine Mystique* in 1963, which sparked the modern feminist movement. As the Church began conversations about the role of women in a priest-dominated Church, the country’s social landscape changed dramatically (O’Toole, 2008). Catholic authors have debated the role and impact of Vatican II on Church decline: did the Council accelerate decline, or would it have happened regardless? It is important to note that the institutional Church initiated significant

change during social revolutions impacting all Americans, including Catholics (McGreevy, 1996; O'Toole, 2008).

Demographic Change: White Flight, Race, and Schools

The post-World War II period witnessed White Catholics, motivated by social mobility, leaving ethnic neighborhoods in inner cities for the suburbs. In some cases, Catholics were motivated by changing demographics as African Americans moved to northern cities. The racial enmity of some White Catholics and ensuing conflicts over neighborhoods motivated this geographic movement, referred to as White flight. Catholics moved to suburbs, often featuring new suburban public schools and fewer Catholic schools (DeFiore, 2014; McGreevy, 1996; Rodriguez & Briscoe, 2019).

While educational researchers noted the academic achievement in Catholic schools among minority students, the American Catholic Church's history on race is more complicated (Bryk et al., 1993; Coleman et al., 1982a; O'Toole, 2008). While some elements of the Church embraced progressive views of civil rights, American Catholics in the 1960s became as polarized socially and politically as American society. Some Catholics resisted liberal changes and engaged in acts of racial prejudice (McGreevy, 1996; O'Toole, 2008).

Often neglected in educational studies, the historiographical literature details an impressionistic portrait of the chaos and disunity of the Catholic Church in the 1960s, a critical period for Catholic schools. Tension over African Americans moving into White ethnic Catholic neighborhoods, at times, sparked violence. In 1964, for example, when priests in a Cleveland neighborhood tried to persuade a throng opposed to integration, Catholics shouted to the priests, "Mind your own business, Father" (O'Toole, 2008, p. 259). Father Francis Lawlor, an Augustinian priest, led the fight against housing integration in Chicago. Opposed by Cardinal

Cody, Fr. Lawlor organized 10,000 Chicagoans into block clubs opposing integration. Another priest called Lawlor “Father George Wallace” (McGreevy, 1996, p. 231). Taken together, these examples demonstrate disunion among Catholics on critical social questions and a complicated history with race.

The historical literature suggests that Catholic divisions during this period paralyzed the Catholic school system and prevented an effective systemic response. McGreevy (1996) found a vociferous group of liberal Catholics opposed school expansion and even Catholic schools as institutions. These critics argued that Catholic schools “prevented public school integration, served a middle-class constituency, kept nuns trapped in educational servitude, promoted religious separatism, and doomed parishes to...red ink” (McGreevy 1996, p. 240). Supporters of Catholic schools argued that the schools kept Whites in urban neighborhoods thus furthering integration, provided an excellent education, and were becoming more integrated than the rapidly resegregated urban public schools. During the 1960s and 1970s, African American enrollment in Catholic schools increased significantly while many schools closed (McGreevy, 1996).

The scale of school closings set against tense race relations and shifting theological commitments during this period further illustrated the confusion, tumult, and racism within archdioceses of the period. These unresolved crises impacted Catholic schools. In Detroit, Cardinal Dearden mandated that a maximum of 40% of a parish’s budget could be directed toward schools since the Second Vatican Council called on parishes to do more for social justice. Between 1968 and 1973, Cardinal Dearden closed over one-third of the Detroit archdiocese’s 360 schools; in just one year, over 18,000 students were pushed out of Catholic schools (McGreevy, 1996). Reflecting a division between the hierarchy and the flock, an usher in Detroit said, “They knew we needed that money for our schools. They gave it to the colored so we

couldn't use it" (McGreevy, 1996, p. 215). In Boston, the archdiocese operated 345 schools for 151,344 students in 1964 and closed nearly 100 schools by 1970; only 248 schools and 81,540 students remained. Cardinal Medeiros, who supported court-ordered busing for Boston Public Schools, instructed Catholic schools that they could not accept Boston students fleeing the public schools. Some Boston Catholics wondered why the Church encouraged them to oppose the *Roe v. Wade* (1973) court decision on abortion but not Judge Garrity's decision on busing (Glinski, 1988). Racial animus among White Catholics undoubtedly played a significant role in White flight. At the same time, division and an incoherent strategy on public policy issues decimated a Catholic school system built on the sacrifice of religious staff and working-class families.

In recent decades, the Catholic Church's complex interaction with minorities has occurred with Hispanics, the fastest-growing minority group in the United States. Distinct from African Americans, Hispanics are often Catholic, thus making this emerging population a natural fit within Catholic schools. Recent scholarship indicates, however, that the Church and Catholic schools are not serving the Hispanic population well. Only 10% of Hispanic youth are in religious education programs in parishes, and just 3% are in Catholic schools. Only 8% of principals and 7% of faculty in the Northeast are of Hispanic background. Most Hispanic youth attend highly segregated public schools in Western cities (Ospino & Weitzell-O'Neill, 2016).

Overall Decline of the Catholic Church (1965-Present)

By most measures, the American Catholic Church has experienced an institutional decline over the past 55 years. Catholic schools are sponsored by the Catholic Church and today draw 80.3% of students from the Catholic population. Consequently, the status of the Church continues to influence the fate of Catholic schools (McDonald & Schultz, 2021). Diminished church attendance and revenue, declining religious staff in schools, institutional chaos, and the

Church sexual abuse scandal further diminished the stature of the Catholic Church and its organizational capacity, leading to a persistent decline.

Declining Church Attendance and Donations

From the period of the 1960s through 2021, Catholic mass attendance has continued to decline steadily (see Table 2). Because of this change, Catholic financial resources have shrunk when factoring in population growth and inflation. This dynamic has led to diminished financial resources for Catholic schools (DiFiore, 2014; Hout & Greeley, 1987).

Table 2

Survey-Based Estimate of United States Catholic Church Attendance

Status	1970	1980	1990	2000	2010	2021
Weekly	54.9%	42.2%	32.5%	30.8%	24.2%	17.3%
Monthly	71.3%	63.7%	57.2%	48.9%	48.9%	36.6%

Note. Adapted from “Frequently Requested Church Statistics,” (n.d.), Center for Applied Research in the Apostolate (CARA), accessed January 6, 2023 from <https://cara.georgetown.edu/faqs>. The most recent data available from CARA was 2021 (2020 was not available). Data is derived from CARA survey-based estimates.

Hout and Greeley (1987) found a substantial drop in Catholic Church attendance occurred between 1968 and 1975 because of antipathy toward the hierarchy, particularly among issues of sexual practice, further enhancing the interpretation of the period following Vatican II (1963-1965) as one of turmoil. Nonetheless, Georgetown University’s Center for Applied Research in the Apostolate (CARA, n.d.) found the drop in attendance continues through today.

The decline in Church attendance was accompanied by a diminished giving among Catholics as a percentage of median household income, from 2.3% in 1963 to 1.3% in 1974 and

1.04% in 2001 (DeFiore, 2014). This shift, in turn, led to a decline in the subsidies provided to parish elementary schools (see Table 3) thus weakening the financial position of schools and leading to higher tuition.

Table 3

Catholic Elementary School Finances

Financial Element	1970	Mid-1990s	2008-2009	2010-2011
Tuition as % of School Income	27%	52%	62%	65%
Catholic Church subsidy as a % of School Income	63%	35%	15%	14%

Note. Adapted from “Catholic Elementary School Finances – Selected Items” by L. DeFiore, 2014, in P. Bauch, O.P. ed., *Catholic schools in the public interest: Past, present, and future directions*, Information Age Publishing, p. 275. Percentages do not add up to 100%; additional sources of school income include fundraising, foundation grants, and government funds.

Decline of Religious Staff (Priests, Nuns, Brothers)

While Catholic religious (primarily nuns) working full-time in Catholic schools had grown from 1920 to 1960, the number of full-time religious declined after Vatican II (see Table 4). The literature identified several reasons for the decline: the rise of feminism; opposition to vows of celibacy, obedience, and poverty; new professional employment opportunities; a decline in religious’ status post-Vatican II; and the rise of individualism within economically polarized societies (Ebaugh et al., 1996; Fishman et al., 2015; McGreevy, 1996; Stark & Finke, 2000).

As the Catholic Church built schools to accommodate the Baby Boom generation, the proportion of lay teachers increased from less than 10% in 1950 to 26% in 1960. The school expansion had begun to outstrip the Church’s inexpensive labor supply prior to Vatican II (McDonald & Schultz, 2021). The Catholic school model relied upon the low-cost labor of religious orders,

primarily nuns but also brothers and priests. The decline in religious staff placed further pressure upon Church institutions at a time of declining church attendance, demographic changes, and racial tensions resulting in White flight.

Table 4

Catholic Schools Full-Time Equivalent Staff

Year	Religious Staff	%	Lay Staff	%
1930	65,601	90.4%	6,951	9.6%
1940	73,960	91.2%	7,097	8.8%
1950	84,925	90.1%	9,370	9.9%
1960	112,029	73.8%	39,873	26.2%
1970	80,615	48.4%	85,873	26.2%
1980	42,732	29.0%	104,562	71.0%
1990	20,020	14.6%	116,880	85.4%
2000	11,011	7.0%	146,123	93.0%
2010	5,742	3.7%	148,567	96.3%
2020	3,742	2.6%	142,602	97.4%

Note. Adapted from “Schools and Enrollment History,” by D. McDonald and M. Schultz, 2021, *United States Catholic Elementary and Secondary Schools 2020-2021*, National Catholic Educational Association, p. 3.

Catholic Church Abuse Scandal

The Catholic Church sex scandal has affected Catholics’ connection with Church institutions, donations, and school enrollment. The literature detailed a grim picture of the fallout from the scandal, including continued school closure and diminished fundraising. Plotting

observable sexual abuse incidents within zip codes and correlating with Catholic schools, economists measured the extent to which the clergy scandal affected enrollment (Bottan & Perez-Truglia, 2015; Dills & Hernandez-Julian, 2012; Moghtaderi, 2018). It is estimated that 5–66% of the 1130 school closures from 2002 to 2010 occurred because of the sexual abuse crisis. Moghtaderi (2018) argued that the *Boston Globe* 2002 series on sexual abuse represented a critical inflection point. The abuse scandal cost the Catholic Church \$3 billion in lawsuits, but the loss of trust resulted in an estimated \$2.3 to \$2.8 billion decline in annual contributions to Catholic institutions (Bottan & Perez-Truglia, 2015; Hungerman, 2013;).

COVID-19 Pandemic

While the existing crises percolated, a new crisis emerged that has exacerbated the underlying threats. The COVID-19 pandemic continues, with a spiraling death toll of over 1,000,000 (Stein, 2022). COVID-19 sparked the largest annual percentage enrollment drop, 6.4%, in Catholic schools since records began (McDonald & Schultz, 2021). The lack of consistent government aid placed American Catholic schools at risk (Wodon, 2020).

Institutional Failure and Catholic School Decline

In assessing the Catholic Church’s overall decline as an institution and its relationship to declining Catholic schools, the literature suggests institutional failures in establishing priorities, fiscal management, and mission fidelity.

McGreevy (1996) argued that the Catholic Church’s deep and rapid expansion of parishes and schools throughout the North represented “institutional hubris” (p. 5). To be sure, the rapid construction of schools in the 1950s with little insight into the White flight that already had begun represented a strategic mistake and hamstrung future Catholic efforts (McGreevy, 1996; Sugrue, 2005, 2008). Catholic bishops directing building drives did not conduct sophisticated

data analysis (Swartz & Bonello, 1977). The era of triumphant growth from 1950 to 1964 saw the creation of 2,520 schools, while the period after Vatican II (1964 to 1980) led to the closure of 3,658 schools. Catholic Church leaders never developed a coherent and effective response to this period of chaos, drift, and financial failure (DeFiore, 2014; McGreevy, 1996). While school closures never stopped in the ensuing decades, they slowed somewhat in the 1990s, which witnessed a small bump (about 60,000) in enrollment (Cooper & D’Agustino, 2014; McDonald & Schultz, 2021). The clergy sex abuse further damaged the Catholic Church’s moral authority, represented failed crisis management, harmed fundraising, and accelerated school closings after a period of relative stability in the 1990s (Barth, 2010; Bottan & Perez-Truglia, 2015; Dills & Hernandez-Julian, 2015; Moghtaderi, 2018; O’Keefe & Goldschmidt, 2014).

Joseph O’Keefe has argued eloquently that the Catholic schools demonstrating the most effectiveness in serving students of color have been the schools most in danger of closing. The urban closure crisis has further threatened the Church’s fidelity to its post-Second Vatican Council social justice mission (O’Keefe, 2000; O’Keefe & Goldschmidt, 2014; O’Keefe & Schoepner, 2007). O’Keefe (2000) argued that “the strength of Catholic schools is in mission, not margin” (p. 193).

Precedents for PPP: Vouchers

Catholic school leaders’ response to the COVID-19 pandemic resulted in a successful push for federal aid in the form of the PPP. The literature on public aid to Catholic schools examines its Constitutionality. This section will trace public policy efforts to fund private schools with public dollars and examine the policy’s roots in the twin contextual narratives of Catholic schools as effective schools and a public good and Catholic school decline. In addition, it will explore how vouchers and other public aid policies served as a precedent for the PPP.

Finally, a review of the nascent economic literature associated with PPP and firms will inform the experience of Catholic schools with PPP, which has not previously been examined.

The issue of public aid for Catholic schools has grown out of the paradoxical narratives in the literature of Catholic school success and decline. After courts, including the Supreme Court, found legislative schemes to fund Catholic schools unconstitutional on First Amendment grounds, Catholic school advocates increasingly focused on voucher programs for religious schools, particularly those serving lower-income urban populations. In this effort, the twin narratives of Catholic schools and the common good and Catholic school decline merged as advocates argued for vouchers because of Catholic schools' effectiveness in serving urban minority children and the need for public funding to preserve urban Catholic schools. At the same time, the courts began to shift in a more conservative direction, favoring government aid to religious institutions. The literature suggested that the court cases and school choice legislation provided a critical foundation for Catholic school leaders to inform their response to the COVID-19 pandemic, particularly in satisfying Constitutional questions and advocating for the PPP's inclusion of private religious institutions. Furthermore, the literature suggested cautionary signals and perspectives as researchers began to evaluate the impact of PPP aid and the potential for further public aid to religious schools (Cunningham, 2015; Russo, 2014).

Constitutional Question Regarding Public Aid for Private Schools

The Constitution of the United States has presented significant hurdles for public aid to private religious schools because of the Establishment Clause of the First Amendment, which stipulated a separation of Church and State. The Supreme Court established a bright line and Constitutional test on public aid to private religious schools with the *Lemon v. Kurtzman* (1971)

decision. Recent Supreme Court decisions slowly chipped away at these restrictions (Russo, 2014; Schimmel et al., 2015).

The *Lemon* decision (1971) struck down state laws that provided public assistance for educational services in Pennsylvania and salary supplements in Rhode Island. In a unanimous decision, the Court established a three-part test for public aid to private religious schools. The Lemon test consisted of the following: “the statute must have a secular legislative purpose; its principal or primary effect must be one that neither advances nor inhibits religion; the statute must not foster an ‘excessive government entanglement with religion’” (*Lemon v. Kurtzman*, 1971, pp. 615-616). The Court found that the laws served a secular purpose but involved the advancement of religion. At the time of *Lemon* (1971) in Pennsylvania and Rhode Island, respectively, 20% to 25% of students attended nonpublic schools, and 95% were Catholic.

The *Lemon* (1971) case is critical for several reasons. First, the Supreme Court did not have to look far for advancement of religion and entanglement: a high proportion of religious faculty; proximity of schools to churches; close supervision and management by pastors; and Catholic dominance of the private school markets in Pennsylvania and Rhode Island (*Lemon v. Kurtzman*, 1971; Russo, 2014; Schimmel et al., 2015). In the *Lemon* (1971) case and throughout the era of rapid Catholic school decline from 1964-1975, Catholic leaders regularly raised the specter of a sudden, complete collapse of the school system that would overwhelm urban districts. The scenario never arrived because of excess public school capacity and a gradual decline (Swartz & Bonello, 1977). This crisis period drove various voucher, tax credit, and aid legislation for religious schools in heavily Catholic states. Catholic schools during the era amounted to roughly 20-25% of state school populations in Pennsylvania and Rhode Island and 20-40% of many Northern cities (McGreevy, 1996). At this point of maximum demographic political influence,

the *Lemon* (1971) test limited public aid to religious schools. Ironically, as the Court shifted politically, Catholic schools were in a position of diminished political and social influence. However, the decreased market share made it easier to meet the *Lemon* test.

In recent years, additional state, lower, and Supreme Court decisions have chipped away at the *Lemon* test and legislators have been more skillful at crafting laws to meet Constitutional muster. The Supreme Court's *Zelman et al. v. Simmons-Harris et al.* (2002) affirmed an Ohio voucher program for low-income, urban students in Cleveland at a time when the Cleveland public schools were considered failing. The Supreme Court also upheld a state voucher program for private religious schools in Montana in *Espinoza et al. v. Montana Department of Revenue et al.* (2020). It overruled a voucher program for private schools that excluded religious schools in Maine in *Carson v. Makin* (2022). In addition to other important precedents, these decisions raised the hopes of Catholic school voucher and choice advocates that public aid to private schools permitted by federal courts might be extended (*Carson v. Makin*, 2022; Cunningham, 2015; *Espinoza v. Montana*, 2020; Russo; 2014; *Zelman v. Simmons-Harris*, 2002).

Research on Private Schools and Vouchers

Earlier studies of Catholic schools made the theoretical case for vouchers by arguing that Catholic schools were inclusive, egalitarian, and effective (Bryk et al., 1993; Coleman et al., 1982a; Greeley, 2017). Once vouchers became available, studies measuring student achievement in voucher programs have been mixed. A group of studies found achievement gains for students in reading or math (Egalite et al., 2020; Witte et al., 2012; Wolf et al., 2013) and some evidence that vouchers placed pressure on public schools to improve (Chakrabarti, 2010).

Contrasting studies have found a negative impact from vouchers on student achievement (Abdulkadiroglu et al., 2015; Figlio & Karbownik, 2016). In a literature review, Wolf (2020)

highlighted positive studies and the growth of school choice but expressed concern over the fragility of the private school sector during the pandemic. Reviewing recent studies, Carnoy (2017) argued that vouchers did not demonstrate enough impact on student achievement to siphon funding from public schools.

Significantly, research on vouchers and Catholic schools did not produce studies touting Catholic school effects that resembled the scope, rigor, and influence of Coleman et al.(1982a) and Bryk et al. (1993).

Internal Catholic Debate Among Catholic School Community About Accepting Public Aid

While the NCEA and United States Conference of Bishops (USCCB, n.d., 2019) aligned themselves with the voucher movement, academics focused on Catholic schools questioned whether vouchers represented a solution to enrollment challenges. The discussion typically broke down into two schools: one focused on questions of Catholic identity, while the other focused on the sheer practicality of vouchers.

Addressing the Supreme Court’s *Zelman* (2002) decision, Cattaro (2003) argued that Catholic schools risked losing their identity as they accepted more students with vouchers and potentially faced greater regulatory scrutiny. Catarro (2003) found that “the paradox is that by accepting students who use vouchers, Catholic schools may run the risk of having to change the ways in which they operate and become less religious in their outlook” (p. 350). Burke (2012) argued that traditional Catholic thought and organizations were communitarian, not driven by “neoliberal market-based reforms” (p. 177). Burke (2012) questioned this new alignment, arguing that Catholic schools’ embrace of market-based ideas like vouchers invited more scrutiny and accountability measures like a standardized testing regime. Burke (2012) cited recent studies demonstrating how Catholic K-8 students’ achievement testing measured poorly

compared with public school students (Hallinan & Kubitscheck, 2012; Reardon et al., 2009). Finally, Burke (2012) questioned the ethics of participating in political reforms that implicitly encouraged disinvestment in inner-city schools. Burke (2012) asked, “What good is saving Catholic schools at the expense of the greater soul of public education?” (p. 194).

Another set of Catholic scholars questioned the practicality of vouchers. While acknowledging that vouchers have some positive impacts, particularly for inner-city schools, O’Keefe and Goldschmidt (2014) argued that “it is foolhardy to think that the nation has the political will to embrace vouchers on a large scale. Vouchers will never provide the panacea that many desire” (p. 227). While the concept of vouchers held appeal in the 1970s and 1980s, Catholic thought leaders and institutions now have more evidence as to the impact of vouchers. Hungerman et al. (2019) found that school vouchers stabilized parishes in Milwaukee and prevented closure but caused a significant decline in parish donations from noneducational sources. Hungerman et al. (2019) theorized that vouchers may diminish social capital within religious institutions and crowd out religious activities, including fundraising, thereby shifting the balance between church and state.

Catholic Schools, Vouchers, and the Pandemic

Catholic school students participate in voucher programs throughout the country. In 2018, approximately 113,000 students received an estimated \$538 million from public vouchers. The three biggest programs in Milwaukee, Wisconsin, Ohio, and Indiana account for 66% of the overall revenue from public vouchers. Twenty-five percent of students in Ohio use vouchers. Public vouchers often do not cover the entire tuition of Catholic schools, which is established at the school level. Additional public choice programs exist, including tax credits. Catholic school

parents' participation in these programs ranges from 85% in Arizona (\$3,335) to only 1% in Kansas (Dolan, 2018), thus suggesting a functional diversity in adopting public money.

Catholic school vouchers — public money for private religious schools — represented a fifty-year policy goal for Catholic school leaders that, over time, developed significant case law and solidified an alliance with conservative political elements. The NCEA, USCCB, and diocesan superintendents have advocated for vouchers for over 50 years. The most significant research on Catholic school effectiveness (Bryk et al., 1993; Coleman et al., 1982a) argued that vouchers would benefit students in failing public schools. While the research on private school vouchers' effectiveness is muddled, the fight over vouchers produced significant legal victories favoring aid to religious schools. As O'Keefe and Goldschmidt (2014) found, vouchers for Catholic schools have not been a panacea for the enrollment challenges of Catholic schools. During the pandemic year of 2019-2020, however, Catholic schools in the voucher states of Indiana, Ohio, and Wisconsin experienced limited school decline, perhaps inviting further investigation (McDonald & Shultz, 2021). The alignment of Catholic school advocates and conservative political forces in furthering the concept of public aid to religious schools, however, laid the legal, policy, and political groundwork for Catholic leaders' response to the COVID-19 pandemic and the inclusion of religious schools in PPP funding program. As more data from the experience of Catholic schools and parishes with vouchers becomes available, the literature suggests that increased government aid from PPP participation may have unanticipated financial and organizational consequences.

PPP and Catholic School Survival

It is still too early to definitively evaluate the impact of the SBA's PPP on the health and survival of businesses and nonprofit organizations. Initial studies, however, estimated that the

PPP forgivable loans increased the survival rate of small businesses, though they may have been accessed in an inequitable manner.

PPP Description

The federal government authorized PPP loans to assist sole proprietors, businesses, nonprofits, and religious organizations with meeting payroll obligations related to the COVID-19 pandemic. Congress passed three pieces of legislation to fund PPP loans administered through the SBA. First, Congress passed the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which authorized \$349 billion on April 13, 2020. Businesses quickly exhausted the initial funding. In response, Congress passed the Paycheck Protection Program and Health Care Enhancement Act on April 23, 2020, which provided an additional \$310 billion. While constructed from two separate pieces of legislation, this April 2020 phase of PPP is generally referred to as the first round. Second, Congress passed the Coronavirus Response and Relief Supplemental Appropriation Act of 2021, which funded a second round of PPP funding totaling \$284 billion. The January to May 2021 round of PPP funding is generally considered the second round (Bi & Gulati, 2021).

The SBA administered the PPP forgivable loans to small businesses by providing loans through commercial banks to individual businesses and organizations (Bi & Gulati, 2021). The SBA rules referred to the April 2020 funding as “First Draw PPP Loans” (Thompson, 2021, para. 2) and the January-May 2021 loans as “Second Draw PPP Loans” (para. 2). The SBA rules for first draw loans allowed a maximum of 2.5 months of payroll, mortgage and utilities expenses, and access for organizations with up to 500 employees. The SBA rules for second draw loans in 2021 slightly modified regulations, calling for firms and organizations to have up to 300

employees and a demonstrated 25% reduction in revenue from 2019 to 2020. The reduction in revenue could be calculated on an annual or quarterly basis (Arora, 2021).

Administering the CARES Act, the Trump SBA changed the rules and exempted religious organizations from the SBA affiliation guidelines based on their Constitutional interpretation of the Religious Freedom Restoration Act. The Trump Administration took executive action and allowed individual religious entities, including parishes, schools, and religious orders, to be exempted from language banning affiliated entities over 500 from taking part in the PPP loans. The Trump PPP rules regarded individual Catholic entities, including schools and parishes, as distinct organizations rather than part of a larger Catholic Church, which generally exceeds 500 employees within a diocese. The Trump SBA regulations placed no limits on all religious organizations' acceptance of PPP loans and their ability to engage in religious expression, thus opening the policy path for Catholic schools to receive federal forgivable loans (Federal Register, 2020; SBA, 2020).

PPP and Impacts on Survival

Initial studies on the use and impact of PPP and institutional survival are mixed and focused on businesses. No extant literature on PPP and private religious schools exists. These studies do not directly relate to Catholic schools, nor will this dissertation employ econometric models to evaluate the survivability of Catholic schools. However, the findings provide context to the extent that Catholic schools operate as market-based businesses and rely on tuition revenue from parents.

Research on business survival, health, and the effects of PPP aid has grown over the last 2 years suggesting, on balance, positive outcomes for firms using PPP. On firm viability, Bartik et al. (2021) focused on firms' receipt of PPP loans distributed by banks and firm expectations of

survival. Barkit et al. (2021) argued that PPP aid increased the estimated likelihood of business survival by 14 to 30%. The study found that firms with weak balance sheets in industries most impacted by COVID-19 applied for PPP loans in the first round of Spring 2020. Using survey data, the study noted that firms receiving PPP loans demonstrated higher levels of confidence related to survival (Barkit et al., 2021). Regarding business persistence, Hubbard and Strain (2020) and Bartlett and Morse (2020) found that PPP improved firms' balance sheets and survival rate. Alternatively, Granja et al. (2020) found little connection between distribution of PPP aid and firm survival. Some evidence indicates that the wide distribution of PPP funds and few restrictions placed on their usage led to little correlation between receipt of the funds and firms that were significantly in need or facing closure (Bi & Gulati, 2021).

The initial economic shock of the shutdowns associated with the COVID-19 pandemic made small businesses — and small nonprofits like Catholic schools — particularly vulnerable, given their limited cash reserves, scant public funding, and dwindling prospects in the decades leading to the pandemic (McDonald & Schultz, 2021, Wodon, 2020). The PPP loans addressed the fact that small businesses operate on thin margins with low cash reserves. Up to 75% of small businesses operate on less than 2 months of cash reserves (Faulkender et al., 2021). The 2020 economic crash, the most substantial since the Great Depression, did not produce the bankruptcies in small businesses that would have been expected. Failures were fewer than during the 2008 financial crash and recession. Drawing on historical precedent, Faulkender et al. (2021) argued that PPP provided a backstop for small businesses that did not exist in prior economic shocks. “Without PPP’s safety net to buffer against this unprecedented aggregate shock, economic theory and historical experience strongly suggest widespread shutdowns and layoffs would have occurred; larger business are better able to survive shocks” (Faulklender et al., 2021,

p. 5). The PPP loans for small businesses and Catholic schools may have provided the resources and confidence that these institutions needed during an economic shock.

PPP Accessibility and Equity

In terms of accessibility, a growing body of literature explored the extent to which PPP aid was not well-targeted to the businesses and communities that needed it the most. The efficacy of PPP aid and its impact on small businesses provides a useful context for the experience of Catholic schools. One estimate indicated that PPP loans were accessed by 76% of eligible businesses (Schweitzer & Borowski, 2021). As in the case of small businesses, one question to consider is whether PPP design allowed those most in need and in underserved communities to access PPP funding. The existing literature on businesses can provide insight into the issues of access and equity associated with PPP and Catholic schools.

Access to PPP loans was influenced by knowledge of the program and the ability to access the loan through banks. Humphries et al. (2020) found that the smallest of small businesses were less likely to know about PPP and, therefore, less likely to apply for loans. Those businesses that applied for and received PPP loans were less likely to lay off employees and demonstrated more confidence about the future. While the study focused on firms with less than five employees, the concept that smaller entities might lack information or view the time spent processing an application to access government aid as too onerous may apply to smaller, under-resourced Catholic schools.

Studies focused on PPP distribution suggest these loans did not target the businesses most in need and facing closure. Granja et al. (2020) found that firms that used PPP demonstrated little correlation between the geographic use of PPP funds and the severity of the economic downturn. Granja et al. (2020) argued that firms used the PPP for fixed payments and to solidify their

balance sheets. Bartik et al. (2021) argued that targeting of PPP aid through banks did not allow the government to affect sectors most in need and instead relied on existing relationships with banks and their clients. Bartik et al. (2021) found that banks in 2020 may have prioritized lending to firms with more cash on hand, therefore, shoring up entities that would potentially prove to be better customers in the future.

The issues of race and socioeconomic status and their impact on PPP distribution have raised questions about the equity of this federal program. A case study of restaurants in Florida found that minority-owned restaurants were less likely to have received PPP loans (25% less likely for Black-owned restaurants and 9.1% less likely for Hispanic-owned establishments). The role of location, prior relationships with banks, and racial bias accounted for this disparity in PPP funding through banks (Chernenko & Scharfstein, 2022).

Liu and Parilla (2020) argued that majority-minority communities experienced unequal access to federal COVID-19 aid. Similarly, Kapinos (2021) found that PPP reduced unemployment but did not benefit the areas hit the hardest by the economic shutdown of COVID-19. While more studies need to be completed, a picture is emerging that suggests PPP aid helped firm survival but perhaps, initially, did so in an unequal way.

There is some evidence to indicate that the equitable performance of PPP improved over time. Comparing second draw PPP loans (January through May 2021) with the initial rounds in 2020, Fairlie and Fossen (2022) found the second round of PPP loans were disbursed equitably to minority communities as measured by population percentage using U.S. Census zip code data and the Annual Business Survey.

Catholic School Closure Variables: Enrollment, Demographics, Finances

The COVID-19 pandemic represented a health and economic shock to the fragile Catholic school sector. The PPP aid offered a new variable for Catholic schools facing closure. The literature on Catholic school closure helped to identify themes and variables to evaluate the resilience of Catholic schools and the effectiveness of PPP aid in stemming Catholic school closure.

The literature on public school closure provides helpful context and themes, though these closed public schools are replaced, which largely does not occur in the Catholic sector (McDonald & Schultz, 2021). Considering that over 7,315 Catholic schools (55%) have closed since 1964, the literature on the variables, indicators, and direct causes of individual school-level closure is quite limited (Cooper & D'Agustino, 2014; McDonald & Schultz, 2021). The NCEA's information on their most precious resource, Catholic schools, consists of meta-data submitted by each diocese (McDonald & Schultz, 2021). This reporting procedure provides useful information but needs complete school level databases for further research. This gap in resources and literature generated calls for more granular, school-level studies (O'Keefe & Scheopner, 2007). However, research often fed the traditional narrative: more studies on the Catholic School Advantage (CSA). The existing research on school closure, however, does provide valuable insights into the predictors of closure and the impacts on students, families, and neighborhoods when schools shutter (Brinig & Garnett, 2012b; Brinig & Garnett, 2014; James et al., 2008; Lundy, 1999; O'Keefe, 2000; Pandey et al., 2009). These studies were detailed and insightful but often limited in that they focused on parish elementary schools in one diocese (James et al., 2008; Lundy, 1999). I relied upon this prior research using a larger sample of Catholic schools and the new variable of PPP during the pandemic.

Public School Closure

For perspective and themes, it is important to understand that public schools close all the time; however, students are entitled to a public education, so they are reassigned to a new school. While these closures result from attempted reform to make failing schools more efficient and enhance student achievement, they often affect urban and rural students. Tieken and Auldridge-Reveles (2019) found that public school closures disproportionately impact the poor and students of color. Pearman and Greene (2021) argued that school closures disproportionately occurred in Black neighborhoods prior to gentrification from affluent Whites suggesting that these school closures correlate with a remaking of cities' landscapes and the desire of White households for reformed schools. Similarly, urban Catholic school closures often negatively affect minority communities (Brinig & Garnett, 2012a, 2014; O'Keefe, 2000).

Catholic School Closure Studies

The literature on private school and Catholic school closure remains limited. This small body of research emphasized the education market factors of supply and demand and other economic variables that triggered closure. Smaller, urban Catholic elementary schools have been the most at risk (Center for Applied Research in the Apostolate [CARA], 2006).

While some studies indicate that the education marketplace may shape public school actions (Hartney & Finger, 2020; Hoxby, 1994), Dinerstein and Smith (2015) found that increased public school spending can impact the market for private schools. Evaluating the effects of New York City's Fair Student Funding initiative, the authors determined that these funding increases led to increased public school enrollments. In addition, Dinerstein and Smith (2015) argued that the Fair Student Funding reform led to an increased likelihood of private

school exit from the market for nonpublic institutions within proximity of public schools receiving increased funding.

In an influential study, O’Keefe (2000) focused on 435 Catholic school closures nationally from 1990-1994 and utilized descriptive statistics to describe the neighborhoods in which schools closed. Using Census data, O’Keefe (2000) found that Catholic schools closed in areas “significantly less White than the national average” (p. 184). While later studies of Catholic school closure would use more sophisticated data analysis, O’Keefe (2000) cited Catholic social teaching related to the poor to argue that urban Catholic schools serving minority children ought to focus on Catholic “mission, not margin” (2000, p. 193).

Using a relatively large, weighted sample of private schools ($N=2000$) drawn from the National Center of Education Statistics and a market research firm, Pandey et al. (2009) found that 424 schools closed over 15 years (1989-2004). Testing variables, Pandey et al. (2009) argued that failing schools correlated with higher poverty rates. Descriptive statistics indicated that failing schools featured fewer students (average of 167 versus 326) and fewer teachers (12 compared to 23) when measured against surviving schools. The study used enrollment as a measure of school’s financial health because enrollment served as an indicator of market share and tuition revenue. Catholic schools ($n=909$) demonstrated a greater survival rate (14% failed over 15 years) than other private schools (Pandey et al., 2009).

Several studies focused exclusively on Catholic urban parish schools (mostly elementary schools) in St. Louis and Chicago determined variables critical to school viability (Brinig & Garnett, 2014; James et al., 2008; Lundy, 1999). These studies provided insight into indicators of survival and closure, though that research’s social, political, and economic environment may

have shifted from samples drawn 20 to 35 years ago. Finally, these studies' geographic barriers and relatively small sample sizes limited generalizability.

Lundy (1999) examined 227 parish schools in Chicago from 1991 to 1994. Using descriptive financial variables of closed and survivor schools, Lundy (1999) used independent correlating variables to develop a discriminant-analysis prediction model to ascertain if a school's status could be determined by examining performance. Interestingly, Lundy (1999) found several variables comparable for surviving schools and non-survivors: compensation as a measure of revenue (82%); fundraising (9%); tuition (\$1,251); and parish subsidy (45% for survivors, 47% for closed schools). Several differences, however, emerged. Like Pandey et al. (2009), Lundy (1999) identified school size as a critical variable (175 for closed schools, and 345 for survivors). The parish revenue was stronger for surviving schools (\$480,000 versus \$313,000), perhaps reflecting more economic vibrancy in the parish community. A greater percentage of closed schools needed grants (55%) from the diocese to fund deficits compared to survivor schools (21%). From this data, Lundy (1999) developed a "keyratio formula" (p. 97), which equaled "church compensation spending divided by church collection income and school compensation divided by tuition-and-fee revenues" (Lundy, 1999, p. 97). Lundy's (1999) variable of keyratio predicted school status (closed or survivor) at a rate of 85.9%. Lundy (1999) correlated the variability in predicting closure status with decisions about Catholic school density and leadership's decision to change circumstances. Significantly, protests from parents may account for some of the variability in schools that survive or close with similar financial circumstances (Tieken & Auldridge-Reveles, 2019).

CARA (2006) identified a significant number of Catholic elementary schools closing in poor, urban areas in the Midwest from 2000 to 2005. This report suggested that schools may be

affected by a “tipping point” (p. 5) — a convergence of key events — that led to closure. The authors argued the confluence of the recession associated with 9/11 and the clergy sexual abuse crisis represented “events that occur within a process that precipitate an increase in the tempo” (p. 6). The COVID-19 economic shock could represent just such a tipping point.

James et al. (2008) explicitly followed Lundy (1999) and CARA (2006) in attempting to create a model to predict school closure. The study focused on 138 elementary schools in Saint Louis from 2000 to 2005; 99 remained open, and 39 closed. This study used discriminant function analysis to develop a model that would classify each school as open or closed. The school enrollment of open schools (284) was substantially higher than that of closed schools (134), though both variables were lower than those in Lundy (1999)’s study (345 open and 175 closed). Starting with 21 variables, James et al. (2008) conducted independent *t*-tests. Completing discriminant function analysis, the authors then identified three predictive variables for school survival: student population above 200, percentage change in enrollment two years prior to the comparison year, and an indicator of parish finances: tuition charged divided by median household income in Saint Louis.

While Lundy (1999) and James et al. (2008) cited the variable of enrollment, in 2019 over 1,500 Catholic schools nationwide had an enrollment of 150 students or less. In a largely theoretical work on the potential for Catholic microschools, Annable and Baxter (2021) argued that some of these schools are small by choice and have proved resilient and effective in serving their communities.

Brinig and Garnett (2014) focused, in part, on Catholic schools in Chicago and the importance of social capital generated from these schools in their neighborhoods. Their analysis, however, did explore the causes of school closure in Chicago. While less descriptive in method

and data than Lundy (1999) and James et al. (2008), Brinig and Garnett (2014) reported using binary logistic regression to determine variables that led to Catholic school closure in Chicago. The sample comprised 225 elementary schools from 1984 to 1994 (when 63 were closed). Brinig and Garnett (2014) determined five variables predictive of school closure: irregularity in parish operations (sexual abuse, pastor turnover); age of pastor; share of Blacks in census tract 1990; share of Hispanics in census tract 1990; and poverty rate in census tract 1990.

Catholic School Leaders and COVID-19 Challenge

Catholic School Leaders and Public Aid

Catholic school leaders advocated for federal aid, including vouchers and direct public aid for staff and materials, since the 1960s (Russo, 2014; Swartz & Bonello, 1977). It is important to understand the extent to which this groundbreaking federal intervention, PPP aid, was used within Catholic schools. Initial research on PPP and firms indicated the importance of information sharing and prior relationships in the complicated process of accessing loans (Bartik et al., 2021; Humphries et al., 2020; Uhl, 2020). Further research demonstrated that PPP was accessed in varying degrees, with communities of color lagging (Kapino, 2021; Liu & Parilla, 2020).

Catholic School Leaders Facing COVID-19

The COVID-19 crisis represented a particularly grave challenge for Catholic school leaders. The recent literature regarding the pandemic and extant literature on Catholic school leadership, innovation, and crisis management provided important context to the actions of Catholic school leaders, their decision-making, and choices for this study. Although this crisis represented a unique threat, the literature suggested that Catholic school leaders have faced the persistent threat of school closure for 55 years (Barth, 2010). The literature on Catholic schools

and COVID-19 identified the threat posed to the enrollments and existence of Catholic schools. The literature also highlighted the grim prospects of Catholic schools' permanent closure because of their reliance on tuition and the substantial job losses caused by COVID-19.

The recent enrollment and closure trends appeared likely to accelerate (Wodon, 2020). Compared to the public funding available for private schools around the world at the beginning of the pandemic in the spring of 2020, Wodon (2020) argued that American Catholic schools faced enhanced danger because existing public funding provided less than 10% of revenue compared to substantial portions of revenue in European countries. Wodon found no "magic bullet" (p. 40) to alleviate the pressures on American Catholic schools but did extend hope that PPP might offer significant financial assistance.

Catholic schools appear to have offered in-person instruction more than public schools in most of the country. Hartney and Finger (2020) found that Catholic schools' decision to largely stay open during the pandemic placed pressure on public schools to offer in-person instruction rather than the remote-only option.

In evaluating the response of Catholic school leaders to COVID-19 pandemic, it is important to understand the key leadership positions in relation to this crisis. Several studies offered insight into the roles of superintendent in dioceses, principal, and the president-principal model.

Superintendent

The role of the Catholic school superintendent has received scant attention within the literature. The superintendent possesses little of the power one might recognize with a public superintendent; Catholic school principals largely set their budget, tuition, and internal school policies.

The role of the Catholic superintendent often exercises authority through networking and collaboration. While a superintendent may weigh in on whether a school will remain viable, the superintendent possesses few direct levers to enact policies and initiatives to improve schools, so they do not close. The Church decline in revenue in the last 50 years has diminished the ability of the diocesan central offices to affect Catholic schools' financial bottom line. This movement toward school autonomy has provided benefits (empowering principals, eliminating red tape), but it has also created a market in which each school must decide its own fate (Miller et al., 2020; Uhl, 2020). The superintendent's lack of direct organizational and financial control over Catholic schools within a diocese "can negatively impact a superintendent's ability to establish universal response protocols" (Miller et al. 2020, p. 126). The Catholic Superintendency, therefore, is an inherently weak office. The challenges faced by superintendents to effect system-wide change suggest an organizational resistance to top-down change (Miller et al., 2020; Neumerski & Cohen, 2019).

Principal

Catholic school principals face the challenges of traditional educational leadership while also being tasked with the challenge of spiritual leadership within their schools and organization. The Catholic Church teachings demand principals cultivate the Catholic faith within their schools. These twin demands of education and faith formation represent a challenge in preparing and hiring strong candidates for leadership positions (Boyle et al., 2020; Boyle et al., 2016). A lack of universal standards, weak principal preparation programs, enrollment concerns, and grant and fundraising demands have made the job of Catholic school principals more daunting than ever for new principals (Spesia, 2016). Catholic grammar school principals face the added challenge of a dual role with the pastor, who through canon law holds ultimate authority over the

parish school but often exercises it haphazardly and is frequently unprepared for the role by the seminary curriculum (Boyle & Dosen, 2017; Schafer, 2004).

President-Principal Model

In Catholic secondary schools, the president-principal model has become an alternative to the principal approach. The president-principal model calls for a chief executive focused on external-facing duties, including board relations, capital campaigns, public relations, and brand management. The principal's role is focused on faculty development, instructional leadership, family relationships, and faith formation. This model has grown over time and was implemented in 47% of all secondary schools in 2004. The model resembles the CEO/COO corporate structure, which also reports to a board. The model can work well, but it depends on clear role definition, job descriptions, and complementary relationships (Dygert, 2000; James, 2009; Polka et al., 2016; Spesia, 2016).

Summary

The literature on Catholic schools presents a twin and paradoxical narrative of strength in student achievement and institutional decline. The narrative of strength led to the concept of the CSA, which argued that Catholic schools performed better than public schools. While the CSA has been criticized, it does appear that Catholic schools have performed well with urban minority children. At the same time, the narrative of institutional decline has illustrated the many factors leading to school closure: demographic change; Catholic Church decline; reduced financial resources; institutional failure; clergy sexual abuse crisis; and COVID-19. The centrality of the debate over the CSA resulted in few studies examining school-level data to determine causes for persistent closure.

COVID-19 represented a particular threat because over 55% of Catholic schools have closed since 1964 and the sector was in a fragile position (DeFiore, 2014; McDonald & Shultz, 2021). Catholic schools had sought to address the decline in enrollment through public aid in the form of vouchers. Although some Catholic schools have benefited from vouchers, the literature does not suggest a clear-cut advantage to students in private schools compared to public schools. Other efforts at reorganization include organic attempts to strengthen leadership, enrollment, and management of Catholic schools.

The literature on PPP indicates that access to PPP funds may have been determined by access to information and prior relationships. In addition, the literature suggests that PPP loans helped businesses' cash reserves, confidence, and survival. In determining reasons for school closure, I examined the extent to which Catholic school leaders, and the schools they helmed, were impacted by the demography of their school sites, enrollment trends, and the policy innovation of PPP funds to stave off school closure.

CHAPTER 3

METHODS

The challenge of the COVID-19 pandemic threatened the already fragile and declining Catholic school sector. At the conclusion of the 2019-2020 school year, as the first wave of pandemic shutdowns crested, 209 Catholic schools closed, merged, or consolidated throughout the United States — double the amount that historically has closed in a year. In lobbying for federal aid, Catholic Church officials estimated that 500 or more schools were at risk of closure (Barber et al., 2020; McDonald & Schultz, 2021). Enrollment plunged 6.4% from the previous year, a loss of 111,000 students and the largest percentage decline in enrollment in 50 years (McDonald & Schultz, 2021). Enrollment rebounded nationally by 3.8% in 2020-21, with a gain of 62,000 students, however, 71 schools closed or merged (National Catholic Educational Association [NCEA], 2022). This study seeks to evaluate Catholic school leaders' response to the pandemic period, COVID-19's impact on Catholic schools' viability status, the predictors of school closure, and the scale and efficacy of Catholic school leaders' use of the federal government's Paycheck Protection Program (PPP).

This study's theoretical framework hypothesized that two competing contextual narratives influenced Catholic schools during the pandemic period of 2019-2021. The first contextual narrative focused on Catholic schools as effective institutions, and the second detailed the multiple factors that led to the decline and closure of Catholic schools. Furthermore, the theoretical framework hypothesized that Catholic schools' survival status was affected significantly by the variables of enrollment, demographic data associated with schools' census

tract, and PPP loans. Finally, the theoretical framework hypothesized that school leaders would identify factors related to two competing narratives of Catholic school effectiveness and decline in describing their schools and their status of open or closed.

Research Questions

This study contributes to the existing scholarship focused on Catholic school leadership, the Catholic school enrollment crisis, PPP as a policy innovation, and Catholic schools' response to the pandemic by examining the following questions:

1. What are the characteristics of surviving Catholic schools (size, type, location, income by census tract, demographics, change in enrollment, use of PPP loans, size of PPP aid) compared with Catholic schools that closed during the coronavirus pandemic (2019-2020 to 2020-2021)?
2. What was the influence of PPP on Catholic schools' survival during the coronavirus related to the following issues:
 - a.) What percentage of Catholic schools accessed PPP aid?
 - b.) How was the PPP aid distributed among Catholic schools as measured by geography (city, suburban, town, rural; states); demographics (White, Black, Hispanic); income level in school community; and school enrollment trends: increasing (4% or more), steady ($\pm 3\%$), decreasing (4% or more) from 2016-2017 to 2019-2020?
 - c.) During the pandemic, what variables, including PPP, were associated with Catholic school closure? What variables predicted survival?
3. What are the perceptions of Catholic school leaders regarding the importance of receiving PPP aid and Catholic schools' viability during the COVID-19 pandemic?

a.) What are the reasons for acceptance/rejection of PPP aid among Catholic school leaders?

b.) Was PPP an important factor in the viability (open/closed) of Catholic schools?

Overview of Research Methods

This mixed method study utilized quantitative and qualitative methods to describe the school closure status of Catholic schools in six states. The quantitative phase analyzed variables' relationship to school closure, including enrollment, PPP aid, and school site demographics. The qualitative phase used interviews with school leaders to follow up on significant and interesting findings in the quantitative phase, including school strengths and challenges, the Hispanic population, and use of federal PPP loans.

Specifically, the study was designed as an explanatory sequential mixed methods study that analyzed the effectiveness of Catholic schools and school leaders' response to the COVID-19 pandemic (Creswell & Creswell, 2018). The study focused on two levels of inquiry: a quantitative analysis of data of Catholic schools focused on school survival, PPP aid, and demographic characteristics, followed by a qualitative analysis of Catholic school leaders' views of their school's characteristics, market position, the efficacy of PPP, and the impact of the pandemic on school closure. The quantitative data provided an overview of the Catholic school closure problem and the qualitative data analysis helped "refine and explain those statistical results by exploring participants' views in more depth" (Ivankova et al., 2006, p. 5).

Mixed methods research design is warranted when neither a purely quantitative nor qualitative design is deemed adequate. When quantitative and qualitative data are used together, they can provide a more complete analysis. The explanatory sequential mixed methods study has become a popular and proven research design. Within this design, the quantitative phase of

research was followed by a shorter qualitative phase to explicate and enhance understanding of the inquiry's data, trends, and phenomena (Creswell & Creswell, 2018; Inakova et al., 2006). In this study, key findings from the quantitative phase related to enrollment, the Hispanic population, PPP loans, school type, and closure status.

The explanatory sequential mixed methods design's two-phase data collection generated quantitative data and analysis that were then used to plan the second qualitative phase of the study. The quantitative phase provided the basis for subject selection and qualitative questions to clarify initial quantitative data further. Semi-structured interviews followed the quantitative phase. A third and final phase in Chapter 5 merged the quantitative and qualitative results. It provided a discussion that "specifies how the qualitative results help to expand or explain the quantitative results" (Creswell & Creswell, 2018, p. 223).

Phase 1: Quantitative Data Collection and Analysis

Quantitative Subjects

Schools

This study focused on a sample drawn from the 6,183 American Catholic schools that existed at the beginning of the academic year of 2019-2020 (McDonald & Schultz, 2020). The sample represented schools in 6 states (New York, Pennsylvania, Massachusetts, New Hampshire, Connecticut, and Maryland) and 2 NCEA-designated regions: New England and Mideast (see Appendix B). The rationale for this sample included the following: (a) the availability of valid and reliable data from verifiable state education agencies and (b) the region most relevant to my practice (McDonald & Shultz, 2021).

School Targeting Strategy

Of the 209 known Catholic school closures and mergers following the 2019-2020 school year, 131 school closures or mergers, or 63.6%, occurred within the Mideast and New England regions (McDonald & Schultz, 2020). To this point, the COVID-19 pandemic and Catholic school enrollment and closure crisis affected regions of the country differently (see Appendices B & C). Tellingly, while 40 Catholic schools in New York 2019-2020 closed or consolidated, only 15 of California's 646 schools shuttered (McDonald & Schultz, 2021). These trends for the first year of the pandemic corresponded with COVID outbreaks, economic damage related to shutdowns, historic enrollment trends, and school closures. After the historic decline in schools and enrollment in the summer of 2022, the closure crisis abated somewhat in 2020-2021 (Smith & Huber, 2022).

All states and commonwealths do not require by statute or practice the tracking of school-level nonpublic enrollment. State departments of education, however, in New York, Pennsylvania, Massachusetts, Connecticut, New Hampshire, and Maryland report nonpublic school enrollment and closure, which was a critical consideration in constructing the range of the sample to attain valid and reliable data. The criteria set for this study yielded a data set of 1,200 schools and school leaders, including 114 closed schools from the pandemic academic years of 2019-2020 and 2020-2021 (McDonald & Schultz, 2020, 2021; Smith & Huber, 2022).

Quantitative Data Sources

A variety of quantitative data sources were used to construct a robust portrait of Catholic school level data. The following variables representing publicly available data were acquired and coded: school enrollment; census tract demographic data; type of school (elementary, or secondary); acceptance of PPP federal aid; amount of PPP federal aid; and status (open or

closed). As researchers begin to understand the impact of the COVID-19 pandemic on Catholic school enrollment and survival, prior research has identified the need for more complete, granular school level data (O’Keefe & Schoepner, 2007).

School Level Data

A trade industry publication was used to determine the Catholic schools that existed in 2019-2020 as the baseline year (Fisher, 2020). Favored by colleges and vendors, Fisher (2020) delineated individual schools, type of school (elementary/middle or secondary), address, leadership, and zip code. Enrollment data was derived from state departments of education enrollment reports provided for nonpublic education institutions. At the direction of state law or policy, this data is self-reported by schools and collected annually by states purposely selected for this study. As mentioned, some states (including Maine, Rhode Island, Delaware, New Jersey, Virginia, and Texas, for example) do not collect individual enrollment data from nonpublic schools.

The validity of the enrollment and school survivability data was determined by triangulating with data and publications from the NCEA (McDonald & Schultz, 2020, 2021; Smith & Huber, 2022), state board of education data, press reports, and when available a combination of the following: individual Catholic diocese website directories, social media, diocese press releases, and phone calls to individual schools and parishes to determine a school’s closure status (Connecticut State Department of Education, n.d., Maryland Department of Education, n.d.; Massachusetts Department of Elementary and Secondary Education, n.d.; New York State Education Department, n.d.; Pennsylvania Department of Education, n.d.)

United States Census Data

Demographic data from the census tract of the schools' locations were used to determine the characteristics of open and closed schools' locations. United States Census data from the 2019 American Community Survey detailed the Median Household Income of the census tract in which the school is located. The year corresponded with the first year of the study (2019-2020) and was the most recent census tract data available for the quantitative phase of this study. In addition, United States Census tract data used the following percentages of populations: Black, White, Asian, Hispanic; and Childhood Poverty. These variables, or a similar derivation, proved significant in prior studies (Brinig & Garnett, 2014; Dillis & Hernandez-Julian, 2015; "Explore Census Data," n.d.; James et al., 2008; O'Keefe, 2000; Pandey et al., 2009).

PPP Federal Aid Data

The amount of PPP aid for each school was determined from the nonprofit Federal Pay PPP search engine ("SBA Paycheck Protection," n.d.). The PPP loan amounts were validated by cross-referencing information using Propublica PPP search engine for Small Business Association PPP data ("Propublica Tracker PPP," n.d.). The school and the corresponding amount were recorded in an Excel spreadsheet and a notebook.

Quantitative Data Collection

The data collection focused on variables identified as significant predictors of Catholic school closure in prior studies: type of school, median family income by census tract, school size, enrollment trendlines, and the demographic population of school's neighborhood (Brinig & Garnett, 2014; Creswell & Creswell, 2018; James et al., 2008; Lundy, 1999; O'Keefe, 2000; Pandey et al., 2009). This study introduced two new variables: a timeframe affected by COVID-

19 (2019-2021), and the availability to Catholic schools of direct federal forgivable loans (PPP) through the SBA.

Demographic Data

Following procedures from a prior private school closure study that included Catholic schools, school-level data was attained from a Catholic school trade and marketing publication directory (Fisher, 2020; Pandey et al., 2009). Each school was coded for type: elementary/middle as 1; high school as 2. Using United States Census data, the 2019 Median Household Income for the census tract of the school was used as a variable. The 2019 Median Household Income corresponded with the first year of the pandemic (United States Census Bureau, n.d.). Enrollment size was coded as a continuous variable for 2016-2017 and 2019-2020. Nationally, 31.1% of Catholic schools numbered 150 students or less in 2019, which prior studies indicated as a potential danger zone for school closure (James et al., 2008; Lundy, 1999; McDonald & Schultz, 2021); however, it has been noted that small schools can also be a viable Catholic model (Annable & Baxter, 2021).

Schools were coded for location by state: New Hampshire as 1; Massachusetts as 2; Connecticut as 3; Pennsylvania as 4; New York as 5; Maryland as 6. Moreover, schools were coded using locale designations provided by the National Center for Education Statistics (NCES): city as 1; suburban as 2; town as 3; and rural as 4. According to the NCES, a city consists of a principal city ranging from 100,000 to 250,000 or more. Suburb is a territory “outside the principal city and within an urbanized area” (NCES, n.d., para. 5). A town is defined as “territory inside an urban cluster” (NCES, n.d., para. 8) that is 10 to 35 or more miles from an urbanized area. Finally, the Census defines rural as territory 5 to 25 miles or more from an urbanized area and 2.5 to “more than 10 miles from an urban cluster” (NCES, n.d., para. 13).

In addition, schools were coded for the demographic data (racial, ethnic, social) of the census tract in which they were located: White, Black, Hispanic, Asian, and Childhood Poverty (Broughman et al., 2019; “United States Census,” n.d.). Further, schools were coded for enrollment in 2016-2017, and the enrollment trendline over three years from 2016-2017 to 2019-2020: the positive or negative enrollment change percentage was included, as well as the categorical rising ($\geq 4\%$), steady ($\pm 3\%$), or declining ($\leq 4\%$). Missing data analysis in Statistical Package for Social Science (SPSS) provided enrollment data for missing fields.

PPP Data

Finally, schools were coded for acceptance of PPP aid (1 for acceptance; 2 for rejection) and the total dollar amount of aid received in three categories: first draw, second draw, and total PPP loans. Schools for which acceptance of PPP aid could not be determined were left blank and considered missing data for that variable. Finally, schools were coded for acceptance of PPP: Use of PPP as 1; no PPP as 2. If PPP status could not be determined, then it was left blank. If a school used PPP both rounds it was coded 1 for both rounds, 2 for no. If it could not be determined, it was left blank. Most schools applied for and received PPP loans through their school’s name; the PPP loan was titled as such. Different dioceses and schools, however, pursued varied strategies in accessing PPP loans, which posed a challenge for data collection.

Parish Loans. As quantitative data collection continued, it became clear that Catholic schools within varied dioceses applied for and received PPP loans in different ways. First, some schools did not access PPP loans in the name of the school but received funds in the name of the parish sponsoring the school. This investigation and subsequent research confirmed a practice among a cohort of schools of applying for the loan through their parish’s name.

These loans were identified using several steps. First, this loan application could be manifested in a school receiving a PPP loan with a title that mentioned both the parish and the school. Second, the loan was most often found in the name of the sponsoring parish. Press reports confirm this practice. As an indicator, the loan resembled Catholic elementary school loans in size (\$300,000 or \$400,000); it also claimed a significant number of employees (20-60) that indicated the loan was for the parish and the school together because of the number of employees. A parish's average number of ministry employees for is 5.4, which may include volunteer staff (Farrow, 2020; Gray et al., 2011).

Rules and procedures, therefore, were developed to address the challenge of parish loans. First, if a PPP loan did not appear using the school's name and address, a sponsoring parish was identified, and that parish name and address were searched for a PPP loan. Second, when schools without a PPP loan but connected to a parish reported a loan indicating 16 employees or more (average parish staff plus 11 employees for a small K-6 Catholic school), the parish PPP loan in total was included in the quantitative sample. All schools were coded for whether it featured a parish loan (1 for yes, 2 for no). This approach captured Catholic schools that accessed PPP loans through parishes, but several caveats for the resulting data should be observed. First, the loan amounts for Catholic schools using PPP loans through a parish loan (the vast majority were elementary schools) will be somewhat inflated. Second, it is unlikely but possible that a negligible amount of parish loans related to schools could reflect another large-scale ministry—that is, a soup kitchen, or a homeless shelter. Finally, most parish loans included a school with a substantially larger than average number of positions claimed (over 30 or 40 positions was typical).

Catholic School Collaborative and Regional Structures. In addition to school loans and parish loans, the data collection phase found that a group of Catholic schools applied for and used PPP loans through collaborative and regional structures. In recent years, Catholic dioceses, and nonprofit organizations (primarily elementary schools) developed collaborative or regional organizational structures to manage schools more effectively, particularly urban elementary schools most at risk of closure. These structures provide shared management that helps ensure resources, Catholic community and identify, marketing and branding, and assistance with enrollment (Wolsonovich et al., 2018).

If a school did not access a PPP loan on its own or through a parish, then data collection procedures called for identifying whether the school belonged to a collaborative or regional structure within a diocese. A web search for the school and “collaborative” or “regional” structure typically identified a collective organization. The listing then helped identify the PPP loan, which was typically taken in the name of the collaborative or regional structure. Some collaboratives listed member schools, but not all did. These PPP loans posed the most significant challenge in data collection because the loans were ostensibly taken for a group of schools, typically 6 to 20 elementary schools. The collaboratives generally detailed a large loan (over \$1 million) with a significant number of employees (hundreds) but no indication of the amount that each school received in PPP funding.

This study attempted several methods to distribute the collaborative loan amount to individual schools in the 20 regions or collaboratives identified. First, one large diocese contained 12 regions that accessed PPP loans. The superintendent of the diocese was contacted, and I applied through the diocese’s process to share information with researchers. A summary of this study (see Appendix D) was included with a letter of support from my dissertation advisor as

part of the application procedures. After a lengthy process with multiple follow-up emails, the diocese's superintendent declined to disclose PPP information and participate in the study.

Second, if a region or collaborative detailed the schools in the organizational structure on a website, an email with an attached letter explaining the study and data request was sent to the leader of the collaborative (see Appendix E). A follow-up email was sent 1 week later. Finally, at least two phone calls were made. In addition to the one large diocese with 12 regions, eight additional regions and collaboratives were contacted. One collaborative provided PPP loan amounts for each school in the collaborative. The rest did not respond or declined to share data.

Except for the one collaborative that provided school level PPP data, the decision was made to exclude schools belonging to collaborative and regional structures because the amount of the PPP loan could not accurately be assigned to individual schools.

Quantitative Data Analysis

The data analysis provided initial answers for research questions of this mixed methods study to be followed with qualitative research (Creswell & Creswell, 2018). Procedures for research questions follow.

Schools, Census, and PPP Data Analysis

1. What are the characteristics of surviving Catholic schools (size, type, location, income by census tract, demographics, change in enrollment, use of PPP loans, size of PPP aid) compared with Catholic schools that closed during the coronavirus pandemic (2019-2020 to 2020-2021)?

Descriptive statistics were used to compare the characteristics of the surviving Catholic schools (2019-2022) to the schools that closed. For surviving and closed schools, SPSS calculated the following: the mean enrollment of the schools; distribution by type; the mean

distribution of schools in the geographic locale category; and the mean distribution of schools corresponding to Median Household Income level strata. In addition, descriptive analysis measured and compared the following characteristics for surviving and closed schools: percentage applying for and accepting PPP loans, and mean size of PPP loans.

2. What was the influence of PPP on Catholic schools' survivability during the coronavirus related to the following issues:

a. What percentage of Catholic schools accessed PPP aid?

b. How was the PPP aid distributed among Catholic schools as measured by geography (city, suburban, town, rural; states), demographics (Black, Hispanic, White), income level in school community, and school enrollment trends: increasing (4% or more), steady ($\pm 3\%$), decreasing (4% or more) from 2016-2017 to 2019-2020?

c. During the pandemic, what variables, including PPP, were associated with Catholic school closure? What variables predicted survival?

Descriptive statistics and inferential statistical analysis identified the percentage of schools that applied for and accessed PPP loans (see Table 5). In addition, descriptive statistics identified the distribution of PPP aid through geographic locales (city, suburban, town, rural) and states. Finally, descriptive statistics detailed PPP distribution by racial and ethnic demographics, income level, and PPP distribution by school enrollment trends.

Table 5*Independent Variables Associated with Open and Closed Catholic Schools*

Variable	RQ	Inferential Test
<i>M</i> of Census Tract Median Income 2019	2c	<i>t</i> test
<i>M</i> of 2019-2020 Enrollment	2c	<i>t</i> test
<i>M</i> of 2016-2017 Enrollment	2c	<i>t</i> test
<i>M</i> of % Change in Enrollment	2c	<i>t</i> test
<i>M</i> of PPP First Draw 2020 Amount	2c	<i>t</i> test
<i>M</i> of PPP Second Draw 2021 Amount	2c	<i>t</i> test
<i>M</i> of PPP Total Aid Amount	2c	<i>t</i> test
% of White Population in Census Tract	2c	<i>t</i> test
% of Black Population in Census Tract	2c	<i>t</i> test
% of Hispanic Population in Census Tract	2c	<i>t</i> test
% of Childhood Poverty in Census Tract	2c	<i>t</i> test
PPP Aid Acceptance (yes or no)	2c	Chi-square
School Type (elementary/high school)	2c	Chi-square

Note. RQ = Research Question

SPSS determined the statistical significance of variables associated with Catholic schools that closed through tests of statistical significance. The variables (or similar derivations) tested were found to be significant variables in prior school closure studies (Brinig & Garnett, 2014; James et al., 2008; Lundy, 1999; O’Keefe, 2000; Pandey et al., 2009). A series of *t* tests (Table 5) on continuous data were conducted on samples of open and closed Catholic schools to

determine predictor variables of school closure. In addition, Chi-Square tests of independence were conducted on categorical data for the same purpose: the impact of school type (preK-8 and high school) on school closure; and Catholic schools' use of PPP federal aid and its efficacy corresponding to Catholic school survival represented a new variable from prior studies. Finally, a logistic regression tested key variables' power in predicting school closure (Brinig & Garnett, 2014; Creswell & Creswell, 2018; James et al., 2008; Lundy, 1999; O'Keefe, 2000; Pandey et al., 2009).

Phase II: Qualitative Data

This explanatory sequential mixed method study design used the data from the quantitative methods portion to inform the qualitative research phase. The qualitative research phase focused on quantitative findings that were "extreme or outlier cases, significant predictors, significant results relating variables, insignificant results, or even demographics" (Creswell & Creswell, 2018, p. 222). The design's strength lies in explaining "how the variables interact" (Creswell & Creswell, 2018, p. 222). The qualitative phase included interviews with school leaders to better describe how these variables interacted.

Qualitative Participants

Following quantitative data analysis, the qualitative phase sought 6-15 leaders (either principals or presidents) of individual Catholic schools within the study to participate in follow up qualitative interviews. Catholic schools typically follow a leadership structure in elementary schools (K-8) with a principal as a leader; the principal is responsible for the academic strength and financial balance sheet of the school. In secondary schools, the president-principal model has become prevalent, with a president responsible for budgeting, fundraising, advancement, and external relations and the principal responsible for managing the curriculum, faculty, and student

life (James, 2009). Therefore, elementary schools were represented by a principal and secondary schools by the most appropriate school official, either president or principal (in the absence of a president or if the principal was most appropriate). The quantitative data results informed the selection of the sample of 6-15 Catholic school leaders. The principals and presidents were “purposefully selected” (Creswell & Creswell, 2018, p. 222) to represent interesting findings related to school closure and utilization of PPP loans: geographic and socioeconomic diversity; schools with a minority population; a closed school; and large stable high schools with substantial PPP loans. The explanatory sequential mixed methods study typically yields quantitative outliers and anomalies, which the qualitative phase clarifies. The interview questions built on quantitative results “because the intent of the design is to follow up the quantitative results and explore the results in more depth” (Creswell & Creswell, 2018, p. 222).

Qualitative Data Sources

Recent qualitative studies of school leaders’ perceptions of challenging issues indicated that 3-15 subjects provide the appropriate sample for semi-structured interviews; these in-depth interviews yield rich narrative detail (Creswell & Creswell, 2018; Guest et al., 2006; Khalil & Brown, 2015). The qualitative sample for the semi-structured interviews of this mixed methods study consisted of 10 school leaders (8 principals and 2 presidents) from the 1,200 Catholic schools in the original quantitative sample. The qualitative phase findings focused on school leaders’ observations regarding: the qualities associated with their school organization, the possibility of school closure, reasons for acceptance and use of PPP, and usage of PPP funds during the pandemic. The study employed a purposive, snowballing sample to clarify and explicate quantitative data. The Catholic school leaders represented schools in the quantitative data set and matched criteria of interest from the quantitative findings. These criteria included

school type, diversity in students served, the Hispanic population, PPP loan size, and school closure status (Creswell & Creswell, 2018).

Qualitative Data Collection

The qualitative data in this explanatory sequential mixed methods study was collected after the analysis of the quantitative data. Semi-structured interviews took place to follow up on key findings related to school closure during the pandemic and school use of PPP loans. An interview protocol was developed for questions, notes, and recording responses. Questions were utilized consistently with each subject. Interviews used Zoom transcription services and were converted into Word files for coding. Data were saved and stored on a password-protected private computer (Creswell & Creswell, 2018).

Interview Protocol and Semi-Structured Interview Questions

Qualitative phase procedures for semi-structured interviews were developed, submitted, and approved by The College of William and Mary's Institutional Review Board (IRB) in April 2022. As part of the procedure, semi-structured interview questions were submitted with the understanding that an expert committee would validate those questions. The College of William and Mary IRB approved procedures stated that Catholic school leaders of at least 21 years old with a minimum of a bachelor's degree would be interviewed via Zoom. A Participant Informed Consent form was included and approved as part of the IRB process.

An email solicitation with an attached letter (see Appendix F) invited school leaders to participate in the study in exchange for access to the findings. All subjects read, understood, and signed the Participant Informed Consent form to meet all IRB requirements (see Appendix G). The interview protocol used the quantitative data to develop questions that further explicated interesting findings related to the experience of Catholic school leaders during the pandemic,

their impressions of their schools' market position, thoughts on school closure, and the usage and impact of PPP loans. The semi-structured interviews were mainly intended to answer Research Question 3. These interviews, however, also provided further understanding of quantitative findings for Research Questions 1 and 2.

Interview protocol in these semi-structured interviews included gathering of basic information (name, time, date, etc.), a warm introduction, and an opening question that functioned as an icebreaker to warm up the subject. The interview protocol and questions were designed to “parse the central phenomenon into its parts—asking about different facets of the central phenomenon” (Creswell & Creswell, 2018, p. 191).

Expert Panel

The validity and reliability of the interview questions were ensured and tested by utilizing an expert panel of Catholic school leaders: a former Catholic high school principal; and a Catholic school administrator who served as a consultant to the NCEA. These professionals reviewed the proposed questions and provided feedback, resulting in revised semi-structured interview questions (Creswell & Creswell, 2020). The original semi-structured interview questions, expert panel comments, and revised questions are in Appendix H.

The interview questions included options for the interviewer to follow up with probes to better elucidate the response. The probes allowed the researcher to extend the interview and gather more information. Closing instructions thanked the subject, assured the subject of confidentiality, and inquired about the ability to follow up on any questions. The subjects were assured that they could receive the results of the study when completed (Creswell & Creswell, 2018).

Advantages of Semi-Structured Interview Questions

Since the topic of inquiry centered on potentially challenging and sensitive topics (pandemic, school closure, and use of federal aid for financially distressed institutions), the semi-structured interview format offered several advantages for the explanatory sequential mixed method study design. This semi-structured interview format allowed the interviewer to develop a positive rapport. In addition, the respondents influenced the topic by their candor in introducing additional unexpected information, including detailed information regarding the financial position of their schools, internal school politics, and enrollment patterns beyond data disclosed to the respective state department of education. Furthermore, the semi-structured interview format allowed the interviewer to guide the interview but did not limit the exchange. Finally, the semi-structured format provided a natural flow of conversation that allowed for sharing additional information (Brinkman & Kvale, 2015; Creswell & Creswell, 2018).

Disadvantages of Semi-Structured Interviews

Semi-structured interviews include several disadvantages that must be mitigated. These disadvantages include time consumption, the potential for the interviewer to be judgmental, and the need for skill in crafting questions. Given the nature of the proposed study, the advantages of semi-structured interviews — potential for rapport, flexibility, and new information — outweighed any disadvantages (Brinkman & Kvale, 2015; Creswell & Creswell, 2018). The size of the sample (10 school leaders) proved manageable. Furthermore, my commitment to, and experience in, Catholic education coupled with common educational values, similar cultural contexts to school leaders, shared faith experience, background in college journalism, and the development of robust interview protocols minimized any downside.

Qualitative Data Analysis

The qualitative data analysis of this explanatory sequential mixed methods study took place from April 2022 to June 2022. In this research design, the qualitative results represented a distinct second phase. The third phase of data interpretation findings in Chapter 5 will demonstrate “how the qualitative results help to expand or explain the quantitative results” (Creswell & Creswell, 2018, p. 223).

A consistent interview protocol for school leaders applied this study’s theoretical framework by exploring factors derived from the two competing contextual frameworks relating to individual Catholic schools: first, Catholic school strength; second, Catholic school decline. The interviews used school leaders to further analyze key quantitative variables related to school survival and closure, including enrollment, school demographics, and PPP loans. Interview transcripts were manually coded in progression using the following steps: data, code, category, theme, and assertion (Saldaña, 2016). Codes were grounded in expected factors related to the strengths of Catholic schools that would make them attractive to families during a pandemic and weaknesses of Catholic schools present in the literature (Bryk et al., 1993; Brinig & Garnett, 2014; Coleman et al., 1982b). Initial in vivo codes used participants’ language to describe their experience as school leaders during the COVID-19 pandemic and economic recession. Second-cycle coding developed pattern coding. Eight categories and four themes emerged and were explained in a narrative to elucidate further the quantitative data analysis (Saldaña, 2016).

Data Trustworthiness

The validity of all data was assured through multiple procedures, including triangulation of data to justify themes (minimum of 60% of interviews), member checking within the interview, reflexivity on bias (memos and handwritten notes), rich description of the setting, and

inclusion of divergent information (see Table 6 for data sources and analysis for all questions). These steps helped to ensure the authenticity of the findings. The reliability of the approach was ensured by documenting steps and procedures and producing a database for consistent and stable results. In addition, reliability was preserved through accuracy of transcripts, repeated reading of the transcripts, and clarity in code definitions (Creswell & Creswell, 2018).

Delimitations, Limitations, and Assumptions

Delimitations

This study's Catholic schools and leaders reflected a large sample of Northeastern and mid-Atlantic Catholic schools ($N=1,200$) with valid and reliable data. This choice intentionally reflected the diversity of Catholic schools while avoiding the "backyard research" (Creswell & Creswell, 2018, p. 184) that a convenience sample study of my diocese, Boston, would represent. The number of Catholic schools and enrollments from 2019-2021 have declined throughout the entire country (Smith & Huber, 2022). These delimitations reflected a desire to balance the socioeconomic diversity in schools within an executable study.

Table 6*Research Questions, Data Sources, Data Analysis, and Data Trustworthiness*

Research Question	Data Sources	Data Analysis
1	<p>Ganley's Catholic Schools Diocesan School Directories State Enrollment Data (MA, NH, NY, PA, CT, MD)</p> <p>United States Census Data (American Community Survey 2019)</p> <p>PPP Aid (Federalpay.org and Propublica.org)</p> <p>NCEA Enrollment and Closure Reports 2020-2022; Catholic School leaders Diocese reports</p>	Descriptive Statistics
2	<p>Ganley's Catholic Schools Diocesan School Directories State Enrollment Data (MA, NH, NY, PA, CT, MD)</p> <p>United States Census Data (American Community Survey 2019)</p> <p>PPP Aid (Federalpay.org and Propublica.org)</p> <p>NCEA Enrollment and Closure Reports 2020-2022; Catholic School leaders Diocese reports</p>	Descriptive Statistics t-tests; Chi-Square Logistic Regression
3	Semi-structured interviews	Interview Coding and Thematic Analysis

Note. PPP = Paycheck Protection Program. NCEA = National Catholic Educational Association. MA = Massachusetts, NH = New Hampshire, NY = New York, PA = Pennsylvania, CT = Connecticut, and MD = Maryland.

Limitations

The quantitative analysis focused on Catholic school survival, and the variables (size, school type, PPP, demographic characteristics) provided correlation but not causation for school survival. Additionally, the qualitative phase of 10 semi-structured interviews with Catholic school leaders may be too small to be generalizable (Khalil & Brown, 2015). Finally, future researchers' attempts to replicate these interviews may be limited by turnover, retirements, memory loss, and unwillingness to discuss the period.

Assumptions

This explanatory sequential mixed methods study assumed that Catholic school leaders would participate in the interviews. A further assumption was that the public data would be available, triangulated, and verified through additional data sources. Steps were taken to ensure participants' honesty, including anonymity, confidentiality, and adherence to The College of William and Mary's Internal Review Board (IRB) procedures.

Researcher as Instrument Statement

As the researcher, my role as the primary data collection instrument comes with certain experiences, biases, and assumptions. A Catholic school graduate from first grade through advanced degrees at Marquette University and Boston College, I am a practicing Catholic and have taught in Catholic secondary schools for 25 years. While I have taken steps to ensure objectivity and impartiality, my experience with Catholic education could potentially affect this study. First, my experience has made me a believer in the importance of Catholic schools as vital American institutions. Second, as a person of faith and employee of Catholic institutions during a period of searing turmoil (including school closures and the Catholic clergy sexual abuse crisis in Boston), I may hold negative biases toward elements of American Catholic culture and

organizations. I have made a careful attempt to minimize any positive or negative biases and carefully follow the procedures in this study to reach reasonable and well-supported findings and conclusions (Creswell & Creswell, 2018).

Ethical Considerations

The procedures for the semi-structured interviews were submitted and approved by The College of William and Mary's IRB. All guidelines associated with The College of William and Mary's IRB were closely followed, including informed consent and documentation of Collaborative Institutional Training Initiative (CITI) instruction. The safety and anonymity of all participants have been protected.

Summary

This explanatory sequential mixed methods study evaluated the experience of Catholic schools and their leaders during the pandemic to address the fragility of Catholic schools, which have experienced a significant decline in recent decades. I developed a theoretical framework that positioned Catholic schools in six mid-Atlantic and Northeastern states within two contextual narratives: first, Catholic schools as effective educational institutions; and second, Catholic schools as institutions in decline. I hypothesized that Catholic schools' operational status (open or closed) during the pandemic period of 2019-2021 would be influenced by quantitative variables, including demographic variables associated with the school site, school-level enrollment data, and PPP as a new variable. Finally, I hypothesized that Catholic school leaders would identify factors related to the two contextual narratives within their own schools. The quantitative and qualitative analysis determined the variables that drove Catholic school persistence and the efficacy of PPP federal aid to private religious schools.

CHAPTER 4

FINDINGS

The findings of this study detail the experience of 1,200 Catholic schools in the mid-Atlantic and Northeastern United States during the COVID-19 pandemic from the academic year 2019-2020 through 2020-2021. The study includes primary (PreK-8) and secondary (9-12) schools. This explanatory sequential mixed methods study details findings beginning with the quantitative phase, focused on Research Questions 1 and 2. The findings for the qualitative phase will be detailed through Research Question 3. The final phase consists of a merged analysis combining the quantitative and qualitative phases.

The quantitative research questions follow:

1. What are the characteristics of surviving Catholic schools (size, type, location, income by census tract, demographics, change in enrollment, use of Paycheck Protection Program [PPP] loans, size of PPP aid) compared with Catholic schools that closed during the coronavirus pandemic (2019-2020 to 2020-2021)?
2. What was the influence of PPP on Catholic schools' survivability during the coronavirus pandemic related to the following issues:
 - a.) What percentage of Catholic schools accessed PPP aid?
 - b.) How was the PPP aid distributed among Catholic schools as measured by geography (city, suburban, town, rural; states), demographics (Black, White, Hispanic), income level in school community, and school enrollment trends:

increasing (4% or more), steady ($\pm 3\%$), decreasing (4% or more) from 2016-2017 to 2019-2020?

c.) During the pandemic, what variables, including PPP, were associated with Catholic school closure? What variables predicted survival?

Quantitative Dataset Description

As indicated in Chapter 3, data were collected from public sources and triangulated to ensure validity and reliability. Table 6 below indicates the primary data sources utilized to answer Research Questions 1 and 2 and the related methods of analysis.

Identification of Starting Schools Sample

The dataset began by using an industry marketing directory, *Ganley's Catholic Schools*, thus replicating the method of a prior school closure study (Fisher, 2020; Pandey et al., 2009). Ganley's data file listed schools by diocese. The states of Maryland, Pennsylvania, New York, Connecticut, Massachusetts, and New Hampshire were chosen because of their proximity to my practice, public enrollment data availability, and the economic impact of the pandemic. The Maryland sample excluded the Washington diocese, which was consistent with the NCEA's practice of organizing data by diocese; nonpublic enrollment data was unavailable for Washington, DC. Within these states and dioceses, Ganley's data file listed 1215 schools. The NCEA reported 1251 Catholic schools in these states for 2019-2020; the NCEA reports meta-data, not school-level data, provided to NCEA by Catholic dioceses (McDonald & Schultz, 2020, 2021; Smith & Huber, 2022).

Verification of Data

The NCEA is a national professional and lobbying organization for Catholic schools. Several factors can explain the discrepancy between NCEA and Ganley's. First, NCEA

publications collect and report data at the diocese, not the school level. Second, through triangulation, Catholic diocesan directories revealed a practice of counting one institution multiple times (i.e., listing a junior high and senior high school as separate schools). Finally, the NCEA follows a methodology in tracking closures and consolidations; consolidations count as two closures. This study's methodology identifies a surviving school in a merger that absorbs another school (larger enrollment, uses the same campus), thus counting as one closure. Finally, the NCEA provided data confirming methodological differences and closure status.

The reliability of school-level data was ensured by verifying schools in Ganley's file as open for the 2019-2020 school year. Using Ganley's file, each school was verified as a single institution (one website, address, reporting state enrollment as one school) through web searches (Connecticut State Department of Education, n.d., Maryland Department of Education, n.d.; Massachusetts Department of Elementary and Secondary Education, n.d.; New York State Education Department, n.d.; Pennsylvania Department of Education, n.d.). Closed schools were verified by searching press reports, school website and social media, and, in some cases, phone calls. Schools in the Ganley file that closed before 2019-2020 were removed.

Enrollment Data

The school-level dataset was constructed with the goal of providing reliable and valid data considered to be critical variables related to school survival, including enrollment data (Connecticut State Department of Education, n.d., Maryland Department of Education, n.d.; Massachusetts Department of Elementary and Secondary Education, n.d.; New York State Education Department, n.d.; Pennsylvania Department of Education, n.d.). The states selected provided nonpublic school enrollment data (which is not required in all states). Enrollment data

were collected from the relevant state data reporting systems. Missing values analysis through SPSS provided estimates for schools not reporting enrollment data.

School Census Tract Variables

Each school in the dataset was matched with demographic variables from the U.S. Census 2019 American Community Survey demographic data from its respective census tract. The percentages for the population (Black, White, Hispanic, Asian), the childhood poverty rate, and adjusted median household income were included. These variables, or comparable alternatives, were considered significant in prior Catholic school closure studies (Brinig & Garnett, 2014; James et al., 2008; Lundy, 1999; O’Keefe, 2000; Pandey et al., 2009). The NCES provides a geocoder to determine by address the geographic region of all schools: city, suburban, town, and rural area. Schools in the sample were coded for inclusion within their assigned region using the NCES (n.d.) search function. As noted, a city consists of territory within both “an urbanized area and...a principal city” (NCES, n.d., para. 2) with a population of over 100,000. A suburban classification means a territory “outside a principal city and inside an urbanized area” (para. 5). A town is an area within an urban cluster 10 to “more than 35 miles from an urbanized area” (para. 10). Finally, rural signifies a territory that is 5 to 25 miles or more from an urbanized area and within 2.5 to “more than 10 miles from an urban cluster” (para.13).

PPP Variables

Each school was coded for PPP loan status and loan amount. These data were available for schools through Federalpay.org and Propublica.org (ProPublica PPP, n.d.; “SBA Paycheck Program” n.d.;). Most schools in the sample applied for the loan under their name, though some K-8 schools received the PPP as part of a larger parish loan. Each school was coded for PPP loan acceptance, including parish loans, and the amounts: Round 1 (April 2020), Round 2 (January-

April 2021), and the total sum of PPP loans. Table 6 details data sources and methods of analysis for the research questions.

Table 6

Research Questions, Data Sources, Data Analysis, and Data Trustworthiness

Research Question	Data Sources	Data Analysis
1	Ganley's Catholic Schools Diocesan School Directories State Enrollment Data (MA, NH, NY, PA, CT, MD) United States Census Data (American Community Survey 2019) PPP Aid (Federalpay.org and Propublica.org) NCEA Enrollment and Closure Reports 2020-2022; Catholic School leaders Diocese reports	Descriptive Statistics
2	Ganley's Catholic Schools Diocesan School Directories State Enrollment Data (MA, NH, NY, PA, CT, MD) United States Census Data (American Community Survey 2019) PPP Aid (Federalpay.org and Propublica.org) NCEA Enrollment and Closure Reports 2020-2022; Catholic School leaders Diocese reports	Descriptive Statistics t-tests; Chi-Square Logistic Regression
3	Semi-structured interviews	Interview Coding and Thematic Analysis

Note. PPP = Paycheck Protection Program. NCEA = National Catholic Educational Association. MA = Massachusetts, NH = New Hampshire, NY = New York, PA = Pennsylvania, CT = Connecticut, and MD = Maryland.

The PPP loan variable presented a challenge because some dioceses operate educational collaboratives. These collaboratives are management entities providing leadership, support, and

logistical services to subgroups of mostly K-8 schools; they range in size from approximately 6 to 20 schools. These educational entities applied for PPP as a collaborative; this presented a challenge to identify the PPP loan amount for each school. PPP loans for 20 collaboratives were identified, including 12 in one large diocese. Efforts to contact these collaboratives for loan data (including phone calls and emails) led to information for one collaborative of six schools. An application for data from the large diocese went through the diocesan research application; however, the superintendent declined to participate in the study. Therefore, the PPP loan status and amount could not be determined for 182 of the 1,200 schools in the sample.

Demographics of Sample

As mentioned, the sample of Catholic schools included 1,200 schools from 6 states. Table 7 further describes the schools in the dataset, including location by state. The 1,200 schools in the sample represented 19.4% of the estimated 6,183 Catholic schools in the country during the 2019-2020 academic year (McDonald & Shultz, 2020).

Table 7*Catholic Schools Sample Distribution by State*

State	<i>F</i>	% of Total Sample
New Hampshire	30	2.5%
Connecticut	95	7.9%
Massachusetts	162	13.5%
Maryland	62	5.1%
New York	452	37.7%
Pennsylvania	399	33.3%
Total	1,200	100.0%

The schools are distributed through NCES-defined geographic regions: city, suburban, town, and rural, as indicated in Table 8.

Table 8*Catholic School Sample Distribution by Region*

Region	<i>F</i>	% of Total Sample
City	477	39.7%
Suburb	600	50%
Town	81	6.8%
Rural	42	3.5%
Total	1,200	100.0%

As seen in Table 9, descriptive statistics detailing U.S. Census demographic data provide insight into the population living in the census tracts where sample Catholic schools reside. It should be noted that these demographic variables detail the census tract where the school is located, though the school's population may come from a larger radius. Nonetheless, this demographic data serves as a useful proxy for the geographic location from which the school draws. It is important to observe that the demographic variables of the school sample ($N=1,200$) in this study are very similar to the population of the entire United States populations. Though located in six mid-Atlantic and Northeastern states, the census tracts of the Catholic schools in this study resemble the broader population.

Table 9

Demographic Variables in 2019 U.S. Census Tracts for Schools in Sample

Variable	Sample %	U.S. %
White	73.4%	72.5%
Black	11.1%	12.7%
Asian	6.5%	5.5%
Hispanic	13.6%	18.0%
Childhood Poverty (18 or under)	14.9%	18.5%

Note. $N = 1,200$ for all variables.

Descriptive statistics in Table 10 below detail characteristics of the 1,200 Catholic schools in the sample, including the following: access of Paycheck Protection Program loans (means and totals); enrollment data from the beginning of the COVID-19 pandemic (2019-2020) and three years prior (2016-2017); and change in enrollment (percentage change and cumulative data).

Table 10 also includes median household income from U.S. Census data from the census tract of each school in the sample.

Table 10*School Level Data: Enrollment, PPP, Household Income*

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	Sum
PPP Round 1	1018	\$418,925	\$474,684.67	\$426,466,576
PPP Round 2	1018	\$97,643	\$223,388.75	\$99,401,514
PPP Total	1018	\$516,569	\$559,549.41	\$525,868,090
Enrollment 2016-2017	1169	318	244.12	
Enrollment 2019-2020	1169	289	234.53	
Enrollment Change (2016-2019)	1166	-8.77%	20.04%	
Median Household Income (2019)	1200	\$78,800.32	\$39,372.59	

Note. PPP = Paycheck Protection Program.

Some Catholic schools, mostly K-8, belonged to a regional or collaborative structure within a diocese. These administrative structures support schools and the centralization improves efficiency. These regional and collaborative structures often applied for and received PPP loans. The nature of these schools' usage of PPP did not allow for most PPP loans to be assigned to each school. However, the cumulative PPP loans for each collaborative could be determined and assigned as either a first draw or second draw loan for 19 regional structures. See Table 11 for the cumulative sum of PPP loan amounts for 19 regional or collaborative systems that could not be assigned to individual schools. Although these data were not formally used to answer the research questions, they are included here to better illustrate the sample and the PPP loan amounts that could not be assigned to individual schools.

Table 11*Regional/Collaborative PPP Loans Un-Assigned to Individual Schools (2020-2021)*

PPP Loan Type	Spring 2020	January-May 2021	Total
Regional/Collaborative	\$44,750,703	\$12,089,845	\$56,840,548

Note. PPP = Paycheck Protection Program.

The type of schools (K-8 or high school) in this study's sample are detailed in Table 12, accompanied by national data from the NCEA depicting all the Catholic schools in the United States for the 2019-2020 academic year. This study's sample somewhat overrepresents Catholic high schools relative to national NCEA data, but it is similar to national data detailing Catholic elementary and high schools in the country (McDonald & Schultz, 2021).

Table 12

Breakdown of Catholic School Type in Study and Nationwide

School Type	<i>N</i>	% of Types of Schools	Catholic Schools Nation-wide 2019-2020	% of Types of Schools Nation-wide
PreK-8	926	77.2%	4,995	80.8%
9-12	274	22.8%	1,188	19.2%
Total	1,200	100.0%	6,183	100.0%

Note. Adapted from "Schools and Enrollment History," by D. McDonald and M. Schultz, 2020, *United States Catholic Elementary and Secondary Schools 2019-2020*, National Catholic Educational Association, p. 7. PreK-8 = elementary school. 9-12 = high school.

The literature on school closure has identified enrollment trendlines as a key variable in school closure (Brinig & Garnett, 2014; James et al., 2008; Lundy, 1999; Pandey et al., 2009). The enrollment trends of the schools in the sample are included in Table 13. The trendline was calculated by determining the percentage change in enrollment for each school within the sample from 2016-2017 to 2019-2020. A significant majority of Catholic schools (64%) faced enrollment declines while heading into the pandemic in March 2020.

Table 13*Catholic School Enrollment Trends 2016-2017 to 2019-2020*

Trendline Variable	<i>N</i>	%
Equal to and + 4%	219	18.3%
Stable (-3% to + 3%)	178	14.8%
Decline equal to and - 4%	769	64.0%
Missing data	34	2.8%
Total	1,200	100%

Within this sample of Catholic schools during the COVID-19 pandemic, a significant number of the Catholic schools closed during the two years of this study: 2019-2020 through 2020-2021. Of the 1,200 Catholic schools in the sample, 114 schools closed during the period of the study. These 114 schools closed represented 9.5% of the sample.

Quantitative Research Phase Findings**Findings for Research Question 1:**

- 1. What are the characteristics of surviving Catholic schools (size, type, location, income by census tract, demographics, change in enrollment, use of PPP aid, size of PPP aid) compared with Catholic schools that closed during the coronavirus pandemic (2019-2020 to 2020-2021)?**

Demographic Data of Open and Closed Catholic Schools

Descriptive statistics in Table 14 detail the characteristics of open Catholic schools and Catholic schools that closed during the COVID-19 pandemic using data from the United States Census' 2019 American Community Survey. Minor differences among the percentages of Whites, Blacks, and Asian were observed. Larger differences occurred with the Hispanic

population in the U.S. Census tract (13.0% in open schools compared with 19.0% in closed schools) and Childhood Poverty (14.6% in open schools versus 17.2% in closed schools).

Table 14

Open and Closed Catholic Schools 2019-2021 Census Tract Demographic Data (2019)

Demographic Variable	Open	<i>N</i>	<i>SD</i>	Closed	<i>SD</i>
White	73.6%	1086	.24	71.4%	.23
Black	11.0%	1086	.17	11.9%	.16
Hispanic	13.0%	1086	.17	19.0%	.19
Asian	6.5%	1086	.09	6.3%	.10
Child Poverty (18 & under)	14.6%	1085	.15	17.2%	.19

Note. For closed schools *N* = 114

Open and Closed Catholic Schools: Enrollment, PPP Loans, States, and Regions

Descriptive statistics in Table 15 detail data related to the amount of PPP loans, school enrollment, and change in enrollment. The means of these variables reflect differences, with open schools having substantially greater enrollments, larger PPP loans, and a smaller decline in enrollment than schools that closed. Heading into the pandemic year of 2019-2020, the mean enrollment of both open and closed schools depicted a substantial decline from 2016-2017: 7.8% for open and 17.8% for closed schools. The 2019-2020 enrollment numbers indicate enrollment for the academic year when the pandemic struck (March 2020). Closures recorded dated from September 1, 2019, to September 1, 2021. For context, the states in this study have exhibited persistent school closure in recent history (McDonald & Shultz, 2020). Historical data for the individual states in this study was made available by the NCEA and helped demonstrate the context for this period. From 2008-2009 to 2017-2018, Catholic schools in Maryland, New York,

Pennsylvania, Connecticut, Massachusetts, and New Hampshire experienced an average year-over-year closure or consolidation rate of 2.75%. The COVID-19 pandemic and related economic shutdown accelerated the closure rate after the 2019-2020 academic year.

Table 15

Means of PPP, Enrollment (2016 and 2019), Enrollment % Change (2016 to 2019)

Variable	Open	<i>SD</i>	<i>N</i>	Closed	<i>SD</i>	<i>N</i>
PPP Round 1 (2020)	\$437,604	\$488,597.04	936	\$205,718	\$152,842.93	82
PPP Round 2 (2021)	\$103,970	\$230,369.87	936	\$25,424.37	\$90,609.39	82
PPP Total	\$541,575	\$574,096.50	936	\$231,143.29	\$192,092.61	82
Enrollment (2016-2017)	330	252.29	1056	204.26	85.67	113
Enrollment (2019-2020)	302	241.70	1056	162.39	70.14	113
% Change	-7.8%	18.52	1056	-17.8%	29.48	113

Note. PPP = Paycheck Protection Program.

The cumulative dollar amount of PPP loans (PPP Total) in Table 16 for open and closed schools represented a substantial difference: \$506,914,340 for open compared with \$18,953,750 for closed schools.

Table 16*Cumulative PPP Loans for Open and Closed Catholic Schools*

Variable	Open	Closed
PPP Round 1 (2020)	\$409,597,624	\$16,868,952
PPP Round 2 (2021)	\$97,316,716	\$2,084,798
PPP Total	\$506,914,340	\$18,953,750

Note. PPP = Paycheck Protection Program. *N* = 936 for Open schools. *N* = 82 for Closed schools.

Descriptive statistics in Table 17 detail open and closed Catholic schools by state. The rate of closure in Connecticut (14.7%) and New York (10.8%) exceeded the overall closure rate in the sample (9.5%), while Massachusetts (9.3%) approximated the sample.

Table 17*Distribution of Catholic Schools (Open and Closed) by State*

State	Open (<i>N</i>)	State % Open	Closed (<i>N</i>)	State % Closed	Total (<i>N</i>)	State as % of Sample
CT	81	85.3%	14	14.7%	95	7.9%
MD	57	91.9%	5	8.1%	62	5.2%
MA	147	90.7%	15	9.3%	162	13.5%
NH	28	93.3%	2	6.7%	30	2.5%
NY	403	89.1%	49	10.8%	452	47.7%
PA	370	92.7%	29	7.2%	399	33.3%

Note. *N* = 1,200 for the total sample. NH = New Hampshire, CT = Connecticut, MA = Massachusetts, MD = Maryland, NY = New York, and PA = Pennsylvania.

The Catholic schools in the sample were distributed throughout the demographic regions provided by the NCES. These regions included city, suburban, town, and rural. The distribution of open and closed schools within geographic locales depicted in Table 18 was comparable to that of the overall sample. Considering prior school closure studies focused on school exits in

cities (Brinig & Garnett, 2014; James et al., 2009; Lundy, 1999; O’Keefe, 2000), it is worth noting that the suburban school closure rate (9.0%) is comparable to the city closure rate (9.1%); the town and rural closure rates are larger.

Table 18

Open and Closed Catholic School Distribution by Geographic Locale

Locale	Open (<i>N</i>)	% Open in Region	Closed (<i>N</i>)	% Closed in Region	Overall Sample (<i>N</i>)	Region as % of Sample
City	432	90.5%	45	9.5%	477	39.8%
Suburban	546	91%	54	9%	600	50%
Town	71	87.6%	10	12.4%	81	6.75%
Rural	37	88.1%	5	11.9%	42	3.5%
Total	1,086	90.5%	114	9.5%	1,200	100%

Descriptive statistics in Table 19 detail the distribution of open and closed schools through the lens of enrollment trends. Open schools demonstrated more favorable enrollment trends, with 19.4% having enrollment gains equal to or exceeding 4% from 2016-2017 to 2019-2020, 16.4% stable (plus 3% gains to minus more than 3%), and 64.1% declining 4% or more in enrollment. Closed schools exhibited 12.3% with enrollment gains equal to or exceeding 4%, 3.5% stable (± 3 enrollment), and 83% declining 4% or more. Table 19 details open and closed schools by enrollment trends and the distribution of the overall sample. Open schools with stable ($\pm 3\%$) or increasing enrollment (+4% or more) were 35.8% of the open category compared with 16.8% for stable and increasing enrollment for the closed schools.

Table 19*Distribution of Open and Closed Catholic Schools by Enrollment Trend*

Enrollment Status	Open (N)	%	Closed (N)	%	Overall Sample (N)	% Overall Sample
>/ = 4% Gains	205	93.6%	14	6.4%	219	18.8%
-3% to 3%	173	97.2%	5	2.8%	178	14.8%
=/< 4% or more	675	87.8%	94	12.2%	769	64.0%
Total	1053	90.3%	113	9.7%	1066	
Missing	33		1	2.9%	34	2.9%

Distribution of Open and Closed Catholic Schools by Median Household Income

The mean 2019 Median Household Median income was \$79,134 for open schools and \$75,614 for closed schools. Table 20 details the distribution of open and closed schools categorized by income brackets from the U.S. Census. A large majority (69.3%) of Catholic school closures are in Census tracts with median household income of \$50,000 to \$149,999, thus outpacing the percentage of households in these brackets throughout the country (45%). Only 5.7% of Catholic school closures occurred in high-income (\$150,000 or more) tracts. In conclusion, school closures occurred throughout virtually all Median Household Income levels with no discernible pattern in open or closed schools.

Table 20*Open and Closed Schools by Census Tract 2019 Median Household Income*

2019 U.S. Census Income Brackets	% of Filers Nationally In Each Bracket	<i>N</i> (% Open Schools)	<i>N</i> (% Closed Schools)	Total
Less than \$10,000	6.0%	0 (0%)	0 (0%)	0
\$10,000 to 14,999	4.3%	2 (.18%)	2 (1.7%)	4
\$15,000 to 24,999	8.9%	18 (7.8%)	3 (2.6%)	21
\$25,000 to 34,999	8.9%	85 (7.8%)	8 (7.0%)	93
\$35,000 to 49,999	12.3%	158 (14.5%)	18 (15.7%)	176
\$50,000 to 74,999	17.2%	316 (29.1%)	31 (27.2%)	347
\$75,000 to 99,999	12.7%	245 (22.5%)	24 (21.1%)	269
\$100,000 to 149,999	15.1%	199 (18.3%)	24 (21.1%)	223
\$150,000 to 199,999	6.8%	48 (4.4%)	3 (2.6%)	51
\$200,000 to 250,000 +	7.7%	15 (1.3%)	1 (.8%)	16
Total		1086	114	1,200

Note. Adapted from “Selected Economic Characteristics,” by U.S. Census Bureau, American Community Survey, 2019, United States Census Bureau.

<https://data.census.gov/cedsci/table?tid=ACSDP5Y2019.DP03>

Distribution of Catholic Schools by Type

Catholic school closure by type in Table 21 represents a clear difference between elementary schools and high schools. The PreK-8 closure rate (10.5%) is substantially larger than the closure rate for high schools (6.3%).

Table 21*Open and Closed Catholic Schools by School Type 2019-2021*

Category	Open (N)	%	Closed (N)	%	Total
9-12	257	93.7%	17	6.3%	274
PreK-8	829	89.5%	97	10.5%	926

Findings for Research Question 2

2. *What was the influence of PPP on Catholic schools' survivability during the coronavirus pandemic related to the following issues:*

a.) What percentage of Catholic schools accessed PPP loans?

Application and Use of PPP Loans

Descriptive statistics describing the sample in Table 22 below detailed schools that applied for and used PPP loans. Within the overall sample of 1,200 Catholic schools, 15.2% of schools were missing data. It could not be determined, therefore, whether these individual schools utilized or elected not to apply for PPP loans. It is expected that most of these schools received PPP loans through a collaborative loan for a group of schools, though the exact amount and status of acceptance and rejection could not be determined despite significant efforts to contact the collaborative or the diocese in which the collaborative resides. The PPP loan status could be determined, however, for 1,018 Catholic schools. For the portion of the sample for which PPP status could be determined, SPSS calculated that 94.0% of schools opted to apply for and receive PPP loans, and 6.0% declined to apply for and use PPP loans.

Table 22*Catholic School Use/Non-Use of PPP Loans 2020-2021*

School PPP Status	<i>N</i>	Overall Sample %	Valid % of PPP Status
Accepted PPP	957	79.8%	94.0%
Declined PPP	61	5.2%	6.0%
Missing	182	15.2%	
Total	1,200	100%	100%

Note. PPP = Paycheck Protection Program.

The use of PPP loans becomes more complex when considering that a portion of Catholic schools elected to apply for, and use, the second draw of PPP loans in Table 23. This installment of PPP was distributed to qualified recipients from January 2021 to May 2021.

Table 23*Catholic School Use/Non-Use of PPP 2nd Draw*

2 nd Draw PPP Status 2021	<i>N</i>	Overall Sample %	Valid %
Accepted 2 nd Round PPP	261	21.75%	25.6%
Declined 2 nd Round PPP	756	63%	74.4%
Missing	183	15.25%	
Total	1,200		

Note. PPP = Paycheck Protection Program.

To qualify for the second draw of PPP, businesses and organizations needed to demonstrate a 25% decline in gross revenue for a quarter from 2019 to 2020. The fact that 25.6% of Catholic schools for which data is available utilized a second draw suggests significant

revenue challenges associated with the economic impacts of the COVID-19 pandemic (SBA, n.d.).

b.) How was the PPP aid distributed among Catholic schools as measured by geography (city, suburban, town, rural; states), demographics (Black, White, Hispanic), income in school community, and school enrollment trends from 2016-2017 to 2019-2020?

PPP Distribution by Locale: City, Suburban, Town, Rural

The distribution of PPP loans, as measured by geography, demographics, income, and enrollment, provides insight into the equity of PPP loans. Catholic schools opted for accepting PPP aid throughout geographic categories, including locales and states. Descriptive statistics in Table 24 demonstrate widespread acceptance of PPP aid throughout all geographic locales, ranging from cities (96.4%) to rural areas (83.3%).

Table 24

Geographic Distribution of PPP Loans by NCES Locale

Locale	Accept (N)	%	Decline (N)	%	Total
City	350	96.4%	13	3.6%	363
Suburb	503	93.5%	35	6.5%	538
Town	69	85.2%	6	7.4%	75
Rural	35	83.3%	7	16.7%	42
Total	956	93.9%	62	6.1%	1,018

Note. PPP = Paycheck Protection Program. NCES = National Center for Education Statistics.

PPP Distribution by State

As detailed in Table 25, PPP loans were distributed throughout the mid-Atlantic and Northeastern states within the sample of 1,200 Catholic schools: New Hampshire, Connecticut, Massachusetts, Maryland, New York, and Pennsylvania. The mean of the total of all PPP loans (including first and second rounds) varied by state. New Hampshire Catholic school PPP loans reflected the lowest mean (\$234,654), while the largest PPP loan totals were in Maryland (\$658,607) and New York (\$675,290). The mean PPP loan is influenced by both mean enrollment and the prevalence of second draw PPP loans. Enrollment operates as a proxy for school financial resources, including tuition revenue and salaries (Pandey et al., 2009). Staffing and salary levels served as the basis for determining PPP. With a sample of 30 schools, New Hampshire received the lowest cumulative sum of aid (\$7,039,625), while Pennsylvania (\$146,052,780) and New York (\$226,222,344) schools received the greatest sum of PPP loans.

Table 25

Distribution of Total PPP Loans by State and Mean Enrollment 2019-2020

State	PPP Sum Total Loans (N)	Mean Total PPP	SD	2019-2020 Enrollment (N)	SD	2 nd Draw % PPP
NH	\$7,039,625 (30)	\$234,654	\$290,044.38	214 (24)	162.52	10%
CT	\$36,721,720 (75)	\$489,622	\$428,116.02	237 (92)	158.18	38.2%
MA	\$68,997,960 (154)	\$448,038	\$589,619.89	299 (157)	232.81	8.5%
MD	\$40,833,661 (62)	\$658,607	\$544,957.36	392 (61)	250.78	4.8%
NY	\$226,222,344 (335)	\$675,290	\$688,912.62	309 (451)	280.32	43.8%
PA	\$146,052,780 (362)	\$403,460	\$384,868.61	263 (384)	179.09	18.4%

Note. PPP = Paycheck Protection Program. NH = New Hampshire, CT = Connecticut, MA = Massachusetts, MD = Maryland, NY = New York, and PA = Pennsylvania.

PPP Distribution by Enrollment Trends

The distribution of PPP aid across schools of varying enrollments indicates that 654 Catholic schools experienced enrollment drops of 4% or more in the 3 years leading up to the COVID-19 pandemic year of 2019-2020. In Table 26 below, these 654 schools represented 66.3% of the 986 schools to which total PPP loans could be assigned to an individual school and enrollment trend. The mean of all PPP loans for these schools was \$481,723, with a cumulative sum of \$315,529,094. Schools ($n=147$) with stable enrollment ($\pm 3\%$ enrollment) received median PPP loans of \$784,581 and a cumulative sum of \$115,333,435 in total PPP loans. The enrollment of stable schools ($n=425$) was larger than schools increasing ($n=271$) or decreasing in enrollment ($n=263$). The acceptance of PPP was similar across varying enrollment trends indicating little difference in application and acceptance of PPP loans.

Table 26

Distribution of Catholic School PPP Loans by Enrollment Trends

Enrollment Trend %	<i>M</i> PPP Total	<i>SD</i>	Apply/Accept PPP %	Declined PPP (%)	2019-2020 <i>M</i> Enrollment	<i>SD</i>
$\geq 4\%$	\$480,742	\$483,876.40	176 (95.1%)	9 (4.9%)	271	176.75
$\pm 3\%$	\$784,581	\$906,744.33	137 (93.2%)	10 (6.8%)	425	397.63
$\leq 4\%$	\$481,723	\$457,952.54	622 (95.1%)	32 (4.9%)	263	181.87
Missing data			32		31	

Note. PPP = Paycheck Protection Program.

PPP Distribution Among Schools Located in Minority Census Tracts

Schools in census tracts with increasing Black and Hispanic populations generally experienced (see Table 27) an increase in PPP loan levels roughly parallel to school enrollment increases. Catholic schools in census tracts with a 25-50% Black population and 76-100% Black

population also experienced a higher rate of PPP second draw loans. Catholic schools in census tracts with an increasing Hispanic population demonstrated a similar trend to those in census tracts with an increasing Black population.

Table 27

U.S. Census 2019 Group Population, PPP Total Loan Mean, Enrollment & 2nd Draw PPP %

Census Group	Total PPP M (N)	SD	2019 Enrollment (N)	SD	2 nd Draw % (N) (2021)
Black (0-25%)	\$502,748 (929)	\$541,373.73	285 (1031)	229.04	24.7% (228)
Black (26-50%)	\$583,555 (48)	\$559,645.33	309 (77)	294.82	40% (20)
Black (51-75%)	\$602,516 (19)	\$588,372.56	329 (27)	237.83	16.7% (3)
Black (76-100%)	\$797,796 (20)	\$919,453.91	346 (28)	228.91	42.9% (9)
Hispanic (0-25%)	\$513,358 (880)	\$552,387.89	287 (970)	227.65	24.4% (215)
Hispanic (26-50%)	\$523,233 (90)	\$613,808.86	308 (122)	308.87	28.1% (25)
Hispanic (51-75%)	\$560,825 (36)	\$625,734.57	276 (59)	154.75	44.4% (16)
Hispanic (76-100%)	\$509,680 (9)	\$377,278.07	325 (13)	270.76	33.3% (3)
White (0-25%)	\$807,224 (59)	\$972,285.60	350 (59)	287.57	45.8% (27)
White (26-50%)	\$550,224 (70)	\$513,305.63	332 (97)	323.44	30.6% (22)
White (51-75%)	\$568,287 (215)	\$525,290.29	298 (249)	212.07	28.8% (62)
White (76-100%)	\$464,241 (654)	\$512,358.18	270 (703)	215.69	22.2% (143)

Note. PPP = Paycheck Protection Program.

While somewhat uneven and speculative, the data suggests that PPP loans tended to increase for Catholic schools in neighborhoods where the non-White population increased. In addition, the usage of the 2nd draw loans exceeded the sample mean of 25.6% in 5 of 6 quartiles in which the Black or Hispanic population was 26% or more. The data on PPP distribution

suggests Catholic schools located in neighborhoods with increasing minority populations accessed larger total PPP loans than in majority-White neighborhoods, which is likely attributed to the greater use of 2nd draw loans. The greater reliance on 2nd draw loans among schools in neighborhoods with an increasing minority population suggests these schools faced more financial hardship and a greater risk of closure. Of note, schools in census tracts with the highest Hispanic population (76-100%) experienced a decline in the mean value of total PPP loans and 2nd draw usage (33.3%) from the previous quartile despite an increase in enrollment. This PPP usage raises the question of whether these schools were stronger financially than other schools in majority Hispanic neighborhoods or could not fully access 2nd draw loans.

Descriptive statistics in Table 28 demonstrate that as the Black and Hispanic populations in census tracts with Catholic schools increased, the median household income declined, and the population became increasingly located in cities (particularly for the Black population). As the White population increased in census tracts with Catholic schools, the median household income increased, and the population became more centered in the suburbs.

Table 28

Black, Hispanic, and White Census Tract Median Household Income (MHI) & NCES Locale

Group (%)	MHI (N)	SD	City (N)	Suburban (N)
Black (0-25%)	\$82,942 (1062)	\$39,142.86	34.7% (369)	53.7% (570)
Black (76-100%)	\$46,557 (28)	\$23,054.77	96.4% (27)	3.6% (1)
Hispanic (0-25%)	\$84,202 (1000)	\$39,742.22	34.0% (340)	54.1% (541)
Hispanic (76-100%)	\$36,991 (13)	\$15,465.14	61.5% (8)	38.5% (5)
White (0-25%)	\$44,745 (96)	\$18,703.48	90.6% (87)	7.3% (7)
White (76-100%)	\$88,095 (730)	\$40,113.70	23.4% (171)	60.5% (442)

Note. NCES = National Center for Education Statistics.

Furthermore, descriptive statistics in Table 29 demonstrate that the largest group of high schools (49.3%) are in cities compared to suburbs (42.7%). Most grammar schools are in suburbs

(52.3%) as compared to cities (36.9%). Catholic schools residing in census tracts with larger Black and Hispanic populations exhibited higher enrollments and, generally, a greater percentage of second draw PPP. High schools are more often located in cities, perhaps contributing to the higher enrollment in minority census tracts. School enrollment is related to the size of PPP loans. Larger enrollment corresponds, on average, with more teachers, staff, and a higher payroll. The lower incomes in minority neighborhoods made those populations, and correspondingly the Catholic schools they may attend, more vulnerable to the economic shocks related to the pandemic. As a result, Catholic schools in neighborhoods with a higher minority population experienced greater usage of second draw PPP loans, which would increase the total PPP loan amount. The predominance of Catholic high schools in cities may also play a role in larger PPP amounts related to minority communities because Catholic high school teachers' salaries historically are higher than those in grammar schools (Przygocki, 2004).

Table 29

Catholic School Type Distribution by Locale

School Type (N)	City % (N)	Suburban % (N)	Town (N)	Rural (N)
PreK-8 (926)	36.9% (342)	52.1% (483)	7.7% (72)	3.1% (29)
9-12 (274)	49.2% (135)	42.7% (117)	3.3% (9)	4.7% (13)

PPP Loan Distribution Among Median Household Income of School Census Tracts

The U.S. Census income brackets provide a lens to view the distribution of PPP aid by matching the income bracket with the 2019 Median Household Income for the U.S. Census tract of Catholic schools in the sample. Table 30 details the distribution of PPP aid in both mean and sum. The median household income serves as a proxy for the socioeconomic status of the

community the school serves. The schools in Census tracts with the highest median household incomes (\$100,000 or higher) received the largest PPP loan amounts.

There are several cautions to using the median household income as a proxy for socioeconomic status. First, individual incomes can differ significantly within a census tract. Second, it is worth noting that Catholic school parent incomes may skew higher than individual schools' U.S. Census tract median family income (Huber, 2007). Third, Catholic high schools tend to draw from a broader range of zip codes and the census tract data of the school location may not reflect where school attendees live. Last, Catholic high schools charge higher tuition than Catholic primary schools and may draw more affluent families (Huber, 2007). The U.S. Census tract median household income data does, however, serve as a proxy for the socioeconomic status of the neighborhood in which the school is located.

Table 30

Distribution of PPP Total Loans by Schools' Census Tract 2019 Median Household Income (MHI)

U.S. Census Income Range	M PPP Loan for Schools in Census Tract with Corresponding MHI	SD	Sum of PPP Loans for Schools within MHI Range
\$0-9,999	n/a	n/a	n/a
\$10,000-14,999	\$816,337		\$816,337
\$15,000-24,999	\$428,626 (17)	\$499,999.47	\$7,286,654
\$25,000-34,999	\$527,781 (71)	\$742,863.07	\$27,272,480
\$35,000-49,999	\$385,012 (144)	\$409,400.43	\$55,441,864
\$50,000-74,999	\$459,594 (312)	\$527,992.53	\$143,393,611
\$75,000-99,999	\$509,246 (228)	\$469,504.49	\$116,108,284
\$100,000-149,999	\$624,807 (190)	\$626,964.82	\$118,713,365
\$150,000-199,999	\$886,757 (41)	\$813,707.37	\$36,357,067
\$200,000-250,000 +	\$734,174 (14)	\$397,120.71	\$10,278,428

Note. PPP = Paycheck Protection Program.

c.) During the pandemic, what variables, including PPP, were associated with Catholic school closure? What variables predict survival?

This study builds on prior studies that sought to identify variables (listed in Table 31) associated with Catholic school closure and analyze their value as predictors. Catholic schools nationwide have averaged a net decline of approximately 100 per year over the last 10 years (McDonald & Shultz, 2021). Prior research identified enrollment, change in enrollment,

geography, demographic factors, and socioeconomic indicators as key variables related to school closure (Brinig & Garnett, 2014; James et al., 2008; Lundy, 1999; O’Keefe, 2000; Pandey et al., 2009).

Table 31

Abbreviations for t-Tests

Abbreviation	Variable
PPPR1	Paycheck Protection Program Loan Amount for First Round 2020
PPPR2	Paycheck Protection Program Loan Amount for Round 2 in 2021
PPPTot	Total Amount of Paycheck Protection Program Loan for school
Enroll2016	Enrollment of school in 2016-2017, three years prior to pandemic
Enroll2019	Enrollment of school in 2019-2020, first year of pandemic
Enr%Change	The change in enrollment from 2016-2017 to 2019-2020
MHI2019	U.S. Census 2019 Median Household Income of school’s census tract
White %	U.S. Census 2019 White Population of school’s census tract
Hisp %	U.S. Census 2019 Hispanic Population of school’s census tract
Black %	U.S. Census 2019 Black Population of school’s census tract
Poverty %	U.S. Census 2019 Poverty Rate among children 18 and under

I used publicly available variables considered significant for Catholic school closure. In addition to the recent timeframe of 2019-2021, this study introduced the crisis of the COVID-19 pandemic and the new variable of the federal government’s PPP loans.

A series of independent *t*-tests compared open and closed schools on several indicator variables. As depicted in Table 32, 7 of the 11 comparisons of open and schools proved statistically significant at the .05 level. All variables related to PPP and enrollment proved statistically significant. The demographic variables were mixed in their statistical significance. The variables of PPP Round 1, PPP Round 2, PPP Total, Enrollment 2019-2020, Enrollment 2016-2017, Enrollment Percentage Change (2016-2019), and Hispanic population proved to be statistically significant. Effect sizes (*d*) ranged from a low negative impact (Hispanic at -.347) to

a medium positive impact (Enrollment 2019 at .609) with none in the high range (.8). The variables of White Population, 2019 Median Household Income, Child Poverty Rate, and 2019 Black Population were not statistically significant ($p < .05$).

Table 32

Comparison of Means of Open and Closed Catholic Schools

Variable		<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	<i>d</i>
PPR1	open	936	\$437,604.30	\$488,597.04	4.278	.000	.493
	closed	82	\$205,718.93	\$152,842.00			
PPPR2	open	936	\$1,039,970.85	\$230,369.87	3.066	.002	.353
	closed	82	\$25,424.37	\$90,609.39			
PPPTot	open	936	\$541,575.14	\$574,096.50	4.871	.000	.561
	closed	82	\$231,143.29	\$192,092.61			
Enroll2016	Open	1056	330.62	252.29	5.29	.000	.524
	Closed	82	204.26	85.67			
Enroll2019	open	1056	302.93	241.69	6.14	.000	.609
	closed	113	162.39	70.14			
Enr%Change	open	1053	-7.82%	18.52%	5.097	.000	.505
	closed	113	-17.83%	29.48%			
MHI2019	open	1086	\$79,134.20	\$39,643.82	.908	.335	.089
	closed	114	\$75,614.54	\$36,699.09			
White%	open	1086	.73	.24	.911	.362	.090
	closed	111	.71	.23			
Hisp%	open	1086	.13	.17	-3.52	.000	-.347
	closed	114	.19	.19			
Black%	open	1086	.11	.17	-.490	.625	-.048
	closed	114	.12	.16			
Poverty %	open	1085	.14	.15	-1.631	.103	-.161
	closed	114	.17	.19			

School Type and School Closure

Prior studies indicated that Catholic elementary schools (PreK-8) have been more vulnerable than high schools (9-12) to school closure (CARA, 2006; James et al., 2008; McDonald & Schultz, 2021). Additionally, this study examined whether the acceptance of PPP loans positively impacted school survival.

A Chi-Square analysis was conducted to determine the relationship between the type of school and school closure status. As seen in Table 33, preK-8 schools closed at a rate of 10.5%, while 6.2% of 9-12 schools closed from 2019-2021. A Chi-Square test of independence determined that that PreK-8 Catholic schools closed significantly more often ($p < .05$) than 9-12 Catholic schools, $X^2 (1, N = 1200) = 4.48, p = .034$.

Table 33

Frequencies for Chi-Square Results for School Type and School Closure (N=1,200)

Variable	Open		Closed	
	<i>N</i>	%	<i>N</i>	%
PreK-8	829	89.5%	97	10.5%
9-12	257	93.8%	17	6.2%

Use of PPP loans and School Closure

A Chi-Square analysis (see Table 34) was conducted to determine the relationship between acceptance of PPP loans and Catholic school closure. A Chi-Square analysis of independence demonstrated that a higher percentage of schools accepting PPP loans (92.9%) survived compared with those schools (77.1%) that did not accept PPP loans, $X^2 (1, N = 1018) = 19.44, p < .001$.

Table 34*Frequencies for Chi-Square Results for School Utilization of PPP and School Closure*

Variable	Open		Closed	
	<i>N</i>	%	<i>N</i>	%
Utilized PPP	889	92.9%	68	7.1%
Did Not Use PPP	47	77.1%	14	22.9%

Note. PPP = Paycheck Protection Program.

Binary Logistic Regression: A Predictive Model

The previous results examined the variables and their relationship to remaining open in a bivariate fashion. The question remains whether these variables in combination can predict which schools remained open. Binary logistic regression was used to determine whether the variables of PPP Total, Enrollment 2016, Enrollment 2019, and Hispanic population could predict Catholic school closure. These variables were determined to be statistically significant ($p < .05$) in independent t -tests. Other statistically significant variables from previous univariate analyses (PPP Round 1, PPP Round 2, and Change in Enrollment) were excluded from the binary logistic regression to avoid issues of multicollinearity. For example, Change in Enrollment is the difference between Enrollment 2016 and Enrollment 2019, making it completely determined and collinear with those two variables.

As a result of missing data, 284 schools were excluded from the logistic regression analysis. Thus, from the original sample of 1,200 schools, 916 schools were used in the analysis. The overall model was statistically significant, $X^2(4, N=967) = 84.13, p < .001$, suggesting it could distinguish between closed Catholic schools and those that stayed open.

As shown in Table 35, the model explained 20.9% (Nagelkerke R square) of the variance in the dependent variable and classified 92.0% of cases correctly. The observed classification of schools remaining open was 92.0%. PPP Total, Hispanic Population, Enrollment 2016, and Enrollment 2019 contributed in a statistically significant way to the model.

Table 35

Logistic Regression Predicting the Likelihood of Catholic School Closure

Variable	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Df</i>	<i>P</i>	<i>OR</i>	95% <i>CI</i>	
							<i>LL</i>	<i>UL</i>
PPPTot	.00	0.00	10.89	1	.001	1.0	1.0	1.0
Hispanic	2.27	0.68	11.93	1	.001	9.7	2.50	37.32
Enrollment 2019	-.01	.003	14.92	1	.000	.984	1.00	1.01
Enrollment 2016	.01	.003	25.70	1	.000	1.01	1.00	1.01
Constant	-1.07	.286	14.07	1	.000	.342		

The variable with the greatest impact on school closure in the model was the Hispanic population (odds ratio [*OR*] = 9.70, confidence interval [*CI*] = 2.52 / 37.32, *p* = .001). The variables of PPP Total (*OR* = 1.0), Enrollment 2019 (*OR* = .984), and Enrollment 2016 (*OR* = 1.010) produced more modest odds ratios. Overall, the model did not function as a strong predictor of school closure.

Hispanic Population and School Closure

Considering that the variable of Hispanic population was the strongest predictor in the binary logistic regression model, a closer examination of Table 36 illustrates its impact on school closure. As the percentage of the Hispanic population in census tracts grows, Catholic schools,

on average, are more likely to close. The socioeconomic challenges that some Hispanic communities face is illustrated by the variables of median household income and PPP second draw usage (indicating a school experiencing financial distress). The creation of two variables in SPSS reflecting the Hispanic population in the census tracts of Catholic schools in this sample ($N=1,200$) operationalizes this trend and suggests a “tipping point” (CARA, 2006; James et al., 2008) at key demographic markers: Hispanic population of 13.6% and 18%. For Catholic schools in tracts with a Hispanic population of 13.6% ($n=820$) or under (13.6% Hispanic is the mean for the sample), the school closure rate was 7.4%. For Catholic schools in the census tracts with a Hispanic population of 13.7% ($n=380$) and above, the school closure rate was 14.3%.

The Catholic school closure rate for schools in census tracts with a Hispanic population equaling the national average of 18% or fewer ($n=927$) was 7.3%. For schools in tracts with a Hispanic population of 18.1% or larger ($n=273$), the rate of closure more than doubled to 16.8%. The overall school closure rate for this sample from 2019-2021 was 9.5% in the sample.

Within this sample, 27.6% ($n= 332$) of Catholic schools were in census tracts with a Hispanic population of 13.7% or more. Of the 114 school closures in this study, 43% ($n=50$) took place in census tracts with a Hispanic population of 13.7% or more. The quantitative data demonstrates that as the population in the census tracts of Catholic schools becomes more Hispanic, Catholic schools are more likely to close.

Table 36*Hispanic Population, School Closure, MHI, and 2nd Draw PPP Participation*

Hispanic %	Closed %	Open %	MHI (N)	SD	2 nd Draw PPP
0-13.6%	63 (7.5%)	781 (92.5%)	\$86,658 (844)	\$41,146.60	22%
13.7-20%	8 (7.5%)	98 (92.5%)	\$73,634 (106)	\$28,587.90	39.3%
21-30%	19 (23.2%)	63 (76.8%)	\$64,414 (82)	\$23,260.73	35.3%
31-40%	7 (15.9%)	37 (84.1%)	\$55,036 (44)	\$20,340.49	14.3%
41-50%	2 (8%)	23 (92%)	\$54,283 (25)	\$22,792.49	33.3%
51-60%	7 (46.7%)	8 (53.3%)	\$47,500 (15)	\$28,247.35	50%
61-70%	4 (10.8%)	33 (89.2%)	\$41,378 (37)	\$15,924.72	50%
71-80%	3 (18.8%)	13 (81.3%)	\$33,992 (16)	\$12,533.91	30.8%
81-90%	0 (0%)	5 (100%)	\$48,316 (5)	\$15,481.05	50%
91-100%	0 (0%)	2 (100%)	\$24,773 (2)	.000	50%
Missing	1	2			
Total	114	1086			

Note. MHI = Median Household Income. PPP = Paycheck Protection Program.

Quantitative Analysis: Summary of Findings

This large sample of 1,200 Catholic schools in the mid-Atlantic and Northeast during 2019-2021 provides a window into approximately 19% of all Catholic schools nationwide. The schools in this sample experienced a mean enrollment decline of 8.77% from 2016-2017 to 2019-2020. Given this precarious position, Catholic schools suffered as a group during COVID-19. Out of this sample, 114 (9.5%) schools closed.

For schools for which PPP status could be determined, acceptance of PPP loans was widespread with 94% ($n=957$) of schools electing for PPP loans. The mean total PPP loans per school was \$516,569 with a total of \$525,868,090 in PPP loans provided to 1,018 individual Catholic schools. In addition, the total PPP loans for open schools was \$541,575 contrasted with \$231,143 for closed schools. Enrollment in open schools declined 7.8%, while closed schools experienced a 17.8% drop in enrollment.

In analyzing key variables that predict school closure, a series of t-tests determined that PPP loans, enrollment, percentage change in enrollment, and Hispanic population of the school's census tract were statistically significant variables. The Chi-Square analysis also determined that acceptance of PPP loans and school type were statistically significant. Logistic regression demonstrated that the variables of Total PPP Aid, the Hispanic population, 2016 Enrollment and 2019 Enrollment were statistically significant but not strong predictors of school closure.

Qualitative Research Phase

The qualitative research phase of this explanatory sequential mixed methods study built on the quantitative research phase to provide a fuller analysis. This qualitative phase used semi-structured interviews to determine Catholic school leaders' interpretations of their schools' experience during the COVID-19 pandemic. Topics of importance focused on school leaders' impressions of their school's experience, including school viability and rationale for using PPP.

3. What are the perceptions of Catholic school leaders regarding the importance of receiving PPP aid and Catholic schools' viability during the COVID-19 pandemic?
 - a. What are the reasons for acceptance/rejection of PPP aid among Catholic school leaders?
 - b. Was PPP an important factor in the viability (open/closed) of Catholic schools?

Qualitative Dataset Description

Quantitative Findings and Interview Sample

The explanatory sequential mixed methods design of this study sought to utilize qualitative data to develop "a more in-depth understanding" (Creswell & Creswell, 2018, p. 237) of the quantitative results. The interviews represented a purposive sampling method that was derived from the initial sample ($N=1,200$) of schools in the mid-Atlantic and Northeast:

Maryland, New York, Pennsylvania, Connecticut, Massachusetts, and New Hampshire. This qualitative phase sought to develop a sample of leaders—presidents and principals—representing schools that might further illustrate interesting findings related to significant variables associated with Catholic school closure during the COVID-19 pandemic from academic years 2019-2020 to 2020-2021.

The quantitative phase findings led to the establishment of four goals for the interview sample. First, since 9.5% of schools in the school sample ($N=1,200$) closed, interview selection sought to include leaders whose schools closed on their watch. Second, the descriptive statistics of the sample indicated that 64% of schools faced enrollment declines of 4% or more from 2016-2017 to 2019-2020 and the remaining schools were stable ($\pm 3\%$ enrollment) or growing ($+4\%$ or more). The selection of leaders sought to match this breakdown. Third, a t -test and binary logistic regression identified the Hispanic population in a school's U.S. Census tract as predictive of school closure. I sought school leaders whose schools served majority Hispanic communities. Finally, my analysis of descriptive statistics found that the largest PPP awards went to high schools with the strongest enrollment (700-1500) in the sample and presumably stable finances. I used this finding to identify the internal financial conditions of these schools and their principal or president's reasons for application and receipt of PPP loans.

Participant Selection and Interview Sample

Leveraging the quantitative findings, a purposive, snowballing method targeted leaders from certain school demographics while using contacts and associations to identify potential subjects. A total of 26 principals and presidents were solicited via email (see Appendix F for an attachment explaining the study) to a semi-structured interview for this study. Subjects were offered a copy of the study's findings if they participated. The invitations targeted 15 elementary

schools and 11 high schools in six states. Ten interviews were scheduled via Zoom video call with transcription provided by Zoom.

The final sample included 10 interviews with school leaders (five from high schools and five from grammar schools). The interview process was concluded upon reaching saturation on critical points related to PPP loans, COVID-19, and school closure (Creswell & Creswell, 2018).

Quantitative Findings and Sample Description

The purposive, snowballing subject selection accomplished the four sampling goals outlined above. The selection process identified three schools that closed. Those school leaders were contacted to become subjects. After two emails to each leader, one former principal agreed to be interviewed. Finally, the sample met the other goals: three leaders representing majority Hispanic school populations; 7 of 10 schools faced declining enrollment from 2016-17 to 2019-20; and two high schools featured enrollment over 700 (large for a Catholic school) and strong financial positions.

Demographics of Schools Led by Participants

The schools helmed by leaders in the qualitative semi-structured interview sample represented critical findings from the quantitative results of the study. In addition, these schools represent the diversity of neighborhoods, enrollment size, market trends, and populations served throughout the Catholic sector (see Table 37). Data has been transformed into a range to ensure school anonymity and interview subject confidentiality. Two schools used PPP for two rounds (Spring 2020 and January–May 2021). Five schools used PPP loans in a range from \$200,000 to \$500,000. Five schools used PPP loans totaling \$750,000 to \$2 million. The mean enrollment for the 10 schools declined 11.3% from 2016-2017 to 2019-2020. School leaders represented four states. The schools were five high schools and five elementary schools, which weighted high

schools more heavily than the overall sample. One goal of the purposive sampling, however, was to identify bigger, more stable schools and their reasoning for using PPP loans.

Table 37

Catholic School Characteristics Represented by Interviewed Leaders

School	Type	Locale	Student Demography (Leader Self-Report)	Enrollment Change % (2016-2019)	Enrollment Range (2019-2020)
A	HS/Coed	Large City	Majority Hispanic	-38%	250-400
B	HS/Coed	Large Suburb	Majority Hispanic	11%	200-400
C	HS/Coed	Small City	80% White	2%	700-900
D	PK-8/Coed	Large Suburb	90% White	7%	400-500
E	PK-8/Coed	Large Suburb	90% White	-17%	350-500
F	PK-8/Coed	Large Suburb	Majority Hispanic	-10%	400-500
G	PK-8/Coed	Large City	80% White	-25%	300-450
H	HS/Single Sex	Large City	60% White	-5%	800-1000
I	HS/Coed	Large City	80% White	-6%	450-650
J	PK-8/Co-ed	Large Suburb	Majority Minority	-32%	150-250

Note. Student Demography was self-reported by school leaders in interviews. Enrollment Change % (2016-2019) records the change in enrollment using state department of education data from the study. The enrollment for each school is reported in a range to protect the anonymity of the leaders and their schools.

Demographics of School Leaders

The following table offers self-reported demographic data on school leaders who participated in the semi-structured interviews (see Table 38). The leaders are not explicitly connected with the schools detailed in Table 37.

Table 38*Catholic School Leaders*

Leader	School	Gender	Race	Title	Degree	Religious
1	HS	F	Caucasian	President	Doctorate	Yes
2	PreK-8	F	Caucasian	Principal	Master's	No
3	HS	M	Caucasian	Principal	Doctorate	No
4	PreK-8	F	Caucasian	Principal	Master's	No
5	PreK-8	M	Caucasian	Principal	Master's	No
6	PreK-8	M	Caucasian	Principal	Master's	No
7	HS	M	Caucasian	Principal	Master's	No
8	HS	M	Caucasian	President	Master's	No
9	HS	F	Caucasian	Principal	Master's	No
10	PreK-8	F	Caucasian	Principal	Doctorate	No

Note. Religious refers to whether the leader is a priest, a religious brother, or a nun.

Interview Subject Identification and Assurance of Anonymity

Subjects read, signed, and attached a scanned copy of the Informed Consent Agreement form, which was part of the approval process from The College of William and Mary's IRB. Interview subjects provided verbal approval for transcription of the interview on Zoom. The transcript was titled with a coded name, and the key is kept in a locked cabinet. The transcripts were stripped of identifying characteristics.

Semi-Structured Interviews

Interview subjects were identified by matching schools that represented critical quantitative findings: experienced a school closure; serving a Hispanic community; stable to strong Catholic high school with an enrollment over 700; and experiencing an enrollment decline

of 4% or more. Using purposive, snowballing sampling, I shared a professional, educational, or personal association with fifteen of 26 school leaders identified. Six school leaders met a demographic criterion but lacked a professional, educational, or personal association. A specific snowballing recommendation identified five school leaders.

Three former leaders of a school that closed in 2019-2021 were contacted. Ganley's Catholic school report, press reports, and state education records identified the closed schools and leaders. LinkedIn and internet searches determined leaders' new positions and contact information.

A total of 26 school leaders were contacted via email with an introductory email, a description of the mixed methods study, an invitation to participate, and an Informed Consent Agreement. A follow-up email was sent a week later. Leaders were offered the opportunity to review the completed findings if they participated. Once leaders agreed to participate in the study, they were sent potential dates for a Zoom-based call. Ten school leaders agreed to take part in the study and were interviewed. Subjects were interviewed over Zoom, and these calls were transcribed by Zoom with approval from the subjects. The interviews generally lasted 30-45 minutes.

Semi-structured interview questions with school leaders sought to build on quantitative findings to answer Research Question 3 better. The semi-structured interview questions focused on leaders' impressions of their school culture, demographic factors critical to resilience (enrollment trends, student body demographics, market conditions), the challenges of COVID-19, and the importance of PPP for school survival. The questions were validated through an expert committee of two former Catholic school administrators. See Appendix H for the original questions, expert committee comments, and final revised questions.

Quantitative Data From Semi-Structured Interviews

The semi-structured interview questions were read and coded for quantitative and qualitative findings. Open-ended responses were coded for frequency and descriptive statistics derived from the total responses offered. Questions that were more closed were tallied and recorded.

Qualitative Findings Coding and Themes

The interviews were read first for general understanding and to edit the transcript of identifying descriptions and for clarity. The transcripts were read again and coded in vivo, creating 351 codes from the ten interviews. The in vivo codes were recorded in the margin of the Word file. The interviews were re-read, and in vivo codes were written on adhesive note cards. The in vivo codes were organized around categories on two large poster boards. Eight categories emerged: school mission; margin/sustainability; school market; school defined in contrast to public schools; fear during COVID-19; leadership and resilience; school improvements; and negative impacts of COVID-19. These eight categories were then collapsed into four themes with corresponding representation among interview subjects: school mission (100%); margin (100%); market (100%); leadership and resilience (100%). These themes inform the response and structure for Research Question 3. School mission means school leaders' focus on serving the students and families in their schools in fidelity to Catholic Church teachings and tradition. Margin refers to the school leaders' focus on balancing the budget and keeping the school "in the black," meaning that the school maintained a positive cash balance. Market means school leaders' focus on their school's place within the private school marketplace and meeting the values, demands, and expectations of current and prospective families. Finally, leadership and resilience refer to leaders' unique challenges operating schools during the COVID-19 pandemic

(including COVID-19 unknowns). This theme includes pandemic issues related to school resilience, including staffing issues, the potential for significant outbreaks, mitigation strategies, technology issues, and emotional challenges.

The semi-structured interviews provided the views of Catholic school leaders on their institutions, the pandemic, PPP loans, and the possibility of school closure. School leaders responded to some open-ended questions with multiple responses. The key findings of the semi-structured interviews are presented in Table 39.

Table 39*Semi-Structured Interview Results*

Category	Response (# of Responses of 10 School Leaders)	%
Strengths of School (Multiple responses permitted – top 4 responses)	Mission (9/10)	90%
	Sense of Community (7/10)	70%
	Student Academic Achievement (6/10)	60%
	Faculty (5/10)	50%
School Demographics	Majority White/10-20% Minority with Socioeconomic Diversity (5/10)	50%
	Majority Hispanic/high poverty (3/10)	30%
	Majority White/40% minority (1/10)	10%
	Majority Minority/Socioeconomic diversity (1/10)	10%
Enrollment Trends (in years prior to pandemic)	Increasing enrollment (2/10)	20%
	Stable enrollment (1/10)	10%
	Decline (7/10)	70%
COVID-19 Challenges (Multiple responses permitted; top 4 included)	Enrollment in spring and summer 2020 (6/10)	60%
	COVID-19 Teaching/Technology (6/10)	60%
	Staffing (5/10)	50%
	Financial (4/10)	40%
Concerned over permanent school closure?	Not concerned (7/10)	70%
	Yes, concerned (2/10)	20%
	School closed winter 2020	10%
How did you hear about PPP? (Multiple responses permitted and tallied)	Diocesan official (8/10)	80%
	Media (2/10)	20%
	Acquaintance (1/10)	10%
Did you apply for PPP?	Yes (10/10)	100%
Why did you apply for PPP?	Good opportunity for school (7/10)	70%
	School really needed the money (2/10)	20%
	Cover expenses related to school closing (1/10)	10%
How did you use PPP funds (multiple responses permitted; top 3 reported)	Cash reserves/endowment (9/10)	90%
	Renovations (5/10)	50%
	COVID-19 Equipment (5/10)	50%
Did PPP help school open for business (remain in operation)?	Yes (2/10)	20%
	No (7/10)	70%
	Reconsidered closing; too late (1/10)	10%
Did PPP help school open for in-person learning September 2020?	Yes (6/9)	66.7%
	No (3/9)	33.3%
	1 n/a; school closed after 2019-2020 school year	
How is school positioned going forward (open-ended)?	Well-positioned for future (9/9)	100%
	Leader cited balanced budget (9/9)	100%
	1 n/a; school closed	

Note. COVID-19 = Coronavirus Disease of 2019. PPP = Paycheck Protection Program.

Qualitative Findings

Findings for Research Question 3

3. What are the perceptions of Catholic school leaders regarding the impact of COVID-19 pandemic and receiving PPP aid on Catholic schools' viability?

a. What are the reasons for acceptance/rejection of PPP aid among Catholic school leaders?

School leaders in the qualitative sample indicated an overall enthusiasm for the simple design and access of the PPP program with varying degrees of motivations and underlying contexts for usage. First, 100% of leaders' schools applied for and received a PPP loan. Seven of 10 (70%) in the sample noted that the PPP loans represented a good opportunity for their school in a time of uncertainty and turmoil to receive federal government money with very few regulatory requirements attached. Enrollment declines from recent years and when schools went online in March 2020, coupled with uncertainty regarding Fall 2020 instruction, created a tumultuous admissions and retention environment from Spring 2020 to mid-Summer 2020. Furthermore, the program's design of a forgivable loan distributed through a bank was simple compared to other federal and state aid applications and distribution criteria. Finally, two leaders (20%) said PPP was critical to the school remaining open for business.

The Voucher Precedent to PPP

The debate over, and experience with, vouchers among Catholic schools suggested that participation in PPP and public funding might generate a spirited discussion over federal encroachment, the stigma of needing federal aid, or a potential decline in fundraising given school community members' recognition of the increase in public dollars (Burke, 2012; Cattaro, 2003; Hungerman et al., 2019; O'Keefe & Goldschmidt, 2014). While the design of PPP was

different from state vouchers (which are provided directly to parents), the prospect of a new federal program appeared to present the opportunity for a broader debate about the efficacy of accessing PPP loans. Given the financial turmoil, health policy exigencies, and careful federal crafting of friendly rules for religious institutions, however, school leaders' language indicated that little debate occurred regarding whether to apply for and access the PPP loans (Federal Register, 2020).

Margin and PPP: "Let's get the money."

Catholic school leaders understood the PPP loan application and acceptance as a straightforward decision considering the program's flexible design and impact on their bottom line. Amid financial turmoil, school leaders focused on their margin. Regarding applying for a PPP loan, one school leader explained succinctly, "If they were gonna give it, we were gonna get it." A second principal explained his school's decision-making: "We need to take it. No debate. I think the reason for that is [that] it was freely offered. At that time, we weren't really sure what the impact on enrollment would be." Third, a principal observed, "We needed it. We didn't have any money in the bank." Elaborating further, the principal asked, "Was there a reason why schools wouldn't go after it?" Fourth, an elementary school principal argued:

It wasn't much of a debate. I mean the amount of money was, you know, pretty significant...the archdiocese was pretty emphatic that you apply for this [PPP]...there really are not a heck of a lot of strings attached to it.

Fifth, an elementary school principal said, "I mean collectively, as an admin team, we were like, there's nothing to lose here. We have to go for this." Finally, a high school president in a large city noted the opportunity PPP represented: "This is priority number one. Let's get the money."

Underlying Factors

Underlying factors set the context for this qualitative sample's 100% participation in PPP loans. For example, eight of 10 (80%) school leaders heard about PPP's availability to Catholic schools through their dioceses' Catholic school office, which was a trusted source. The dioceses and consortiums to which some schools belonged provided information and financial coaching about the PPP process.

Margin: Enrollment and Revenue Concerns

In the spring of 2020, 7 of 10 (70%) school leaders experienced enrollment declines as their schools switched to government-mandated remote learning and society shut down. One school decided to permanently close a couple of months prior to the pandemic, and PPP helped pay salaries as some parents stopped paying tuition during remote instruction. These Spring 2020 enrollment declines occurred after 3 years of widespread overall declines. In the large quantitative sample and this sample of leaders, Catholic schools experienced declining enrollment in the three years from 2016-2017 to the 2019-2020 pandemic year. In the spring and summer of 2020, the initial phase of the pandemic demonstrated the enrollment challenges some Catholic schools faced, given the uncertainties of instructional delivery. For example, one grammar school in a large affluent suburb serving a majority White population saw an enrollment drop of 16% from the 2019-2020 academic year to re-enrollment in July 2020. Another principal of a grammar school in a large suburb serving a majority Hispanic population reported a drop of 18.6% from the 2019-2020 enrollment. Finally, a high school principal serving a majority White population with stable enrollment reported a very small incoming freshman class for Fall 2020.

Mission: “Not backing down.”

One organizational strength of Catholic schools has been a unifying ideology of Gospel values and Catholic social teachings that serves as the community’s glue and informs the values of the curriculum (Bryk et al., 1993). The unique mission of Catholic schools represented an important theme for school leaders in explaining their school community and actions.

Unprompted, 9 of 10 (90%) school leaders professed a deep commitment to the mission of their school to educate children within the tradition of Catholic teachings. These leaders felt a strong sense of carrying out their mission in person while also recognizing the practical reality that tuition revenue might decline if they did not meet family expectations connected to tuition.

Related to their school’s mission, three school leaders serving Hispanic students in high-poverty neighborhoods recognized the importance of providing a safe place for the students to come to school, receive a meal, and serve as daycare for their parents. PPP provided a backstop to these schools. One grammar school principal serving a Hispanic population summed up her school’s mission and how it related to offering in-person instruction during the pandemic:

The mission of the school here, which is ...in one of the highest poverty areas in [Northeastern State], and our mission is to through faith to uplift our students and get them up and out of poverty... We live that mission daily. The staff we have, the board of trustees...it’s everyone together... We served the community. We didn’t just survive. We were here for our families, and we set that example of service.... Your child can come here. They’ll be safe. They’ll be fed. They’ll be educated. And we’re all afraid. But these teachers are going to stand up here every day in front of these children, and with their masks on, and all their equipment and they’re going to face this pandemic. And they’re not backing down.

Market and Mission: “They weren’t gonna stay for that.”

As Catholic school leaders assessed plans for the fall of 2020, it became clear that some parents would be resistant to paying tuition for remote-only instruction, particularly for young students who would be less capable of accessing online instruction. The private school market called for a learning model beyond remote instruction. Generally speaking, Catholic schools were *more open* than their public school peer institutions. While it is true that Catholic school leaders and educators draw upon a tradition of being present as a community, it also appears true that serving the mission and market were two sides of the same coin (Bryk et al., 1993; McGreevy, 1996). As the principal of a majority White elementary school in a large city observed:

I think if we had made a different decision ...you know, I think that might have been a much different outcome for us. You know, I just don’t think families would have invested the tuition money for a fully remote program.

Another principal of a majority Hispanic elementary school summarized the close relationship between mission and market:

Coming back [from the government shutdown], we realized being remote did not serve our pre-K and our Kindergarten parents because they weren’t gonna stay for that. And I don’t blame them. So we ...just made a decision: We’re gonna bring the little ones back and we’re gonna take our chances and we’re gonna do everything possible COVID safety-wise...and that’s driven by mission, of course, to serve, and it’s also driven by the needs of our parents because our parents are those first line workers, you know, they’re working in service and industries. They desperately need to be at work and make the

money. So we need to provide that service to have the school open and have a place for them to send their children.

While Catholic school leaders took steps to install COVID protocols and enforced them with vigilance, the enterprise resembled a confidence game and a leap of faith. After creating and sharing videos over the summer with parents to explain the re-opening plan, one principal of a majority White, middle-class elementary school explained:

These parents feel super confident about, “This is what your classroom is going to look like when you come back. And this is [how] drop is going to be different.” Feeling inside, I have no idea if it’s gonna work. But we’re gonna do the best we can, you know. It’s right, I think, as a leader ... it’s that feeling of, God, I have this plan, and I hope it works, and I just have to, on the outside, remain super confident that it [will]. But inside, I’m like dying, hoping that it does.

The principal of a large, financially stable high school recalled discussing the need to educate students in-person but also considering the consequences of a potential outbreak and “not being the super spreader.” He observed:

The first thing we’re thinking of is, what if somebody dies? You know, and ultimately that’s a decision we made, and that’s on us. And so at that stage, you’re trying to maximize what we could do and do it safely but also be really cognizant of the point [that] for the wrong teacher, there was no safeguard, and if the wrong person got sick, they could be in trouble...I think those are the types of things we had to think about as responsible community members, too. Part of our mission, too, I mean that’s part of our mission as Catholic schools.

Margin: PPP Design and Access

Finally, eight of ten school leaders (80%) reported that the PPP program was relatively straightforward and easy for their schools to access and use. All school leaders used an existing banking relationship. Considering 78.8% of loans were taken out by firms with less than 10 employees (Faulkender et al., 2021), even modest Catholic grammar schools ranked among the top 20% of PPP recipients in terms of employees supported. Large Catholic high schools (700 to 1500 students) placed in the top tier of PPP recipients for the mean value of PPP loans. While some businesses struggled to access PPP, Catholic school leaders' organizations were often big enough to rely on existing infrastructure to ensure a successful loan application and receipt. This financial support included banking relationships, a business manager (sometimes part-time in K-8 schools), existing credit lines, and school boards. For example, one K-8 principal in a large suburb of a large city noted that the president of the bank they used for the PPP loan was on the school's finance committee. Noting his school's banking industry ties, another high school leader in a large city observed that his school had a "successful board" made up of members with "decades in this business."

3b.) Was PPP an important factor in the viability (open/closed) of Catholic schools?

Immediate Viability

Among school leaders, 20% indicated that using PPP was an important factor in the immediate viability of their school (2020-21) and 80% indicated PPP was a contributing factor to long-term viability through boosting cash reserves and endowments. One school decided to close permanently a couple of months before the pandemic but accessed PPP to pay its staff. Initial studies of COVID-19 economic impacts and PPP suggest the federal forgivable loans boosted confidence by providing a safety net for small businesses experiencing a cash crunch while also

allowing leaders to boost their cash reserves during a crisis (Faulkender et al., 2021; Granja et al., 2020). The qualitative sample of school leaders suggests they and their schools behaved in a similar fashion.

Margin and School Survival: “We didn’t have any money in the bank.”

The theme of margin explains the mindset of school leaders toward balancing their budget and creating stable enrollment. Catholic school leaders focus on enrollment to stay in the black. Even stable Catholic schools live in a marketplace and must rely on tuition revenue to endure. Whether uncertain about the future or facing substantial budget shortfalls, Catholic school leaders recognized PPP loans as an essential revenue source for Catholic schools. First, 2 of 10 (20%) school leaders explicitly said their school would have closed without the PPP loan. One leader in a school serving a majority Hispanic population in a large city described a grim situation in which school officials discussed closure options. When asked about the decision to take out the PPP loan, the principal said, “We needed it. We didn’t have any money in the bank. And we thought at the time it was the best thing to do... Without a doubt, I mean, we would not have made it without it [PPP loan].”

The PPP loan allowed this school serving students at the poverty level to stabilize. Additional donors played a role, as well. The principal explained what it was like to operate a school considering closure: “There were times in that April stretch of 2020 that we were wondering how we’re going to pay our faculty. Yeah, it was pretty dire.” Although the school still faces challenges, the budget is now balanced, and student enrollment has begun to climb.

A school leader in a large city suburb indicated that PPP was an important factor in the preK-8 school’s ability to remain open. Permanent school closure “was a 100% genuine concern because, I think, at the end of the [2020] school year, we did have some families that chose not to

re-enroll not knowing what the future was going to hold.” The principal continued, “I actually said to [my spouse] at one point, I’m going to ...close the school.”

Leadership and Resilience: “Good fights are worth it.”

Although the suburban principal’s school averted closure, PPP provided an infusion of funds that allowed her to focus on serving the school’s faculty, students, and families. After enrollment bottomed out in the early summer of 2020, the school’s prospects improved. Through meeting the needs of families with full-time education during the pandemic in Fall 2020, however, the principal explained that the school’s enrollment increased in 2020-2021 and 2021-2022. The enrollment for 2022-2023 was projected to rise approximately 25% from the pandemic low. The PPP loans seemed to have provided a cushion that allowed the principal and her school community to demonstrate their resilience by addressing the challenges of operating in-person during the pandemic. The principal invested energy into the school’s academic, social, and emotional needs during the pandemic. Even with PPP loans, the experience posed significant challenges. The principal reflected on this searing professional experience:

Being a principal during this pandemic by far has been the most difficult challenge of my entire life, and I’m just (being) very honest and forthcoming...It’s just the mentality of, you know, you gotta dig in, and you gotta just keep fighting. You gotta keep fighting, fighting and...good fights are worth it, you know...someday, like I said, I’m still not there yet, but someday I’m sure when I sit down, when I’m able to sit and really relax and take a breath as to what we’ve accomplished...It’s pretty amazing, you know, the emotional piece of it...I think we could only have gotten through this with the mentality of everyone involved, that together we are one. Everyone has to step up...Everybody has

to be willing to do what it takes to be successful. My own family helped out. We were here 9 o'clock at night, sometimes, packing up classrooms.

Margin: "I could sense from my pastor. He didn't want the school."

Margin and leadership and resilience are critical for survival. One principal of a suburban, majority-minority elementary school led a school that had declined in enrollment by 30% in the three years prior to 2019-2020. The principal believed the school was viable when comparing the institution's enrollment to peer schools. The principal described the challenge of sharing leadership with a pastor who was a spiritual man but was less connected with students and burdened by multiple churches in the parish. She was proud of the school, which was diverse and boasted strong academics. The pastor handled the finances. "That was his. So he held it tightly," she said.

The principal's situation reflected a familiar scenario: a dual leadership role with the pastor, who holds ultimate authority under Catholic Church canon law but can be an inconsistent manager whom the seminary may not have prepared to run a school (Boyle & Dosen, 2017; Schafer, 2004). Older pastors are more likely to close schools (Brinig & Garnett, 2014). The principal described management challenges that festered, including the pastor's unwillingness to lay off teachers as enrollment contracted over the years. The principal described a meeting with diocesan school officials in the winter of 2020, where she found out they intended to close the school. She recalled:

I remember I could sense from my pastor. He didn't want the school...The pastor was sitting next to me and not saying anything...The pastor has the authority. Yeah, he could have said, I want my school to stay open at least another year...I think we could have fought to keep it open had we had a pastor that was willing to fight the fight.

The principal strongly believed that if the school was going to close, she needed to provide students and faculty time to plan. The announcement of permanent closure was made in the winter of 2020. When COVID hit shortly thereafter, the school applied for PPP to pay teachers' salaries and settle accounts as the school closed. Highlighting the fragile nature of some Catholic schools and the fine line of whether these institutions close or remain open, the principal speculated that PPP could have saved the school.

I think behind closed doors ...the finance manager and the pastor knew that [the school could have remained open after the infusion of PPP funds]. But the announcement was made in January. ...I honestly think we would have been strong enough to reopen in the fall because the PPP would have kept us on board, right, you know, kept us above water.

Long-Term Viability

When discussing the viability of Catholic schools, it is critical to understand the diverse group of Catholic schools nationwide and within the quantitative ($N=1,200$) and qualitative ($n=10$) samples of this study. The ten school leaders demonstrated Catholic schools' financial and institutional diversity in the mid-Atlantic and Northeast. While this study seeks to measure variables important to school survival, these qualitative semi-structured interviews with school leaders found that some Catholic school leaders have thought in a sophisticated and hard-nosed way about long-term school viability. Long-term thinking is part of these leaders' understanding of present reality.

The PPP program further enhanced the viability of schools over the long term by adding funds to cash reserves and endowments. For example, eight of the ten school leaders (80%) said the PPP allowed them to build their cash reserves or endowment to enhance long-term viability and solvency. Furthermore, the president of a Catholic high school serving a majority Hispanic

population reported that while the school considered itself viable with 6 months of cash reserves, funding reallocated because the injection of PPP loans allowed the school's cash reserves to grow to nearly 9 months. While different than businesses, Catholic schools operate in the marketplace and seemed to utilize PPP to shore up their financial moorings consistent with businesses impacted by the pandemic (Faulkender et al., 2021; Granja et al., 2020).

Margin: "In the black"

A high school president in a large city discussed his administrative team's opportunistic and strategic use of the PPP loan. The school serves a metro region, and its long history goes back generations. After successfully leading another Catholic high school, the leader explained that he had been "called back...to ensure the financial future" of his current school by a member of the religious order that founded the school. Building on a modest endowment (single figure millions), this president improved the school's financial position, which now has an endowment and cash reserves totaling in the tens of millions of dollars. The school has run "in the black" for a decade. In describing the approach to using the PPP loan and the funds freed up by the program, the leader observed:

I think we thought and talked about: Let's take it and get forgiveness. If we got there, it's fine. The government's giving away a lot of money. We weren't desperate and it (PPP) probably saved some schools. That wasn't gonna be the case [for us]...[We worked] too hard to get ourselves in order. We certainly debated what amount to take...A couple of the private wealthy schools with their [PPP] money...got lambasted (in the newspaper), you know. They (have) a 150 million dollar endowment. You're taking [PPP] and your students drive ...Lamborghinis to school.

This school leader thoughtfully noted that his school's participation in PPP and the level of spending may have contributed to inflation, but he remained focused on ensuring his school's long-term viability. The endowment provides financial aid so students from struggling families can pay some tuition while receiving significant financial aid. Most importantly, this school leader saw using the funds reallocated because of PPP as a strategic opportunity to enhance the school's financial position for its next leader and future generation of students. The leader's history with the school and its modest roots and financial challenges made securing the institution's financial future personal. He recalled the religious order running the school, borrowing money to meet basic expenses when he was on the faculty in the 1980s.

After ticking off the school's financial position, including tens of millions in endowment and cash reserves, and renovated campus facilities, the school leader observed: "So somebody could screw it up. It's gonna take a while, you know."

School Market: "A state of equilibrium"

School leaders described a whipsaw in enrollment as some families entered the private school marketplace and enrolled in Catholic schools. Four of 10 (40%) of leaders operated Catholic schools in districts that offered remote-only education for approximately 1 year; an additional school resided in a city operating remotely for the fall of 2020. While instruction varied (and sometimes changed with flareups), all Catholic schools (100%) in the qualitative sample offered instruction at least one step beyond the local district, if not more. For instance, if the local district was hybrid, then the Catholic school offered instruction five days a week for all students. If the district was remote, the Catholic school was hybrid.

Enrollment has posed a historic challenge for Catholic school leaders. Seven of 10 (70%) school leaders in the qualitative sample entered the pandemic with declining enrollment; the

qualitative sample averaged an 11.3% decline in the three years leading to the pandemic year of 2019-2020; the 7 schools with enrollment declines averaged a 19% drop. Six of 10 (60%) leaders described enrollment declines from March 2020 through July 2020. Nine of 10 (90%) described enrollment increases from the second half of the summer of 2020 through the 2020-2021 school year.

The experience of one school leader may prove insightful for Catholic schools that have not built significant endowments and reserves. The principal's suburban grammar school experienced an enrollment decline totaling 25% in the 3 years leading up to the pandemic. From March 2020 to July 2020, enrollment declined an additional 16% as some parents declined to pay for remote education, and families withheld registration as Fall 2020 remained uncertain. The principal believed his school would not close and could open without PPP, but the PPP loan allowed the school to maintain staffing levels and provided a cushion — “money in our back pocket.”

The enrollment decline may have led to layoffs over the summer of 2020. As local districts delayed the start of school and began September 2020 either fully remote or in a hybrid format, this school began the year fully in person. As parents sought to avoid remote and hybrid formats, the school began the 2020-21 school year with an increased enrollment of 20% from July 2020. With a “significant surplus” from the increased enrollment and PPP funds, the school renovated a learning space and recreational area, and upgraded classroom technology. Enrollment increased 9% for 2021-2022 on the positive momentum, according to the principal. For 2022-2023, enrollment was projected to drop, back to its 2019-2020 enrollment. The principal reported: “We’ve experienced a significant drop in enrollment. You know some families decided to go back to public school. But more...people just aren’t coming in the droves

that they once were, you know.” The principal noted the flattering press coverage Catholic schools received during the pandemic but observed that the positive effects of demand for in-person education and PPP may have begun to ebb. The principal observed:

I think we’re already seeing that ... we’re kind of returning to a state of equilibrium in terms of enrollment, and it [enrollment boost] wasn’t as long-lasting as I had hoped it would be. But I think it was kind of a wakeup call with this year’s admissions cycle okay? ... We were the ones that were open when a lot of other schools were closed...My concern is not necessarily with respect to our school, but just Catholic education in general, that maybe a lot of schools that they were kind of on the verge of closing or moving in that direction and they received a little bit of a peak [in enrollment]. My concern is that they’re gonna end up going back down...If a school was really struggling, then you know, I think this may delay its demise, but ultimately, I don’t think it’s gonna prevent its demise in the long term – almost like you might see double dips here.

The COVID-19 pandemic led to the closure of 9.5% of schools in this sample over two years, however, a segment of schools that survived the initial crisis experienced demand and a windfall of funding from PPP. By returning to “a state of equilibrium,” the school leader meant that the increase in demand that some Catholic schools experienced in 2020-2021 and beyond may have dissipated in some areas once public schools returned to normal operations. In some cases, the remote and hybrid instruction in public districts fueled demand for Catholic schools. The state of normal for many Catholic schools in this sample ($N=1,200$) prior to the COVID-19 pandemic consisted of tight budgets, declining enrollment, and an average year-over-year closure rate of 2.75%.

Summary of Findings

I sought a sample of school leaders to build on noteworthy findings in the quantitative phase of the study. The sample accomplished four things: (a) roughly replicated the percentage of schools with declining enrollment, (b) included school leaders serving Hispanic populations, (c) incorporated school leaders of Catholic schools with strong enrollment and financial positions who accessed PPP loans, and (d) provided insight into a school closing and using PPP. In addition, I sought to approximate the diversity in Catholic schools. For example, I avoided including leaders from only one large city or all from one state. The sample consisted of leaders from four states, two large cities, one small city, and several large suburbs with diverse populations.

I purposively included leaders of schools in majority Hispanic neighborhoods because the U.S. Census variable of Hispanic population was statistically significant in a *t*-test ($p < .05$) and the logistic regression. Significantly, one of these three school leaders observed that PPP prevented the permanent closure of his school. In addition, a principal of a suburban Catholic grammar school believed that PPP also saved her school from shuttering. These findings indicate that PPP likely played an important role in the survival of additional Catholic schools throughout the large quantitative sample ($N=1,200$). Reflecting on their knowledge of the Catholic school landscape, two school leaders (20%) alluded to PPP saving other Catholic schools. One leader whose school closed before COVID-19 believed that PPP could have saved her school if the institution had held off on the closure announcement. The remaining schools indicated that PPP played an important role in shoring up their balance sheet, thus positioning them well for the future.

Quantitative and Qualitative Summary

This sequential explanatory mixed methods study collected quantitative data to answer the first two research questions. Next, in the qualitative phase, ten Catholic school leaders were interviewed regarding their experience during the pandemic to answer the third research question. Chapter 4 presents the findings of both the quantitative and qualitative phases of this study. These findings will be further analyzed in Chapter 5, considering the quantitative and qualitative phases and the literature pertaining to the questions and topic.

The purpose of this study was to analyze the experience of Catholic schools and their leaders during the pandemic during the academic years of 2019-2021. I sought to identify significant predictor variables related to school closure and analyze the new variable of PPP federal loans by answering these three questions:

1. What are the characteristics of surviving Catholic schools (size, type, location, income by census tract, demographics, change in enrollment, use of PPP loans, size of PPP aid) compared with Catholic schools that closed during the coronavirus pandemic (2019-2020 to 2020-2021)?
2. What was the influence of PPP on Catholic schools' survivability during the coronavirus pandemic related to the following issues:
 - a.) What percentage of Catholic schools accessed PPP aid?
 - b.) How was the PPP aid distributed among Catholic schools as measured by geography (city, suburban, town, rural; states), demographics (majority minority), income in school community, and school enrollment trends: increasing (4% or more), steady ($\pm 3\%$), decreasing (4% or more) from 2016-2017 to 2019-2020?

- c.) During the pandemic, what variables, including PPP, were associated with Catholic school closure? What variables predicted survival?
- 3. What are the perceptions of Catholic school leaders regarding the impact of the COVID-19 pandemic and receiving PPP aid on Catholic school viability?
 - a.) What are the reasons for acceptance/rejection of PPP among Catholic school leaders?
 - b.) Was PPP an important factor in the viability (open/closed) of Catholic schools?

CHAPTER 5

RECOMMENDATIONS

The findings in this study add to the literature on Catholic school resilience and closure, the experience of school leaders during the pandemic, and the Paycheck Protection Program's (PPP) impact on private schools. This chapter will summarize the findings of this explanatory sequential mixed methods study and analyze the findings in relation to the extant literature associated with Catholic schools, Catholic school closure, and the PPP loan program. These findings will then inform policy recommendations regarding public aid to nonprofits, at-risk Catholic schools, and the Hispanic population. Finally, several recommendations for future research on Catholic schools and school closures will follow.

Summary of Findings

Research Question #1

What are the characteristics of surviving Catholic schools (size, type, location, income by census tract, demographics, change in enrollment, use of PPP loans, size of PPP aid) compared with Catholic schools that closed during the COVID-19 pandemic (2019-2020 to 2020-2021)?

During the 2 years of 2019-2020 and 2020-2021, 9.5% of Catholic Schools in the mid-Atlantic and Northeast closed. Catholic schools that survived the COVID-19 pandemic exhibited distinctly different characteristics than schools that closed. Catholic schools that closed experienced smaller enrollments, larger enrollment declines (2016-2019), tended to be

elementary schools, used smaller PPP loans, and were in census tracts with a larger Hispanic population.

Additional demographic variables (Black, White, Median Household Income) did not evidence large differences between open and closed schools. School closures occurred consistently throughout geographic locales (city, suburban, town, rural) in a manner stable with sample distribution. Relatively minor differences occurred in state closure rates compared to the sample closure rate of 9.5% over the 2 years: 10.8% and 14.7% of schools in New York and Connecticut, respectively, closed within the sample ($N=1,200$).

Research Question #2

What was the influence of PPP on Catholic schools' survivability during the coronavirus related to the following issues:

a.) What percentage of Catholic schools accessed PPP aid?

For schools where the loan status could be determined, 94.0% ($n=957$) applied for and utilized PPP loans compared with 6.0% ($n=61$) that declined PPP loans. Among Catholic schools for which it could be determined, 25.6% ($n=261$) applied for and received a second draw loan in 2021 ($n=917$). The second draw process included more restrictions, including requiring applicants to demonstrate a 25% decline in annual revenue or during a corresponding quarter from 2019 to 2020 (Arora, 2021). The mean PPP total loans per school in the sample was \$516,549, and the total amount of PPP loans assigned to an individual school was \$525,868,090.

b.) How was the PPP aid distributed among Catholic schools as measured by geography (city, suburban, town, rural; states), demographics (Black and Hispanic communities), income in school community, and school enrollment trends: increasing (4% or more),

steady (negative 3% to positive 3%), decreasing (4% or more) from 2016-2017 to 2019-2020?

Geography. Catholic schools applied for and used PPP loans in large percentages across geographic locales: rural (83.3%), town (85.2%), suburban (93.5%), and city (96.4%). The mean PPP loan size distribution by school across states varied, with New York (\$675,290) and Maryland (\$658,607) ranking first and second in mean total PPP loan size. Maryland ranked first in mean enrollment (392) and New York second (309); however, New York schools used the second draw of PPP (43.8%) at a significantly larger rate than that of Maryland (4.8%).

Demographics and PPP Loan Distribution. The mean PPP loans for schools generally increased as the percentage of the minority population in their census tract increased. For example, the mean PPP loan increased as the Black population increased in schools' census tracts: (a) \$502,748 (0-25% Black), (b) \$583,555 (26-50% Black), (c) \$602,516 (51-75% Black), and (d) 797,796 (76-100% Black). The mean PPP loan mostly increased as the Hispanic population increased in schools' census tract with a decline in census tracts with the highest Hispanic population: (a) \$513,358 (0-25% Hispanic), (b) \$523,233 (26-50% Hispanic), (c) 560,835 (51-75% Hispanic, and (d) \$509,080 (76-100% Hispanic). In comparison, the PPP loan means in school census tracts declined as the White population increased: (a) \$807,224 (0-25% White), (b) \$550, 338 (26-50% White), (c) \$568,287 (51-75% White), and (d) \$464,773 (76-100%).

In addition, as the Black and Hispanic populations increased, the schools in these census tracts became increasingly concentrated in city locales, and the median household income declined. Furthermore, the median enrollment of the schools consistently increased as the Black population increased. Finally, the median enrollment of the schools generally increased as the

Hispanic population increased (the exception would be census tracts with a Hispanic population of 51% to 75%).

The mean PPP total loan generally increased consistently with the percentage of Black and Hispanic Population in schools' census tracts. These increases in PPP loans also corresponded with larger enrollments, greater concentration of schools in city locales with decreasing incomes, and generally increased access to PPP second draw loans.

Income Trends and PPP Loan Distribution. The Catholic schools in the census tracts with the largest Median Household Income generally received the largest mean PPP loans. For example, the schools in census tracts with larger income brackets experienced larger mean PPP loans: (a) \$50,000 to \$74,999 (mean PPP loan of \$459,594), (b) \$75,000 to \$99,999 (mean PPP loan of \$509,246), (c) \$100,000 to \$149,999 (mean PPP loan of \$624,807), and (d) \$150,000 to \$199,999 (mean PPP loan of \$866,757).

Enrollment Trends and PPP Loan Distribution. Catholic schools' access and usage of PPP loans were similar regardless of enrollment trends: (a) 95.1% accepted PPP in schools experiencing declining enrollment of -4% or more, (b) 93.2% accepted PPP in stable schools ($\pm 3\%$ enrollment), and (c) 95.2% accepted PPP in schools exhibiting increasing enrollment of 4% or more). The mean size of the PPP loan varied across enrollment trends with stable enrollments receiving the largest mean loans: (a) mean PPP loan of \$481,723 in schools with declining enrollment of -4% or more, (b) mean PPP loan of \$784,581 in stable schools ($\pm 3\%$ enrollment), and (c) mean PPP loan of \$480,742 in schools with increasing enrollment of 4% or more.

The size of the PPP loans in each enrollment trend category corresponded with the mean enrollment of schools in each category related to enrollments trends: (a) mean enrollment of 263

in schools with a declining enrollment of -4% or more, (b) mean enrollment of 425 in stable schools ($\pm 3\%$ enrollment), and (c) mean enrollment of 271 in schools with an increasing enrollment of 4% or more.

c.) During the pandemic, what variables, including PPP, were associated with Catholic school closure? What variables predicted survival?

Of the Catholic schools in this sample ($N=1,200$), 114 schools closed, and 1086 remained open. On a percentage basis, 9.5% of Catholic schools in this six-state sample closed, and 90.5% remained open during the 2019-2020 and 2020-2021 academic years.

Catholic schools that close are smaller. Descriptive statistics demonstrate that the median size of closed schools was 162 compared with 302 for schools that survived. For schools that closed, 73% ($n=84$) had enrollments of 200 or fewer. For schools for which it could be determined, only one school with an enrollment of over 400 students closed. Larger Catholic schools in this study generally did not close.

A series of independent t -tests variables compared open and closed schools using key variables. Seven of the 11 comparisons were statistically significant ($p < .05$) in t -tests. The statistically significant variables included PPP Round 1, PPP Round 2, PPP Total, Enrollment 2016, Enrollment 2019, Enrollment Percentage Change (2016 to 2019), and Hispanic population. Effect sizes ranged from a low negative impact (Hispanic at $-.347$) to medium positive impact (Enrollment 2019 at $.609$). No variables had a high effect size ($.8$).

A Chi-Square analysis determined that PreK-8 Catholic schools closed significantly more often than 9-12 high schools. In addition, a Chi-Square analysis determined that a higher percentage of schools accepting PPP loans survived compared with schools that did not apply for and accept PPP loans. This significant finding will be further explored in the discussion section.

A logistic regression model used the variables of PPP Total, Hispanic Population, Enrollment 2016, and Enrollment 2019 to develop a predictive model of school closure. The variables of PPP Round 1, PPP Round 2, and Enrollment Percentage Change (2016-2019) were excluded because of multicollinearity. Median Household Income (MHI) and Childhood poverty were excluded because of their low effect size. The logistical model was statistically significant, explaining 20.9% (Nagelkerke R Square) of the variance in the dependent variable and correctly classified 92.0% of the cases. The model, however, was a weak predictor of school closure. Although the use of PPP was not a strong predictor of school survival, the variables of PPP Round 1, PPP Round 2, and PPP Total were statistically significant. The variable of Hispanic population increasing was the strongest predictor of school closure. The decision to apply for and use PPP and type of school (K-8 or 9-12) were significant in a Chi-Square analysis.

Research Question # 3

What are the perceptions of Catholic school leaders regarding the impact of the COVID-19 pandemic and receiving PPP aid on Catholic schools' viability?

a.) What are the reasons for acceptance/rejection of PPP aid among Catholic school leaders?

The explanatory sequential mixed methods study began with a quantitative phase and used the qualitative phase to clarify and further explain interesting and notable findings. The qualitative interview phase ($n=10$) featured interviews with Catholic school leaders from four states in the sample. The selection of leaders aimed to represent four criteria (though not all in the same leader) for the sample: serving a Hispanic community; experienced school closure; stable to financially strong high school; enrollment decline of 4% or more.

Catholic school leaders (70%) in the qualitative sample believed that PPP loans represented a good opportunity for their schools given the uncertainties surrounding the

COVID-19 pandemic, government-imposed shutdowns, financial market crash, and the economic recession of the spring and summer of 2020. A group of school leaders (20% of qualitative sample) believed that during this time of uncertainty their school would have closed without PPP loans. Furthermore, school leaders believed PPP provided an insurance policy to guard against future shocks and to strengthen their balance sheets considering the economic and health conditions.

b.) *Was PPP an important factor in the viability (open/closed) of Catholic schools?*

The PPP loans were an important factor in the short-term viability of 20% of Catholic schools in the qualitative sample ($n=10$); 20% of school leaders said their school would have permanently closed without PPP loans. In addition, 90% of school leaders said that PPP loans bolstered their cash reserves and endowments, thus furthering the long-term sustainability of Catholic schools. The growth of free cash and investment funds generating revenue for Catholic schools will provide greater flexibility and capacity to withstand future financial shocks and maintain affordability by reducing future tuition increases.

Discussion of Findings

The results of this mixed methods study add to the literature on the condition of Catholic schools, nonprofits' experience during the pandemic, Catholic school closure, and Catholic school leadership views of PPP and school closure. This study presents the most recent, largest, and geographically diverse sample of Catholic school closure, spanning 2 years (September 1, 2019- September 1, 2021) and six states. The sample ($N=1,200$) represents 19.4% of the 6,183 American Catholic schools on the eve of the pandemic in the 2019-2020 school year. Regarding Catholic school enrollment, the sample includes two of the top five states (New York – 2nd, and

Pennsylvania -5th) in 2020 and five (Philadelphia -3rd; New York – 4th; Brooklyn – 8th; Boston 11th; Baltimore 17th) of the largest seventeen dioceses (McDonald & Schultz, 2021).

Characteristics of Surviving and Closed Catholic Schools

One striking finding of this study is the closure rate of 9.5% ($n=114$) in this large sample over a tumultuous 2-year period. It is useful to analyze these results within the context of prior literature focused on Catholic school closure (see Table 40). The annual average closure rate in this study was 4.75% per year. If the closure rate of 2019-2021 persists, fewer than 600 schools of the 1,200 in the sample will remain open in 12 years. This study's average annual closure rate ranks among the highest compared to prior closure studies (Brinig & Garnett, 2014; James et al., 2008; Lundy, 1999; Pandey et al., 2009). Additionally, the open schools in this study are in significantly worse shape than surviving schools in St. Louis in 2005 (James et al., 2008) when comparing the mean three-year enrollment decline rate. In addition, the enrollment of open elementary schools in this study ($n=242$) is lower than that ($n=284$) of James et al. (2008). Finally, the enrollment of closed elementary and high schools in this study ($n=162$) is lower than that of the closed elementary schools ($n=175$) in Chicago in the 1990s (Lundy, 1999), thus demonstrating Catholic schools' decline in the mid-Atlantic and Northeast over the past 30 years.

Table 40*Open and Closed School Data Findings Compared to Published Literature*

Study Findings	Prior Findings	Published Literature
Annual average closure rate: 4.75%	Annual rate 4.6% Annual rate 2.0% Annual rate 1.06%	James et al., 2008 Lundy, 1999 Pandey et al., 2009
Open/Closed Enrollment All Schools Together: 302 Open/162 Closed 9-12: 494 Open/224 Closed PreK-8: 242 Open/151 Closed	Open/Closed Enrollment All Schools Together: 326 Open/167 Closed (national sample) Prek-8: 345 Open/175 Closed (Chicago 1991-1994) 294 Open/134 Closed St. Louis 2000-2005	Pandey et al., 2009 Lundy, 1999 James et al., 2008
3 Year Enrollment % Change Open: -7.8% Closed: -17.8%	St Louis Open: -2.4% Closed: -24.4%	James et al., 2008

Note. Pandey et al. (2009) conducted a broad, national study of private school closure that included a Catholic school subsample that was national.

Catholic Schools and PPP Distribution

New Findings. Since no extant literature exists on Catholic schools and PPP loans, all findings will be new; however, this discussion will apply the economic research on small businesses and PPP loans that have informed this study. First, Catholic school use of PPP loans was substantial at 94%, which exceeds an estimate by the Cleveland Federal Reserve Bank of 76% of businesses accessing PPP loans (Schweitzer & Borowski, 2021). The qualitative findings indicated that 80% of school leaders found out about PPP through their Catholic diocese or

Catholic schools office, suggesting that the cohesiveness of networks among Catholic school communities remains strong (Coleman, 1988).

Modest differences in Catholic schools' use of PPP loans existed among geographic locales. First, the use of PPP loans appeared to decline slightly as locales became less dense: cities (96.4%), suburban (93.5%), rural (85.2%), and towns (83.3%). One possible explanation is that bigger mid-range banks provided more PPP loans than small banks, which might serve Catholic schools in towns and rural locales. The smaller banks may not have possessed the strength of balance sheet and the personnel capacity to provide the loans given the relatively low rate of return (Granja et al., 2020; Volker, 2022).

The application and acceptance of Second Draw PPP loans (January–May 2021) varied by state, with New York (43.8%) and Connecticut (38.2%) using these PPP loans to the greatest extent. In comparison, New Hampshire, Massachusetts, and Maryland were all 10% or below in Second Draw PPP loans. While speculative, one possible explanation is that the usage of PPP loans corresponds with the stubbornness of the enrollment declines experienced from 2019-2022. New York (-8.9%) and Connecticut (-6.7%) experienced the worst enrollment trends from 2020-2022 (Porter-Magee et al., 2022) among the six states in the study. In addition, another possible explanation for the disparity in Second Draw PPP access is that New York and Connecticut were more significantly impacted economically by unemployment. For example, New York experienced the highest unemployment rate (8.6%) among states in this study in January of 2021, when Second Draw PPP loans became available; Connecticut ranked third (7.3%) behind Pennsylvania (7.5%). The slow economic recovery in these states may have diminished tuition revenue and fundraising, thus allowing more Catholic schools to qualify for Second Draw PPP loans (United States Bureau of Labor Statistics, n.d.).

Catholic schools accessed and used PPP loans at similar rates, and in increasing size, as the Black and Hispanic population in the schools' census tracts increased and the median family income decreased. This finding contradicts research indicating that minority-owned businesses faced discrimination in receiving PPP loans, which failed to serve minority communities most in need (Chernenko & Scharfstein, 2022; Kapinos, 2021; Liu & Parilla, 2020). One possible explanation from the qualitative findings is that although 40% of leaders' schools in the sample were in minority-majority neighborhoods, the leaders of the schools were all White.

Alternatively, another explanation could be that the banking officials making the loan may not have known that Catholic schools applying for the PPP loan served a majority-minority population if the school leadership was all or mostly White. The schools also featured well-established banking relationships. Catholic schools must consider their complex historic legacy regarding race and how they serve minority students today (Brinig & Bennett, 2014; McGreevy, 1996; Ospino & Weitzel-O'Neill, 2016); however, the reliance on a largely non-minority leadership structure, counterintuitively, may well have been to the Catholic schools' benefit in leveraging existing business relationships and avoiding any discrimination inherent in the banking system.

Catholic schools with stable enrollment received the largest mean PPP loans (\$784,581). It is important to note that those schools with stable enrollment also exhibited a larger mean enrollment ($n=425$). So, the analysis of PPP and enrollment trends is complicated by enrollment size. Catholic schools with larger enrollments tend to be high schools, which often have more faculty and staff with high salaries (Przygocki, 2004). Considering only one school in the quantitative sample with an enrollment of over 400 closed, it is worth noting the extent to which larger schools with stable enrollments accessed PPP. These findings related to Catholic schools

and PPP loans parallel the literature questioning whether PPP loans reached the small businesses most in need (Bi & Gulati, 2021; Granja et al., 2021). The PPP program was designed to preserve employment in small businesses, thus avoiding bankruptcies. The design of the PPP program prioritized preserving jobs and payroll. Therefore, when operationalized among Catholic schools, the program produced larger loans that corresponded with more faculty and higher salaries. Larger enrollments likely corresponded with more staff, better salaries, and larger PPP loans. This finding was confirmed in the qualitative interviews, where 70% of school leaders articulated that PPP was not critical to their school's pandemic-era survival. Some Catholic school leaders utilized the PPP program and opportunistically exploited the loose regulations controlling it. In the qualitative findings, 90% of Catholic school leaders said they used PPP loans to enhance their balance sheet thus confirming a finding from research on small businesses (Faulkender et al., 2021). Given the narrative of decline Catholic schools have faced for decades, Catholic school leaders took an opportunity to enhance their financial prospects and long-term viability by building cash reserves and strengthening their endowments while insulating themselves from potential unknown economic shocks (Faulkender et al., 2021).

Finally, a significant number of Catholic schools (25.6%) for which it could be determined utilized the second draw of PPP loans. The second round of PPP included more restrictive terms, requiring applicants to certify a 25% decline in revenue year-over-year, or from one quarter in 2020 corresponding with 2019. Access to the second draw PPP loans generally expanded as the Black or Hispanic census tract population increased, median family income decreased, and schools became centered in cities most affected economically by the lockdown. Given the likely demographics of institutions in the quantitative sample and the self-reported demographics and socioeconomic status of schools in the qualitative sample, the general increase

in second draw PPP loans suggests that Catholic schools used the program as intended. Twenty percent of school leaders in the qualitative sample accessed second draw loans, and they led schools serving a majority-minority, high-poverty population whose parents were often frontline workers impacted by COVID-19 shutdowns. The second draw PPP loans were intended to serve underserved communities better, and these findings suggest the goal was accomplished for Catholic schools thus confirming economic research (Fairlie & Fossen, 2022).

Catholic School Closure

Findings Confirming Prior Literature. An analysis of Catholic school closure identified key variables from the literature that were tested in the current study.

School type (grammar and high school) demonstrated that grammar schools continue to be at a more significant risk of closure than high schools (McDonald & Schultz, 2021). Furthermore, school-level enrollment continues to be a critical variable related to school closure. In past studies, enrollment has served as a proxy for institutional performance and market demand (Pandey et al., 2009). In this study, larger enrollment led to a declining closure rate, with school failure largely concentrated in schools with enrollments below 200 (73.6% of closures in this study; $n=84$).

Multiple derivations of enrollment variables (one year before closure; three years before closure; enrollment percentage decline) proved statistically significant in relation to closure in t-tests ($p < .05$). These findings confirm prior Catholic school closure studies focused on elementary schools in Chicago and St Louis (James et al., 2008; Lundy, 1999). The findings also confirm a larger-scale study of private schools that included a substantial ($n=909$) subsample of Catholic schools (Pandey et al., 2009). The confirmation that these variables continue to be important in this study of the COVID-19 era is alarming for those who care about the continued

viability of Catholic schools because the Chicago and St. Louis studies centered on large urban dioceses facing closure challenges. This study focused on six states, including small cities, mid-range cities, large cities, large suburban areas, and rural counties, thus representing continued, broad decline in enrollment. Moreover, closure rates were not significantly different throughout geographic locales. The NCES assigns schools to four geographic locales: city, suburban, town, and rural. The closure rates for each locale follow: city (9.5%), suburban (9%), town (12.4%), and rural (11.9%). Most closures (99 of 114) took place in cities (n=45) and suburbs (n=54). For perspective, four of the states in the sample (NY, PA, CT, MA) ranked in the top seven for Catholic closures over 25 years ago (O’Keefe, 2000) thus demonstrating the persistence of the problem. In addition, the region of New York and Pennsylvania experienced significant closures after the 2008-2009 Great Recession, however, that wave of additional consolidation clearly did not stabilize enrollment (Porter-Magee et al., 2022). Northeast Catholic schools continue to exhibit significant fragility over decades and have yet to reach a market equilibrium.

The Hispanic population in census tracts was significantly related to school closure thus confirming prior analysis of school closings (Brinig & Garnett, 2014; Dills & Hernandez-Julian, 2012). The Hispanic population was also the best predictor in this study’s binary logistic regression model focused on variables predicting Catholic school closure. This finding confirms literature highlighting the challenges for the Catholic Church and its institutions. The leadership structure of the Catholic Church is largely White; however, the Hispanic membership of the Church reflects the growth of the U.S. Hispanic population. Most Hispanics are Catholic; however, Catholic schools serve Hispanic children at a much lower rate than their population. The leaders of the schools in the qualitative sample were 100% White, including three serving majority Hispanic schools and one a majority-minority school. As Catholic schools in the mid-

Atlantic and Northeast face enrollment challenges, the growing Hispanic population provides new opportunities for enrollment if schools can embrace and attract the population. Beyond the challenge of increasing tuition for an emerging, often immigrant population in the Northeast, Catholic schools face several challenges in recruiting this population, including increasing tuition, limited outreach, and few self-identified Hispanic teachers (16%) and leaders (14%) (Ospino & Weitzel-O'Neill, 2016). Three leaders (30%) interviewed for this study understood that their mission was to provide a lifeline for Hispanic families during the pandemic through in-person instruction. Illustrative of this impulse, one school leader in a Hispanic-serving school said, "For our population, particularly the social-emotional aspect, we said, 'They need to be greeted by somebody who's going to acknowledge their name, acknowledge their presence, acknowledge their humanness.'" Despite these efforts, descriptive statistics demonstrated Catholic schools in census tracts with a Hispanic population larger than the national average (18%) closed at a rate of 16.8% from 2019-2021 compared to an overall closure rate of 9.5% in the quantitative sample ($N=1,200$). Among the 114 school closures, 43% ($n=50$) occurred in census tracts with a Hispanic population larger than the sample's mean (13.7%).

Findings Contradicting Prior Literature. Several findings related to school closure contradicted prior literature. First, the percentage of the Black population in school census tracts was not related to school closure (Brinig & Garnett, 2014; O'Keefe, 2000). The complex historical relationship between the Catholic Church and race has been described as "hopeful and discouraging" (McGreevy, 1996, p. 5). Catholic schools have alternatively served as engines of opportunity for Black families in inner cities and flight schools for the White working class during the era of forced busing (McGreevy, 1996; O'Toole, 2008). Researchers have credited Catholic schools with providing strong educational opportunities for urban Black students since

the late 1970s, but Catholic schools in diverse cities have been closing for a generation (Brinig & Garnett, 2014; Coleman et al., 1982a; Greeley, 2017; Lundy, 1999). The past association of increasing Black population in census tracts and closing Catholic schools can be attributed to White flight and inner-city Catholic schools' inability to adapt to serving new populations (McGreevy, 1996). The lack of school closure associated with increasing Black population in this study could indicate that after two generations of serving African American students, the Catholic Church's relationship with the Black population has become less fraught. Alternatively, the quantitative findings indicate that fewer Catholic elementary schools (the most likely to close) exist in cities (36.9%) compared to suburbs (52.1%), suggesting that a good many Catholic schools in neighborhoods with transitioning populations sadly have already closed.

The finding that median household income is not associated with school closure also contradicts prior research (James et al., 2008). The difference in median household income in open and closed schools in this study was not significant. Most schools closed in census tracts with median household incomes of \$50,000 to \$150,000, which can be understood as middle to upper middle class in the mid-Atlantic and Northeast. These income brackets (\$50,000 to \$150,000) represented 69.9% ($n=839$) of school census tracts in the quantitative sample ($N=1,200$) and 69.3% ($n=79$) of the school closures.

New Findings. In a related finding, Catholic school closure was distributed consistently throughout NCES geographic locales: city, suburban, town, rural. While prior studies focused on school closures' impact on cities, urban neighborhoods' social fabric, and large urban dioceses, this study of the mid-Atlantic and Northeast makes clear that Catholic schools are closing *everywhere*, including middle class and upper middle-class communities (Brinig & Garnett, 2014; CARA, 2006; James et al., 2008; Lundy, 1999; O'Keefe, 2000). As middle-class families

have failed to see their incomes rise, they have enrolled in private schools in declining numbers creating a smaller, more affluent market for these schools. Approximately one quarter (24.5%) of Catholic schools closed in census tracts with median household incomes of \$100,000 or more, suggesting that the warnings of the unsustainable rise in tuition from over 15 years ago have begun to come to fruition (Huber, 2007; Murnane & Reardon, 2018). Finally, median household income and childhood poverty in census tracts were not statistically significant variables related to school closure ($p < .05$), thus confirming that Catholic school closure in the mid-Atlantic and Northeast is a phenomenon taking place in geographically diverse locales, not limited solely to neighborhoods with challenging socioeconomic circumstances.

Limits of Variables in Logistic Regression. The use of PPP (and related PPP variables) was associated with Catholic school survival status in a significant way in t -tests ($p < .000$), but it was not a strong predictor in the logistic regression model focused on school closure. Despite press reports indicating widespread Catholic school usage of PPP in dioceses like Boston, I theorized that PPP usage would vary by diocese, geographic region, and state. This judgement was informed by literature noting that Catholic schools are largely site-managed, independent entities with a lack of centralized cohesion (Neumerski & Cohen, 2019; Uhl, 2020). In addition, the prior debate over public money for vouchers suggested the presence of principled internal Catholic opposition to public money because of the threat of increased regulations and potential harm to fundraising (Bryk et al., 1993; Burke, 2012; Catarro, 2003; Hungerman et al., 2019; United States Conference of Catholic Bishops, 2019). Those assumptions were wrong. In schools where it could be determined, Catholic school use of PPP reached 94% with similar numbers across regions, states, and varied socioeconomic census tracts. Despite the infusion of nearly \$600 million in federal money to Catholic schools in 2020 and 2021 (\$582,708,638 in

PPP for individual schools and collaboratives), the variable of PPP was not highly predictive of Catholic school closure. This finding was surprising.

The variable of PPP Total may not have been too heavily correlated with the dependent variable (school closure) because 94% of schools in the quantitative sample used PPP loans. The predictive nature of PPP was diluted because such a large percentage of schools used PPP loans.

Findings Related to Theoretical Framework. As noted in Chapter 1, the first contextual narrative identified characteristics in the literature that recognized Catholic schools as effective educational institutions. In the qualitative findings, 100% of school leaders identified the market orientation and mission of Catholic schools as important and 60% of leaders identified student academic achievement as an essential feature of their school. Aside from these findings, this contextual narrative was almost exclusively theoretical.

The second contextual narrative of the theoretical framework noted underlying factors and variables related to the decline of Catholic schools. A number of these factors were confirmed in the qualitative and quantitative findings. First, the school that closed was in a town with increased public school investment (Dinerstein & Smith, 2015), experienced declining religious staff (Ebaugh et al., 1996; McGreevy, 1996), and was led by a pastor with a weak commitment to the school (Boyle & Dosen, 2017; Schafer, 2004; Simonds et al., 2021). Additionally, several key variables were statistically significant regarding Catholic school decline and closure. First, changing demographics in the case of increased Hispanic population was found to be a statistically significant ($p < .05$) variable related to school closure (Brinig & Garnett, 2014; Dills & Hernandez-Julian, 2012). The Black population, White population, median household income, and childhood poverty were not related to school closure. Second, school enrollment (2019-2020 and 2016-2017) and the change in enrollment (2016-2017 to

2019-2020) were statistically significant variables ($p < .05$) related to school closure. Smaller enrollments and larger declines in enrollment were associated with school closure. As previously noted, schools that did not use PPP were also associated in a statistically significant way with school closure. This study identified critical variables associated with Catholic school closure; however, the logistic regression found that these variables explained only 20.9% of the closure phenomenon. The remaining 79.1% of the variability in Catholic school closure was not determined. However, the literature suggests additional variables that may be explored in future research.

Additional Variables Not Explored. I did not explore key variables noted in the theoretical framework's first and second contextual narratives, as well as variables in the literature associated with closure of Catholic schools. For example, I failed to identify a precise and reliable quantitative variable to measure a Catholic school's academic success or reputation. In addition, I did not include the internal financial data (including tuition rates, diocesan subsidies, and parish financial support) used in school closure studies that were assisted and by large dioceses (James et al., 2008; Lundy, 1999). One premise of this study was that enrollment would function as an indicator of both school organizational performance and market position (Pandey et al., 2009). That assumption asked too much of one variable. Although enrollment functioned as a significant variable (in multiple derivations), clearly other variables influence school closure. For example, researchers have identified the variables of crime, the close presence of a charter school, and public school COVID-19 instructional models as important variables that I did not use and may have contributed to this study (Harris & Martinez-Pabon, 2022; Hartney & Finger, 2020; Pandey et al., 2009). Finally, additional variables related to Catholic school closure in the second contextual narrative and school closure studies not

analyzed in this study include the following: school location; Catholic share of local population; age of the pastor associated with an elementary school; incidence of sexual abuse and related publicity; and Catholic Church decline in membership, Mass attendance, and donations (Bottan & Perez-Truglia, 2015; Brinig & Garnett, 2014; Dills & Hernandez-Julian, 2012; Harris & Martinez-Pabon, 2022; Moghtaderi, 2018; Pandey et al., 2009). The following section will consider the role of PPP and leadership as key variables in school closure.

Catholic School Leadership, PPP, and School Viability

New Findings Considering Prior Literature. No extant literature on Catholic schools and PPP exists, nor am I aware of any qualitative research focused on school leaders and closure. Therefore, all findings related to PPP and leadership are new. These findings can be understood considering research on small businesses and PPP loans. In addition, previous school closure studies relied on quantitative methods (Pandey et al., 2009; James et al., 2008). This study is believed to be the first school closure study to use a qualitative sample of school leaders.

PPP Prevented Catholic Schools' Permanent Closure. Considering the quantitative and qualitative findings, PPP prevented the further permanent closure of a cohort of Catholic schools. This finding is significant from a policy perspective. First, PPP's role in keeping Catholic schools solvent and forestalling permanent closure confirms the positive economic impact of PPP loans in the private school sector. Second, the social impact of keeping schools open to provide in-person instruction during the pandemic likely made a significant impact on the lives of students given the evidence that pandemic learning loss widened existing achievement gaps and is correlated with virtual learning (Dorn et al., 2020; Goldhaber et al., 2022).

The finding that PPP alleviated the permanent closure of Catholic schools confirms the economic literature on PPP loans and firm survival as applied to Catholic schools. The

preponderance of quantitative and qualitative data leads to this conclusion. First, 100% of Catholic school leaders in the qualitative sample indicated that their school utilized and applied for PPP loans for their school thus reflecting widespread usage. This confirms quantitative data that 94% of Catholic schools for which it could be determined utilized PPP loans. Second, 90% of school leaders used PPP to shore up their balance sheets and endowments, making leaders more confident about the future thus confirming the economic research finding about business behavior (Barkit et al., 2021; Bartlett & Morse, 2020; Granja et al., 2020; Hubbard & Strain, 2020). Third, 20% of qualitative sample leaders believed PPP stopped their Catholic school's permanent closure. This finding falls in the middle of an estimate from economic literature that PPP increased firm survival by 14% to 30% (Barkit et al., 2021). Fourth, the Chi-Square analysis demonstrated that Catholic schools that used PPP loans survived at a greater rate than those schools that did not use PPP loans. Finally, the *t*-tests of PPP Round 1, Round 2, and Total PPP and the logistic regression affirm the statistical significance of PPP as key variable in keeping Catholic schools open. These quantitative and qualitative findings demonstrate the significance of PPP as a federal government policy intervention that stopped a cohort of Catholic schools in this sample from permanently closing.

The fact that more Catholic schools averted permanent closure during the pandemic because of PPP means that more students were likely to experience in-person instruction during the pandemic. Considering that 20% of leaders in the qualitative sample believed that their school would have shuttered for good without PPP loans, the finding that PPP enhanced Catholic school viability is worth exploring since PPP increased firm survival between 14% to 30% (Barkit et al, 2021). Suppose only half of that 20% amount was correct throughout the quantitative sample (hypothetically, 10% of surviving schools would have closed without PPP).

In that case, an additional 105 schools may have closed (reflecting an overall hypothetical closure rate of 18.2% compared with actual closure rate of 9.5%).

The continued access of families to Catholic schooling during the pandemic will likely have long-term implications for students whose schools survived. Goldhaber et al. (2022) found that students in districts offering hybrid and remote instruction were more likely to experience learning loss during the pandemic, thus widening existing achievement gaps. The qualitative sample found that 100% of Catholic schools in the sample were more open than their counterparts in the local public school district. This qualitative finding confirms prior research (Reyes, 2020) that 92% of Catholic schools operated with in-person instruction in September of 2020 (the remainder included California schools under a mandate). At the same time, only “43% of public schools and 34% of charter schools offered in-person learning” (Porter-Magee et al., 2022, p. 7). While speculative, if we assume that 105 schools may have closed in this study’s quantitative sample without PPP, then approximately 17,000 students were afforded a greater level of learning than they would have been without this federal policy.

PPP and Long-Term Viability. While the quantitative and qualitative findings indicate that PPP prevented school closure for an estimated 10-25% of schools in the sample, it seems likely that PPP also enhanced the long-term sustainability of a subset of Catholic schools. While speculative, the extent to which PPP allowed schools to build cash reserves and enlarge their endowments will strengthen the long-term viability of Catholic schools. Within the qualitative sample, 70% of school leaders were not concerned about permanent closure of the school (10% of leaders closed their school, and 20% believed PPP saved their school from permanent closure). In addition, 90% of school leaders in the qualitative sample reported using PPP for cash reserves and endowments, and 50% used at least a portion of PPP for renovations. Although it is

difficult to quantify, it seems likely that a significant infusion of federal funds fortified the financial position and leadership confidence of schools not in danger of closing.

PPP and Historic Enrollment Decline. A closer analysis of historic closure data for the six states in this study further demonstrates the significant nature of the COVID-19 pandemic's impact on Catholic school closure and the positive effects of PPP loans in mitigating further school closures. A few notes of caution are necessary. This analysis involves different historical periods, varied economic conditions, and some conjecture. To be sure, Catholic schools have experienced persistent historic closure rates. Table 41 details the historical closure and consolidation for states in this study. From 2008-2009 to 2017-2018, the average year-over-year closure percentage for Catholic schools in Maryland, New York, Pennsylvania, Connecticut, Massachusetts, and New Hampshire was 2.75%. The most significant year-over-year closure rate of 4.63% occurred following the 2009-2010 school year, and the lowest rate of 0.57% followed the 2014-2015 school year.

Catholic school declines have been persistent for the six states in this study, according to NCEA-provided data. Catholic schools declined from 1,708 in 2008-2009 to 1,315 in the 2017-2018 academic year. Of the schools closed, 93.8% were elementary schools. The reasons for larger Catholic elementary school closure include diminished resources from sponsoring parishes, demographic shifts out of parish neighborhoods, lack of investment in dated facilities, declining Catholic parish culture, declining baptisms at parishes, and ineffective governance and funding models (CARA, 2006; O'Keefe & Goldschmidt, 2014).

Table 41*Historic NCEA Catholic School Closure (MD, NY, PA, CT, NH) 2008-2018*

Academic Year	Annual % Closed After Each Academic Year	Total Schools in Region	Number of Schools Merged/Closed After Academic Year
2008-2009	3.57%	1708	61
2009-2010	4.63%	1647	73
2010-2011	2.85%	1574	45
2011-2012	4.25%	1529	65
2012-2013	3.34%	1464	49
2013-2014	1.06%	1415	15
2014-2015	0.57%	1400	8
2015-2016	3.01%	1392	42
2016-2017	2.59%	1350	35
2017-2018	1.67%	1315	22
Average	2.75%	n/a	41.5

Note. NCEA = National Catholic Education Association. MD = Maryland, NY = New York, PA = Pennsylvania, CT = Connecticut, MA = Massachusetts, and NH = New Hampshire. Data on total schools in these six states provided by the NCEA.

The Great Recession Comparison. To better understand the influence of the pandemic and PPP on school closure, it is worth comparing this period of economic shock with another period of economic decline: The Great Recession of 2008. A few cautions are necessary. First, the circumstances of the Great Recession and the COVID-19 pandemic were different, with the former resulting from a housing and stock market crash, and the latter from a global pandemic, government-mandated shutdown, and a stock market crash. Second, these conclusions are

speculative in nature. Nonetheless, the Great Recession and COVID-19 both experienced sharp stock market declines, high unemployment, loss of business confidence, and significant economic dislocation (Hubbard & Strain, 2020). As noted, the year-over-year average closure rate for Catholic schools from 2008-2009 to 2017-2018 was 2.75%, according to NCEA data. Table 42 details the differences in school closure rates during the Great Recession and COVID-19. The closure rate of 7.66% in this study following the 2019-2020 school year ranks as the highest closure rate for the six states since 2008. Notably, the annual closure rate declined to 1.98% following 2020-2021, which is 28% below the average year-over-year closure rate from 2008 to 2018. In addition, the year-over-year closure rate during the Great Recession accelerated in the second year, while during COVID-19 the closure rate decelerated significantly. How can this be? One possible explanation involves the policy response. Although the closure rate spiked to 7.66% following the 2019-2020 school year, the quantitative and qualitative findings indicate that PPP helped staunch school closings. However, the design of PPP in assisting with payroll to preserve jobs suggests that PPP became a way for schools that had already announced closure to make sure the school could pay their faculty and staff and close without significant debt. One principal, whose elementary school shuttered, noted that the closure announcement came before COVID-19; however, the school accessed PPP to pay its teachers. In addition, this principal indicated that some parents stopped paying tuition once they knew the school was closing and the school shifted to remote instruction. Although this analysis remains speculative, it appears that PPP was used for different purposes by school leaders. Some schools that closed likely used PPP to ensure faculty were paid and that the closure did not leave the school's legal entity, or sponsoring parish, with further debt.

Table 42*Comparison of Economic Shocks and Related Catholic School Closure*

Economic Shock	Academic Year	Annual % Closed/Merged After Academic Year	Schools Closed After Academic Year
Great Recession 2008-2009	2008-2009	3.57%	61
	2009-2010	4.63%	71
COVID-19 Pandemic	2019-2020	7.66%	92
	2020-2021	1.98%	22

Note. Historic data on number of Catholic schools in these six states provided by National Catholic Education Association. “Annual % Closed/Merged After Academic Year” refers to the percentage of Catholic school decline through closure/merger of Catholic schools in Maryland, Pennsylvania, New York, Connecticut, Massachusetts, and New Hampshire.

In the qualitative sample, 20% of school leaders indicated that PPP saved their schools from closing. Interestingly, 25.6% of schools, for which it could be determined for the study ($N=1,200$), applied for the second draw of PPP in early 2021. The Small Business Administration’s guidelines for PPP second draw became more stringent in 2021, requiring that entities applying for PPP demonstrate a 25% decline in gross receipts for a corresponding quarter from 2019 to 2020, or year over year. Under threat of violating federal guidelines, 25.6% of Catholic schools attested to significant financial distress in 2021 and received PPP loans. The second round of PPP funding may provide the best indication of Catholic schools experiencing significant financial stress. School closures accelerated in the second year during the Great Recession as the weight of financial challenges from the recession built up. During the pandemic, however, school closures significantly declined. Although speculative, PPP appears to have provided a backstop for Catholic schools experiencing financial distress in 2020-2021.

COVID and Catholic Schools. After the initial shock of COVID and the 2020 closure wave, the pandemic presented a unique environment. Some Catholic schools reported increased market demand and enrollment during 2020-2021 as public schools shifted to remote and hybrid learning models. At the same time, 80-92% of Catholic schools reported being open beyond remote thus helping some Catholic schools during the 2020-2021 school year with increased demand, enrollment, and tuition revenue (McDonald & Schultz, 2021; Reyes, 2020).

For a subset of Catholic schools (perhaps 10-25%), PPP significantly helped stave off closure. Still, qualitative findings indicate that PPP was used to pay faculty and staff, despite a decision already being made to close a school. In addition, historical data demonstrates that while Catholic schools faced significantly more closures in the first year of the COVID-19 economic shock than compared to the Great Recession, the closures declined significantly in the second year. It is worth recalling that American bishops in 2020 argued to Congress that over 630 Catholic schools (about 10%) nationwide could close by September 2020 (Barber et al., 2020). The NCEA reported that nationwide 280 schools closed or merged following the 2019-2021 school years; 209 school failures and consolidations came after the 2019-2020 academic year and 71 after 2020-2021 (McDonald & Schultz, 2021; Smith & Huber, 2022). One possible explanation is that PPP, including a more restrictive second draw in 2021 used by 25.6% of schools in the sample, helped schools facing financial distress. Another explanation is that remote and hybrid learning in the public sector created increased demand for some Catholic schools, thus alleviating the acceleration of closings seen during the Great Recession period (Porter-Magee et al., 2022). While speculative, the answer for the deceleration of school closures following 2020-2021 lies in a combination of the two explanations.

The quantitative and qualitative findings indicate that PPP helped prevent further school closures and allowed leaders to build financial reserves and focus on their mission and market position. The positive trends, however, were not universal (see Table 43). While some Catholic schools exhibited continued enrollment challenges, Catholic schools in Massachusetts, Maryland, and New Hampshire turned a corner. While nonpublic state enrollment data was not fully available at the school level for this study, recent diocesan level NCEA data and state public school data provide a snapshot of Catholic school enrollment trends from 2019-2020 to 2021-2022. The public school enrollment data place the Catholic school enrollment challenges in perspective because public schools, particularly those in large urban areas, have also been struggling with enrollment issues because of demographics, delayed entry, homeschooling, and private school usage (American Enterprise Institute [AEI] & Davidson College [DC], 2022; Camera, 2022; Porter-Magee et al., 2022).

Table 43*Catholic School and Public School Enrollment Trends in Selected States*

State	Public School Enrollment Trend 2020-2022	Catholic School Enrollment Trend 2020-2022
New York	-5.88%	-8.2%
Pennsylvania	-2.91%	-5.7%
Connecticut	-2.83%	-6.7%
Massachusetts	-4.12%	-1.2%
Maryland	-2.68%	+2.8%
New Hampshire	-4.29%	+8.9%

Note. Adapted from “Catholic school enrollment boomed during Covid. Let’s make it more than a one-time bounce,” by K. Porter-Magee, A Smith, M. Klausmeier, June 2022, Manhattan Institute (<https://www.manhattan-institute.org/catholic-school-enrollment-boomed-during-covid>); American Enterprise Institute & Davidson College, “Return to Learn Tracker,” 2022, *Return to Learn Tracker* (<https://www.returntolearntracker.net/2020-22-enrollment-changes>).

Catholic School Resilience, PPP, and Taxpayers. To the extent that PPP helped avert Catholic school closures in the short and long-term, the program represented a good investment that preserved faculty jobs while also mitigating further public sector costs related to educating students formerly in private school. Since most Catholic schools that close are elementary schools, the cost of educating displaced students likely becomes a multi-year, recurring cost. While speculative, if it is assumed that PPP helped avert 100 Catholic school closures (with 151 students in each school, the mean in this study for closures), taxpayers would need to fund the education of another 15,100 students. Taking the average 2020 cost of educating a student in the Northeast as a back-of-the-envelope cost (\$19,953), the annual recurring cost of absorbing these students would be over \$301 million (Fitch, 2020). While the \$582 million in PPP detailed in this

study for 1,200 Catholic schools in the Northeast can seem like a staggering sum to those in cash-strapped parochial schools, that expenditure may well have been a fiscally conservative investment given the high, recurring costs of more Catholic school failures.

The use of PPP by schools that closed makes any evaluation of the program's efficacy more challenging. The quantitative data in this study indicates that surviving schools utilized PPP at higher rates than closing schools. At the same time, a significant number of schools used PPP and closed. One school leader interviewed suggested that PPP became a facility to stem further losses at her closing school and to cover the inevitable decline in tuition revenue as parents withheld payments amid closure announcements and remote learning. One cannot help but feel like some pastors took advantage of taxpayers as they closed their schools. Joo and Wheeler (2020) suggested that the blame for the shortcomings of PPP lay in Congress' design of the legislation, written during a government-imposed economic shutdown, market meltdown, and pandemic of unknown severity. The lax standards in the loan application stipulated that borrowers only needed to initial that "current economic uncertainty makes this loan request necessary to support the ongoing operations of the Applicant" (Joo & Wheeler, 2020, p. 35).

Role of Leadership. School leadership can be critical to school survival. Among the leaders who believed that PPP kept their school open, one school faced significant enrollment declines while serving a majority Hispanic community. In contrast, another school featured healthy enrollment compared to the overall sample. The vital factor is that both leaders counted on PPP loans to restore confidence in their school's future. Lundy (1999) developed a linear regression model that was highly predictive of school closure but found a gap of 25% in which the financial and enrollment data did not correctly classify a school as open or closed. Addressing this variance, Lundy (1999) argued that it

may suggest that more schools would be closed or consolidated if the decisions were based on numbers alone. Some decisions to keep schools open may take other factors into account. For example, a school which might be a candidate for closure on purely financial grounds might be left open if it were the only Catholic school in a large geographic area; or it might be left open if a new leadership team feels that with some time, the management issue can be successfully addressed. (pp. 98-99)

From the qualitative sample, a case study of the principal whose school closed helps explain the gray area of which schools survive and why. The principal detailed the challenge of working with a pastor she did not believe was vested in keeping the school open. The literature on Catholic grammar schools suggests that a skeptical pastor can be very difficult for principals because of inadequate seminary preparation, the structural incoherence of a dual leadership role, and the pastor's ultimate authority over the school in canon law (Boyle & Dosen, 2017; Schafer, 2004).

In the qualitative sample, another Catholic elementary school principal with a supportive pastor found that PPP provided a lifeline to meet the challenges of running a Catholic school during the COVID-19 pandemic. The principal and pastor were both vested in the school as partners (Foundations and Donors Interested in Catholic Activities [FADICA], 2020). The principal lauded the pastor's business savvy and felt like she could call him anytime to deal with issues. Regarding the school and its nearly century-long legacy she was safeguarding, the principal said, "Good fights are worth it."

In the winter of 2020, the principal whose school closed sat at a meeting with diocesan school officials and her pastor. The school faced enrollment declines and deficits. Nevertheless, the principal believed these issues could be addressed. At the meeting with diocesan officials, the

bishop did not attend. As the topic of closure came up, the pastor sat in a chair and said nothing. “I think we could have fought to keep it open had we had a pastor that was willing to fight the fight,” the principal recalled. The school subsequently closed.

The principal noted several factors present in her school that the literature identified with closure, including elevated public school funding in the town (Dinerstein & Smith, 2015), declining religious nuns on faculty (Ebaugh et al., 1996; McGreevy, 1996), and a pastor with a dubious commitment and competence toward supporting a school (Boyle & Dosen, 2017; Schafer, 2004; Simonds et al., 2021). In addition, the principal observed that the pastor later rented the closed school’s facility out to a private educational enterprise. Two years later, the Vatican’s guidance on Catholic school closure suggested that the principal’s experience may reflect a larger pattern of pastors closing schools and renting out the building for a guaranteed revenue stream (Porter-Magee et al., 2022). The Congregation for Catholic Education (2022) advised:

Problems can arise within the local Church as a result of *differences of opinions* among the members of the community (Bishop, parish priest, consecrated persons, parents, school leaders, associations, etc.) concerning the viability of the school, its financial sustainability and its position in the face of new educational challenges...A problem that always causes conflicting reactions is the *closure* or change of the legal structure of a Catholic school due to management difficulties. This problem should not be solved in the first instance by considering the financial value of buildings and property with a view to selling them, or by transferring management to bodies that are distant from the principles of Catholic education in order to create a source of financial profit...Therefore, in the case of a diocesan/eparchial or parochial school, it is the responsibility of the Bishop to

consult with all those concerned in order to evaluate every possible solution to safeguard the continuity of the educational service. (paras. 82-83)

In my study, a Catholic school was closed by its bishop and pastor. The bishop did not consult “all those concerned” (Congregation for Catholic Education, 2022, para. 83) in the school community, and shortly after that, the pastor rented out the building for “financial profit” (Congregation for Catholic Education, 2022, para. 83). Approximately 400 Catholic schools in this study with lower enrollments than the school that closed continued to serve students the next year. Strong leaders, the impact of PPP, and the willingness of a Catholic community to make significant sacrifices for their school consistent with Vatican teachings may account for some of the variance in this study’s model (Lundy, 1999; Porter-Magee et al., 2022).

Implications for Policy and Practice

This explanatory sequential mixed methods study contains important findings for those within the Catholic Church and its institutions who care about the health of Catholic schools. In addition, these findings will interest those in the broader policy community who believe that private religious institutions contribute to the common good (Brinig & Garnett, 2014; Bryk et al., 1993; O’Keefe, 2000). I make recommendations for policy and practice related to Catholic schools and the Hispanic population in the United States, and the use of public funds for private religious institutions and nonprofits, particularly during economic and health emergencies.

Recommendation 1: Catholic Schools Should Expand Outreach to the Hispanic Community

Individual Catholic schools and the institutions that support them, including dioceses and universities, should develop outreach programs to Hispanic communities, including hiring, marketing, and admissions. Best practices should be developed. Observational studies demonstrate that Catholic schools serve the children of Hispanic families well by instilling

academic resilience through structure, rigor, and a supportive, close-knit community (Bempechat et al., 2002; Fenzel & Richardson, 2019; Louie & Holdaway, 2009; Proehl et al., 2017). In the qualitative findings, three school leaders (30%) of Hispanic-serving Catholic schools passionately described their mission to serve inner-city families and place students on the path toward achieving college graduation.

Hispanic families now comprise over 40% of all Catholics in the United States. While Catholic schools can provide examples of serving this emerging population well, only 2.3% of all Hispanic children attend Catholic schools. The evidence in this study indicates that Catholic schools permanently closed as the Hispanic population increased, perhaps representing a school traditionally serving a White Catholic population failing to adapt to new demographics (Brinig & Garnett, 2014; Bryk et al., 1993; Ospino & Weitzell-O'Neill, 2016).

Individual schools, dioceses, and universities should develop plans to diversify their efforts to serve Hispanic families, parishes, and institutions to meet the needs of this population and, quite candidly, as a measure of sustainability. These recommendations are not new or original, but perhaps represent greater urgency given the finding that the greatest predictor of school closure was a rising Hispanic population. Given the Catholic Church's history and theological commitments, developing methods of serving Hispanic Catholics should be a joyful opportunity (Ospino & Weitzell-O'Neill, 2016).

Recommendation #2: Refine Emergency Policy Relief for Private Schools and Nonprofit Organizations

From a Catholic school perspective, the PPP was widely used (94%) and well-regarded by Catholic school leaders (100%). Catholic schools in this sample (representing 19.4% of all Catholic schools in 2019-2020) received a cumulative amount of over \$582,708,638 in PPP

loans (McDonald & Shultz, 2020). While the closure rate of schools in this sample was high (9.5% of 1,200 schools), it is plausible that the closure rate would have been substantially larger in the summer of 2020 without PPP. In the qualitative findings, 20% of Catholic school leaders said PPP was critical to their school's survival.

The leader who saw her school close permanently believed it could have survived had they received the PPP loan prior to announcing the shuttering. The experience of Catholic school leaders and PPP demonstrates that the program was critical to the short-term survival of 20% of schools in the qualitative sample ($n=10$), and the long-term viability of 80% of schools through more robust cash reserves and endowments. The program was designed, however, to preserve jobs, not the existence of religious schools. In that regard, economic research on businesses indicates the PPP program was critical to the survival of small businesses (Barkit et al., 2021; Bartlett & Morse, 2020; Hubbard & Strain, 2020). The looseness of the regulations of the first draw PPP (applicants merely had to attest that they believed the pandemic impacted their institution) led to healthy Catholic schools with higher salaries and enrollments receiving significant loans (Joo & Wheeler, 2020). In contrast, Catholic schools in marginalized communities often received smaller first draw loans because of fewer students, employees, and lower salaries. Urban Catholic schools are critical to serving low-income neighborhoods (Brinig & Garnett, 2014); the qualitative findings supported prior research in this regard. Additional religious institutions and secular nonprofits perform a similar function.

Any future PPP-style mechanism should consider indexing forgivable loans for nonprofits and religious institutions in marginalized and underserved communities, thus providing institutions critical to our social fabric with more funds during a crisis. This

Table 44*Policy Recommendations for Catholic Schools*

Finding	Related Recommendation	Supporting Literature
Catholic school closure is related to increasing Hispanic population.	Considering the evidence of effectiveness in serving the Hispanic population, Catholic schools and institutions should develop plans for outreach.	Bempechat et al., 2002; Louie & Holdway, 2009; Weitzell-O'Neill, 2016; Proehl et al, 2017; Fenzel & Richardson, 2019; Ospino & Weitzell-O'Neill, 2016
Paycheck Protection Program (PPP) assisted in the short-term and long-term viability of Catholic schools, though schools that needed aid the least often received the most aid.	Develop a policy mechanism to address the inefficiencies in the PPP program for the next economic emergency to magnify funds for nonprofits in low-income, minority, and rural census tracts to limit aid to wealthy institutions.	Bartlet & Morse, 2020; Hubbard & Strain, 2020; Lui & Parilla, 2020); Barkit et al., 2021; Chernenko & Scharfstein, 2022; Fairlie & Fossen, 2022
School enrollment is a significant variable related to school closure.	Develop school level and diocese-wide enrollment management systems for Catholic schools.	Lundy, 1999; James et al., 2008; Pandey et al., 2009; Hoerle, 2017; Pogodzinski & Morris, 2021
School enrollment and demographic data for nonpublic schools is not consistently required and student enrollment has shifted.	State legislatures nationwide should pass legislation requiring nonpublic schools to report enrollment and demographic data.	Connecticut State Department of Education, n.d.; Maryland Department of Education, n.d.; Massachusetts Department of Elementary and Secondary Education, n.d; Pennsylvania Department of Education, n.d.; New York State Education Department, n.d.; New Hampshire Department of Education , 2020; American Enterprise Institute & Davidson College, 2022; Porter-Magee et al., 2022.
As a model, Catholic elementary schools are most at risk of closure, and the pastor-principal relationship can harm school viability.	Continue to develop alternative structures to mitigate the tension in the pastor-principal relationship for Catholic elementary schools.	Schafer, 2004; Brinig & Garnett, 2014; FADICA, 2015; Boyle et al., 2017; Simonds et al., 2021.

Note. FADICA = Foundations and Donors Interested in Catholic Activities.

mechanism should develop a formula based on socioeconomic data for nonprofit social service providers in marginalized communities. Under this approach, a Catholic school, Baptist Church, Mosque, Jewish School, or Boys and Girls Club would receive funding during an emergency that does not penalize the people they serve because their employees are not paid their social worth. Additionally, a thoughtful revision of a PPP-style mechanism would include the outreach of the second draw PPP funding through community development banks, financial technology firms (offering loans and other financial products online), and other methods to ensure that racial bias and prior banking relationships do not influence the equitable distribution of emergency funding (Chernenko & Scharfstein, 2022; Fairlie & Fossen, 2022; Lui & Parilla, 2020).

Recommendation #3: Develop Marketing and Enrollment Management Systems

This study identified enrollment as a significant variable related to school closure, thus confirming prior studies (James et al., 2008; Lundy, 1999; Pandey et al., 2009). Although Catholic schools today are largely site-managed and, therefore, market-oriented, the evidence for schools in this six-state sample suggests that, as a group, they have struggled profoundly with marketing and market share (Bryk, 2008; Smith & Huber, 2022). As the costs associated with private schools rise, the affordability of Catholic schools will continue to be tested (Murnane & Reardon, 2018). At the school and diocese level, Catholic schools must create marketing and enrollment management systems to build a better brand for Catholic schools to attract, monitor, and retain enrollment.

The schools in this six-state sample collectively have been failing as market institutions and would benefit from a more vigorous marketing program. The number of schools in this quantitative sample declined by 9.5% from 2019-2020 to 2020-2021. Catholic schools in this quantitative sample of Maryland, New York, Pennsylvania, Connecticut, Massachusetts, and

New Hampshire numbered 1,708 in 2008-2009, according to NCEA data. By the conclusion of the 2020-2021 school year, the schools in this sample declined to 1,086 schools. This decline represents the loss of 622 schools, or 36.4% of Catholic schools in these six states. This path is not sustainable.

While some schools, particularly high schools, market themselves well, Catholic schools need to develop a marketing program at both the school and regional levels. This recommendation is related to the lack of success sustaining schools in census tracts with increasing Hispanic demographics (Brinig & Garnett, 2014; Dills & Hernandez-Julian, 2012). Hispanic Catholic families would like to send their children to Catholic schools. These families believe Catholic schools to be academically strong and excellent in faith formation, but the Church needs to provide further outreach and financial aid (Suhy, 2012).

At the school and diocese level, Catholic schools can learn from independent schools, which have developed sophisticated models of enrollment management that integrate marketing, enrollment modeling, tuition, and financial aid. Enrollment management systems create institutional support to enhance student success, reduce attrition, and increase net tuition revenue (Hoerle, 2017). While some schools and dioceses have begun relatively sophisticated attempts to evaluate the relationship among enrollment, school viability, and qualitative school characteristics, these efforts have not been consistent, effective, or widely replicated (McDonald & Schultz, 2021; Pogodzinski & Morris, 2021).

Recommendation #4: States Should Require Nonpublic Schools to Report Demographic Data

The COVID-19 pandemic has disrupted schools in a myriad of ways, including through enrollment shifts. It is estimated that almost 1.3 million children have left public schools from 2020 to 2022 (AEI & DC, 2022). Educational officials and policy experts are examining where

students went and the reasons for their shift. Although it is too early to make a firm determination, factors for this demographic shift include COVID-19 school policies, housing costs, layoffs, delayed entry, and shifts to homeschooling and private school (AEI & DC, 2022; Camera, 2022). To better understand how our society meets the educational needs of children, state legislatures should develop legislation requiring the collection and reporting of enrollment and demographic data of nonpublic schools and homeschooling. State legislatures should pass legislation requiring state education officials to report comprehensive data annually for all nonpublic schools and families engaged in homeschooling.

Gathering enrollment data and demographics is critical to the evaluation, health, and funding of nonpublic and public institutions. From a Catholic school perspective, the requirement of this data is critical. First, this study found a statistically significant relationship ($p < .005$) between enrollment (including enrollment trends) and Catholic school closure. In addition, recent reports at the state and diocese level have found Catholic school enrollment trending more positively than public school enrollment trends in Massachusetts, Maryland, and New Hampshire (American Enterprise Institute & Davidson College, 2022; Porter-Magee et al., 2022). I found, however, that some states do not require the reporting of nonpublic enrollment data thus limiting the scope of the sample and future research on a granular level. The following areas could not be included in the study because nonpublic enrollment data is not required by state or district law: New Jersey, Rhode Island, District of Columbia, and Virginia. The lack of a legal requirement to collect and report enrollment and demographic data on nonpublic schools curtails the ability of education officials to effectively regulate, monitor, and evaluate private schools.

From a public school perspective, large urban public school districts face an enrollment crisis of their own as housing costs, layoffs and remote work, homeschooling, and private schools have led to a decline in enrollment. Boston, New York City, Baltimore, Philadelphia, and many other large cities nationwide have seen declines. These declines impact funding and may lead to public school closures and staff layoffs (Camera, 2022). The lack of private school enrollment data and more precise information related to homeschooling makes the analysis of these developments more challenging. Although prior studies have found that well-funded public schools can lead to private school closure, additional evidence suggests that public schools exist in a marketplace and parental dissatisfaction with public school policies and performance can impact enrollment (American Enterprise Institute & Davidson College, 2022; Camera, 2022; Dinerstein & Smith, 2015; Hartney & Finger, 2020; Hoxby, 1994; Porter-Magee et al., 2022). Nonpublic school enrollment and demographic data can help public school districts with enrollment issues develop policies to attract and retain students and related funding.

Although the general reasons for shifts in enrollment appear to be related to COVID-19 economic disruptions and school policies (American Enterprise Institute & Davidson College, 2022; Camera, 2022), it will be more challenging to evaluate further the needs of families and school enrollment patterns with the limited data available. It is in the public interest to know where and why families educate their children and the reasons for what appear to be significant shifts in enrollment patterns. A law for nonpublic reporting standards will help build accountability and serve as a tool for researchers and policymakers. Although a state education department can develop a reporting policy, it is important to note that policies can change with administration. The passage of state laws focused on reporting nonpublic enrollment and

demographic data will provide greater transparency, accountability, and information for school leaders, researchers, and policy experts.

Recommendation #5: Develop More Effective Elementary School Leadership Models

Research on Catholic elementary schools found that the dual role of principal and pastor leadership of a parish elementary school can be an administrative challenge. While once thought to be an issue among older pastors who were potentially overburdened and burned out, the ambivalence and stress associated with the role of running a school is now present in some seminarians (Boyle et al., 2017; Brinig & Garnett, 2014; Schafer, 2004; Simonds et al., 2021). In this study, the difference in outlook between a principal and pastor resulted, according to one principal, in the premature closing of a Catholic elementary school. Catholic foundations, organizations, and dioceses should continue developing models that provide support for struggling elementary schools. Regional school systems within dioceses have been demonstrated to strengthen management, finances, academic programming, and enrollment through shared marketing, clergy support, a board of trustees, and a president or CEO (Wolsonovich et al., 2018). The development of Catholic school regional structures resurrects direct administrative control of a group of schools by a single entity. The dioceses of New York and Los Angeles created regional structures to better support the schools most in need (Foundations and Donors Interested in Catholic Activities, 2015). In Milwaukee, Wisconsin, Seton Catholic Schools managed 11 parish-based schools providing administrative support and economies of scale (Simonds et al., 2021). The benefits of centralized management include shared resources, a unified vision, the potential for stronger leadership, and reduced costs (Foundations and Donors Interested in Catholic Activities, 2015). While current efforts toward centralizing at-risk schools have largely focused on inner-city schools, this study makes clear that Catholic schools in all

locations are at-risk and consortiums could help vulnerable Catholic schools in suburbs, towns, and rural areas.

Recommendations for Future Research

This explanatory sequential mixed methods study has examined the impact of the pandemic and PPP loans on school closure for a large sample ($N=1,200$) of Catholic schools in six Mid-Atlantic and Northeastern states. To be sure, Catholic schools in this sample entered the COVID-19 pandemic in a fragile condition having experienced, on average, declining enrollment (64% experienced enrollment declines of 4% or more). The recommendations for future research concern developing a data-based portrait of Catholic schools as institutions, including the long-term impact of PPP loans. In addition, one of the most valuable resources for Catholic schools remains their leaders. Researchers need to know more about these professionals during this critical time for sustaining Catholic schools.

First, a foundation or university should develop a school-level longitudinal study focused on Catholic school institutional characteristics and closure. To better understand school resilience, it is critical to develop a large dataset of Catholic schools, including enrollment, neighborhood characteristics, population served, organizational structure, and PPP loans. While a large body of literature exists lamenting and explaining the decline of Catholic schools, we still know very little about these institutions at the school level. From this study, it will be interesting to track enrollment for 2020-2021 and 2021-2022. Initial reports indicate that some Catholic schools gained enrollment nationwide in 2020-2021 (NCEA, 2022; Porter-Magee et al., 2020), but the data produced is diocese-level data thus lacking granular detail and analysis. The qualitative findings support this enrollment increase for the mid-Atlantic and Northeast. Important questions remain to be answered. Will the rise in enrollment persist or was it a short-

term gain related to COVID-19 and frustration with remote learning? Will the amount of PPP loans correlate with increased school resilience and perhaps enrollment growth? Will a second draw from PPP correlate with school closure? Do Catholic schools throughout a larger sample (perhaps in the Southwest) better serve the Hispanic population? What is the experience of Catholic schools in the Midwest and South serving the Hispanic population?

Second, a foundation or university should develop a longitudinal study focused on a precious resource: Catholic school leaders. The qualitative findings demonstrated the importance of mission, leadership, management, and organizational structure to Catholic school sustainability and organizational ability to thrive. A large-scale, mixed methods longitudinal study of Catholic school leaders would provide critical research on an area of Catholic schools that has received relatively little attention. The literature on principals demonstrated the challenges of finding good leaders given the scope of the position (Boyle et al., 2020; Boyle et al., 2016; Schaefer, 2004; Spesia, 2016;).

Cautions and Limitations

It is important to note several cautions and limitations associated with this study. First, I relied on publicly available data and identified variables associated with enrollment, Hispanic population, and PPP loan data as statistically significant ($p < .05$). More time, resources, and access to private data might have considered the impact of additional variables related to Catholic school closure, including schools' internal financial data, neighborhood crime data, tenure of pastor for elementary schools, and funding of adjacent public schools (Brinig & Garnett, 2014; Lundy, 1999; Pandey et al., 2009). Although this study appears to be the largest Catholic school closure study ($N=1,200$) to date, the lack of state data for nonpublic schools in the region limited the potential size of this sample. Finally, the relatively small size of the

qualitative sample ($n=10$) suggests that the findings may not be generalizable to all Catholic schools throughout the United States (Khalil & Brown, 2015).

Summary

Catholic schools have made a significant contribution to our nation's educational system and the neighborhoods they serve (Brinig & Garnett, 2014; Bryk et al., 1993; Coleman et al., 1982a; McGreevy, 1996). These schools, however, have become increasingly fragile. This mixed methods study demonstrated that Catholic schools in the mid-Atlantic and Northeast faced significant closures (9.5%) over two years. Critical variables related to school survival included enrollment, PPP loans, and the Hispanic population in a school's census tract. But much of the prediction of whether a school remains open or closed was left unexplained by quantitative data and this study's logistic regression model. The qualitative findings in this study demonstrated that leaders played an essential role during the pandemic and that PPP loans proved critical in the survival of a subset of Catholic schools (perhaps 10-20%). Additional studies with more variables could yield a more predictive metric for Catholic school survival. In addition, the qualitative findings demonstrated the institutional strength of some Catholic schools (particularly well-established high schools) in enrollment, endowment, and cash reserves. Scholars, policy experts, teachers, and families who care about Catholic schools need to learn more about the institutional diversity of parochial schools and the importance of leadership. This study indicated that the dedication and effectiveness of a school leader is critical for Catholic schools' long-term sustainability, but also during times of crisis. At a human leadership level, the leader willing to go "all in" and fight the "good fight" can be the difference between whether a Catholic school continues to serve families or closes forever.

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Appendix A

Catholic Schools and Enrollment History

Year	Elementary	Secondary	Total Schools	Enrollment
1940	7,994	2,105	10,049	2,396,000
1950	8,589	2,189	10,778	3,067,000
1960	10,501	2,392	12,893	5,253,000
1970	9,366	1,986	11,352	4,367,000
1980	8,100	1,540	9,640	3,139,000
1990	7,394	1,324	8,719	2,589,000
2000	6,923	1,221	8,114	2,653,038
2010	5,889	1,205	7,094	2,119,341
2020	4,995	1,118	6,182	1,737,297

Note. Adapted from “Schools and Enrollment History,” by D. McDonald and M. Schultz, 2020, *United States Catholic Elementary and Secondary Schools 2019-2020*, National Catholic Educational Association, p. 2.

Appendix B

Selected Mideast and New England Catholic Schools 2019-2021

Region	State	Elementary	Secondary	Totals
New England	CT (2019-2020)	73	20	93
	CT (2020-2021)	65	20	85
	Net Change	-8	0	-8
	MA (2019-2020)	133	45	178
	MA (2020-2021)	121	40	171
	Net Change	-12	-5	-17
	NH (2019-2020)	22	6	28
	NH (2020-2021)	17	7	24
	Net Change	-5	+1	-4
	NY (2019-2020)	377	101	478
	NY (2020-2021)	338	100	438
	Net Change	-39	-1	40
Mideast	PA (2019-2020)	331	76	407
	PA (2020-2021)	312	74	386
	Net Change	-19	-2	21
	MD (2019-2020)	48	19	67
	MD (2020-2021)	47	18	65
	Net Change	-1	-1	-2

Note. Adapted from “Schools and Enrollment,” by D. McDonald and M. Schultz, 2020, *United States Catholic Elementary and Secondary Schools 2019-2020*, National Catholic Educational Association, pp. 29-36; “Schools and Enrollment,” by D. McDonald and M. Schultz, 2021, *United States Catholic Elementary and Secondary School 2020-2021*, National Catholic Educational Association, pp. 29-36.

The following abbreviations are used for states: CT (Connecticut), MA (Massachusetts), and NH (New Hampshire), NY (New York), PA (Pennsylvania), and MD (Maryland).

Appendix C

Selected Catholic Schools in Great Lakes, Plains and West

Region	State	Elementary	Secondary	Totals
Great Lakes	WI (2019-2020)	242	31	273
	WI (2020-2021)	236	31	267
	Net Change	-7		-7
Plains	NB (2019-2020)	84	29	112
	NB (2020-2021)	84	28	111
	Net Change	0	-1	-1
West	CA (2019-2020)	530	116	646
	CA (2020-2021)	520	111	631
	Net Change	-10	-5	-15

Note. Adapted from “Schools and Enrollment,” by D. McDonald and M. Schultz, 2020, *United States Catholic Elementary and Secondary Schools 2019-2020*, National Catholic Educational Association, pp. 29-36; “Schools and Enrollment,” by D. McDonald and M. Schultz, 2021, *United States Catholic Elementary and Secondary School 2020-2021*, National Catholic Educational Association, pp. 29-36.

The following abbreviations were used: WI (Wisconsin), NB (Nebraska), and CA (California).

Appendix D

Formal Request for Data from Large Diocese

January 14, 2022

Dear (Superintendent),

I write to you requesting data on (your diocese') schools as part of my dissertation at The College of William and Mary in Williamsburg, VA. In placing my request for information, I will respond to the Office of Superintendent of Schools' "Requirements for conducting research."

My dissertation proposal called for an explanatory sequential mixed methods study examining the impact of the global pandemic on Catholic schools with a focus on the efficacy of the Paycheck Protection Program (PPP)'s impact on school survival. Currently, I am focused on the quantitative phase of the study, which comprises a data set of approximately 1,200 Catholic schools in six Eastern states: Maryland, New York, Pennsylvania, Connecticut, Massachusetts, and New Hampshire. The data set utilizes public data to construct a statistical portrait of each Catholic school, including historic enrollment data, school type (PK-8, 9-12), U.S. Census demographic data for school setting, and PPP amount. The study will utilize SPSS to conduct inferential statistical analyses, including *t*-tests and Chi-Square analysis, to determine the statistical significance of variables associated with school survival. This study will contribute to prior research focused on Catholic school survival (Lundy, 1999; O'Keefe 2000; James et al., 2008; Pandey et al., 2009; Brinig & Garnett, 2014) but include a larger, multi-state sample, more recent data, and the new variable of direct aid from the federal government (PPP).

The dissertation proposal has been guided, supervised, and approved by my doctoral committee, consisting of Dr. James Stronge, Heritage Professor of Education; Dr. Steve Constantino, former Acting State Superintendent of Virginia; and Dr. Thomas Ward, Chair, Department of Educational Policy, Planning and Leadership. Dr. Ward serves as the chair for my dissertation, and has published widely using statistical analysis, including research on the effectiveness of private and public schools (Ward & Clark, 1991). This research study will adhere to all standards of sound research practice, ethics, and the Institutional Review Board of The College of William and Mary. Dr. Ward will provide in writing testimony that The College of William and Mary has approved this dissertation study.

This research study will be of inherent value to your diocese because of its contribution to understanding school survival through its inferential statistical analysis of the effectiveness of PPP aid. Given the Supreme Court's recent direction, including the *Espinoza v. Montana Department of Revenue* decision and the pending *Carson v. Makin* case, research on the effectiveness public dollars aiding religious schools will be critical for public policy, government funding, and future legal decisions. My research questions are attached as an appendix (see Dissertation Questions below).

With this research request, I am seeking access to data, with no need to interact with schools, principals, or students. I may ask for clarification of the data from appropriate personnel within (your diocese). The distribution of PPP aid varied by diocese with most schools applying for PPP loans themselves or through a parish. Some dioceses and school collaboratives, however, requested aid as a cohort. (Your diocese) is unique in its widespread use of regions to request and

distribute PPP aid. I am requesting the following information to ensure the most valid and reliable data for the quantitative analysis in my dissertation.

- This request seeks a listing of (your diocese's) Catholic schools from September 2019 to September 2021 with type of school (regional, private-parish, or independent Catholic – owned by religious order).
- Which category of schools received the “block grants” of PPP loans to region?
- What were the individual school recipients and per-school loan amounts for the following regional PPP loans?
 - (Region A): \$4,097,930 2020;
 - (Region B): 4,081,522 in 2020;
 - (Region C): \$3,470,712 in 2020 and \$2.0 million in 2021;
 - (Region D): \$4,071,620;
 - (Region E): \$1,385,087 in 2020 and 1,218,650 in 2021;
 - (Region F): \$3,451,560 in 2020;
 - (Region G): \$1,156,307 in 2020;
 - (Region H): 1,086,192 in 2020 and 945,397 in 2021;
 - (Region I): \$1,821,222 in 2020 and 1,469,462 in 2021;
 - Are (Collaborative Name) in (your diocese) represented by (Redacted Name) PPP loans for \$2,721,794 in 2020 and 2,000,000 in 2021?
 - Am I missing any PPP loans for (your diocese)?

To be clear, all school data will be anonymized. I am committed to sharing research findings with partners who have been generous to clarify and explain the public data available. One collaborative region has clarified data thus preserving critical sample data.

I am committed to the continued vitality of Catholic schools and see private religious schools as central to our democracy and freedom. I have worked in Catholic schools for 25 years, including the past 19 at Catholic Memorial School in Boston. As a child, I attended Catholic school on Long Island through higher education at Siena College, and advanced degrees at Marquette University and Boston College.

Thank you for considering this request.

Sincerely,

Vincent G. Bradley, MA, MEd

Chair, History and Social Studies

Doctoral Candidate, The College of William and Mary

Cell: XXX-XXX-XXXX

Dissertation Questions

1. What are the characteristics of surviving Catholic schools (size, type, location, average income by zip code, change in enrollment; use of PPP aid, size of PPP aid) compared with Catholic schools that closed during the coronavirus pandemic?

2. How equitably was the PPP aid distributed among Catholic schools as measured by geography (urban, suburban, rural), demographics (white, majority-minority), income in school community, and school enrollment trends: increasing (3% or more), steady (negative 3% to positive 3%), decreasing (3% or more) from 2016-2017 to 2019-2020)?
3. What are the perceptions of Catholic school leaders regarding the importance of receiving PPP aid and Catholic schools' viability during COVID-19 pandemic?
 - a. What are the reasons for acceptance/rejection of PPP aid among Catholic school leaders?
 - b. Was PPP an important factor in the viability (open/closed) of Catholic schools?

Appendix E

Request for Data from Catholic School Region/Collaborative

Date

Dear (Regional Leader),

I write to you requesting data on (School Region XYZ) as part of my dissertation at The College of William and Mary in Williamsburg, VA. In placing my request for information, I want to explain the relevance of my study.

My dissertation proposal called for an explanatory sequential mixed methods study examining the impact of the global pandemic on Catholic schools with a focus on the efficacy of the Paycheck Protection Program (PPP)'s impact on school survival. Currently, I am focused on the quantitative phase of the study, which comprises a data set of approximately 1,200 Catholic schools in six Eastern states: Maryland, New York, Pennsylvania, Connecticut, Massachusetts, and New Hampshire. The data set utilizes public data to construct a statistical portrait of each Catholic school, including historic enrollment data, school type (PK-8, 9-12), U.S. Census demographic data for school setting, and PPP amount. The study will utilize SPSS to conduct inferential statistical analyses, including *t*-tests and Chi-Square analysis, to determine the statistical significance of variables associated with school survival. This study will contribute to prior research focused on Catholic school survival (Lundy, 1999; O'Keefe 2000; James et al., 2008; Pandey et al., 2009; Brinig & Garnett, 2014) but include a larger, multi-state sample, more recent data, and the new variable of direct aid from the federal government (PPP).

The dissertation proposal has been guided, supervised, and approved by my doctoral committee, consisting of Dr. James Stronge, Heritage Professor of Education; Dr. Steve Constantino, former Acting State Superintendent of Virginia; and Dr. Thomas Ward, Chair, Department of Educational Policy, Planning and Leadership. Dr. Ward serves as the chair for my dissertation, and has published widely using statistical analysis, including research on the effectiveness of private and public schools (Ward & Clark, 1991). This research study will adhere to all standards of sound research practice, ethics, and the Institutional Review Board of The College of William and Mary. Dr. Ward will provide in writing testimony that The College of William and Mary has approved this dissertation study.

This research study will be of inherent value to Catholic schools because of its contribution to understanding school survival through its inferential statistical analysis of the effectiveness of PPP aid. Given the Supreme Court's recent direction, including the *Espinoza v. Montana Department of Revenue* decision and the pending *Carson v. Makin* case, research on the effectiveness public dollars aiding religious schools will be critical for public policy, government funding, and future legal decisions. My research questions are attached (see Dissertation Questions).

With this research request, I am seeking access to data, with no need to interact with schools, principals, or students. I may ask for clarification of the data from appropriate personnel within (your diocese). The distribution of PPP aid varied by diocese with most schools applying for PPP loans themselves or through a parish. Some dioceses and school collaboratives, however, requested aid as a cohort. I am requesting the following information to ensure the most valid and reliable data for the quantitative analysis in my dissertation.

- This request seeks a listing of (School Region XYZ) (X schools) and the share of 2020 PPP loan and 2021 PPP loans (ABC and XYZ) for each recipient school.
- ***If you are able to provide the data, I will share my findings with you once the study is completed. I am happy to speak with you and explain the study and its benefits at greater length.***

To be clear, all school data will be anonymized. I am committed to sharing research findings with partners who have been generous to clarify and explain the public data available. To date, other Catholic school systems have been very helpful in providing more complete, school-level data associated with the PPP loans.

I am committed to the continued vitality of Catholic schools. I have worked in Catholic schools for 25 years, including the past 19 at Catholic Memorial School in Boston. As a child, I attended Catholic schools in NY, CT, and MA through higher education at Siena College, and advanced degrees at Marquette University and Boston College. My motivation is to learn more about our Catholic schools so that we can strengthen these vital institutions and ensure their legacy.

Thank you for considering this request.

Sincerely,

Vincent G. Bradley, MA, MEd
Chair, History and Social Studies
Doctoral Candidate, The College of William and Mary
Cell: XXX-XXX-XXXX

Dissertation Questions

1. What are the characteristics of surviving Catholic schools (size, type, location, average income by zip code, change in enrollment; use of PPP aid, size of PPP aid) compared with Catholic schools that closed during the coronavirus pandemic?
2. How equitably was the PPP aid distributed among Catholic schools as measured by geography (urban, suburban, rural), demographics (white, majority-minority), income in school community, and school enrollment trends: increasing (3% or more), steady (negative 3% to positive 3%), decreasing (3% or more) from 2016-2017 to 2019-2020)?

3. What are the perceptions of Catholic school leaders regarding the importance of receiving PPP aid and Catholic schools' viability during COVID-19 pandemic?
 - a. What are the reasons for acceptance/rejection of PPP aid among Catholic school leaders?
 - b. Was PPP an important factor in the viability (open/closed) of Catholic schools?

Appendix F

Request for Participation in Semi-Structured Interview

May 6, 2022

Dear School leader,

As a doctoral candidate at The College of William and Mary in Virginia, I am reaching out to you to ask for your participation in a doctoral dissertation study focused on the experience of Catholic schools in the pandemic.

Request for Interview

I am requesting that you participate in a semi-structured interview, which will last approximately 30-35 minutes. In a separate attachment, please find an informed consent document providing further details regarding the interview and requesting your approval. Your confidentiality and that of your institution will be safeguarded. I will provide participants with the findings of the study, which will contain data relevant to your practice and school.

The dissertation proposal has been guided, supervised, and approved by my doctoral committee, consisting of Dr. James Stronge, Heritage Professor of Education; Dr. Steve Constantino, former Acting State Superintendent of Virginia; and Dr. Thomas Ward, Chair, Department of Educational Policy, Planning and Leadership. Dr. Ward serves as the chair for my dissertation and can be reached for any questions (note: email and phone provided). This research study will adhere to all standards of sound research practice, ethics, and the Institutional Review Board of The College of William and Mary. The Institutional Review Board of The College of William and Mary approved the procedures and protocol for this phase of the study.

Study Design

This explanatory sequential mixed methods study includes both a quantitative phase and a qualitative phase. This study analyzed the experience of a large sample of Catholic schools (n=1,200) during the COVID-19 pandemic from 2019-2020 to 2020-2021 with a focus on school closure. The Catholic schools in the study were from six mid-Atlantic and Northeastern states: Maryland, New York, Pennsylvania, Connecticut, Massachusetts, and New Hampshire. This study adds to the literature on Catholic school closure and resilience.

This mixed methods study introduced the new variable of United States federal government Paycheck Protection Program (PPP) loans and sought to measure the impact of these government loans on school survival. Given the persistent decline in Catholic schools over the past 50 years, this study hypothesized that the COVID-19 pandemic posed a significant challenge to Catholic schools and that a school's decision to apply for and accept a PPP loan could be an important predictor of whether a school remained open. The study is tentatively titled, "Catholic Schools and COVID-19: Paycheck Protection Program (PPP), Leadership, and School Closure."

The quantitative phase of the study seeks to describe the experience of Catholic schools from 2019-2021 and identify key variables of resilience using public data. The qualitative phase will utilize semi-structured interviews with principals and presidents of Catholic schools to provide further insight into data related to school community, enrollment, and PPP loans.

Your lived experience will shed light on the views of Catholic school leaders in the sample, which is equivalent to approximately 20% of the Catholic schools in the country.

Currently, I serve as Department Chair in History at Catholic Memorial School in West Roxbury, Massachusetts. As a lifelong Catholic school educator, I believe that increasing our knowledge of our institutions will sustain their vitality.

Sincerely,
Vincent G. Bradley, MA, MEd
Doctoral Candidate
The College of William and Mary

Appendix G

Participant Informed Consent Form

I, _____, agree to participate in a research study regarding my experiences as a Catholic school leader during the COVID-19 pandemic from September 2019-September 2021. The study focuses on Catholic school leaders' response to the challenges of the pandemic, including school community, use of Paycheck Protection Program (PPP), financial issues, and the potential for school closure.

As a participant, I understand that my participation in the study is purposeful and voluntary. Selected school leaders within the sample of approximately 1,200 schools in six mid-Atlantic and Northeast states will have the opportunity to voluntarily participate in one (1) semi-structured interview based on enrollment criteria and community characteristics in which the school is located.

I understand that the interviewer has been trained in the research of human subjects, my responses will be confidential, and that my name will not be associated with any results of this study. I understand that the data will be collected using an audio recording device and then transcribed for analysis. Information from the Zoom recording and transcription will be safeguarded so my identity will never be disclosed. My true identity will not be associated with the research findings.

I understand that there is no known risk or discomfort directly involved with this research and that I am free to withdraw my consent and discontinue participation at any time. I agree that should I choose to withdraw my consent and discontinue participation in the study that I will notify the researcher listed below, in writing. A decision not to participate in the study or to withdraw from the study will not affect my relationship with the researcher, The College of William and Mary generally or the School of Education, specifically.

If I have any questions or problems that may arise as a result of my participation in the study, I understand that I should contact the researcher. Vincent Bradley (XXX-XXX-XXX or email provided), or Dr. Tom Ward, dissertation chair and chair of EDIRC, at XXX-XXX-XXXX or EDIRC-L@wm.edu. My signature below signifies that I am at least 21 years of age, that I have received a copy of this consent form, and that I consent to participate in this research study.

Signature of Participant Date

Signature of Researcher Date

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3966) ON APRIL 12, 2022 AND EXPIRES ON APRIL 12, 2023

Appendix H

Validation of Semi-Structured Interview Questions

Proposed/Original Semi-structured Questions in IRB below

- Validation process was included in IRB procedures.

The questions follow:

- 1.) What are the strengths of your school community?
- 2.) Describe who your school primarily serves?

Follow up: What minority populations are served?

- 3.) What is the current enrollment trend in your school? What factors may be leading to these trends?
- 4.) What challenges has COVID presented for your school?
- 5.) Were you concerned that COVID-19 and the related economic issues could lead to school closure?
- 6.) How did you hear about Paycheck Protection Program?
- 7.) Did your school apply for a Paycheck Protection Program loan? Why or why not?
- 8.) If you did apply for PPP loan, how were you able to use the money?
- 9.) Did PPP play a role in helping your school remain open?

Feedback from Expert Panel

A. Former Principal at High School in Boston. Comments in italics.

The questions follow:

- 1.) What are the strengths of your school community?

I think this is a good ice breaker. There's nothing more that people want to talk about than their successes.

- 2.) Describe who your school primarily serves?

Maybe direct them with specifics.

Add: Please include but not limited to Minority, Demographic and Socioeconomic populations.

Follow up: What minority populations are served?

3.) What is the current enrollment trend in your school? What factors may be leading to these trends?

Rephrase: What factors may be contributing to this trend?

4.) What challenges has COVID presented for your school?

Add: Do you think some of these challenges already existed to some degree but were brought to light because of COVID?

5.) Were you concerned that COVID-19 and the related economic issues could lead to school closure?

Rephrase: How concerned were you that COVID-19 and the related economic issues could lead to your school closure?

6.) How did you hear about Paycheck Protection Program?

7.) Did your school apply for a Paycheck Protection Program loan? Why or why not?

Add: How would you assess the process involved in determining the distribution of these funds?

8.) If you did apply for PPP loan, how were you able to use the money?

Add: Did you have a clear vision of what you were going to use the PPP for when you applied? Did any of those anticipated uses change after you received the PPP?

9.) Did PPP play a role in helping your school remain open?

10. How do you feel your school is positioned now entering a post-PPP and post-COVID environment?

B. Feedback from Former Administrator at High School and NCEA Consultant:

Below are my comments which I hope will prove useful in finalizing your interview questions.

In general, I believe the sequence of questions is appropriate with no language that is "leading" and which would promote responses in a specific direction. My overall thought, though, is that some of the questions may be too general or open-ended, resulting in responses that are so diverse in nature as to not provide you with meaningful data that could readily be categorized. While I recognize that this is the qualitative part of your analysis, creating some categories for

responses may help to focus the interviewees and allow for better analysis. One example of this is question 8 where you ask about how PPP money was spent. Identifying a list of categories like faculty salary, academic support, hiring paraprofessionals, technology, etc. might be appropriate.

Regarding question 3, I would consider a term different than "trend" as any observations from 2020 and 2021 are likely to be unusual in their own right. Instead, I would suggest asking about pre-pandemic in comparison specifically to the current admission cycle which should represent something of a return to normal. While not finalized, the pipeline is far enough along to offer good information.

For question 1, I realize that it is somewhat your icebreaker question, but the term "community" has such a deep meaning in Catholic schools that I wonder if there is useful information that can be gathered there. Once again, offering some specific areas to discuss, like parent involvement or faculty/student relationships, may provide insights into potential future research on the likelihood of a school's long-term viability.

With question 6, if your intent is to understand the robustness of the network among Catholic school leadership, it may make sense to ask that more directly.

Finally, I wonder whether it would be useful to ask a question about the longer-term effects of the PPP infusion. Do the interviewees believe the money changed the course of their school's viability in any way or just move the inevitable timeline out?

I hope these suggestions are helpful, and please feel free to reach out with any questions about them or for any other feedback that would be of use to you.

Revised and Validated Questions for Interviews:

- 1.) What are/were the strengths of your school community?
- 2.) Describe who your school primarily serves/served? Please include but do not limit yourself to the minority populations and socioeconomic status of your students.

Follow Up: How has the population changed in the last 5 years? 10 years?

- 3.) What was the enrollment trend of your school in the years leading up to the pandemic in 2019-2020? What factors may have contributed to this trend?

Follow Up: How has the pandemic impacted enrollment since 2019-2020?

- 4.) What challenges has COVID presented for your school?

Follow Up: Were some of these challenges present but made more pressing by COVID?

- 5.) How concerned were you that COVID-19 and the related economic issues could lead to your school closure?

- 6.) How did you hear that the Paycheck Protection Program was available to Catholic schools? Was it the media, a colleague, personal acquaintance, or diocese?

- 7.) Did your school apply for a Paycheck Protection Program loan? Why or why not?

Follow Up: How would you assess the process involved in determining the distribution of these funds?

- 8.) If you did apply for PPP loan, how were you able to use the money?

Follow Up: Did you have a clear vision for using the PPP funds when you applied? Did any of those anticipated uses change after receipt of the PPP funds?

- 9.) Did PPP play a role in helping your school remain open permanently? In Fall of 2020?

- 10.) How is your school positioned now in a post-PPP and post-COVID environment? (N/A if school is closed)

VITA

Vincent Bradley

Education	2019- January, 2023	The College of William and Mary Williamsburg, Virginia Doctor of Education <i>Educational Policy, Planning and Leadership</i>
	1997-2002	Boston College Chestnut Hill, Massachusetts Master of Education <i>Educational Administration</i>
	1994-1996	Marquette University Milwaukee, Wisconsin Master of Arts <i>United States History</i>
	1990-1993	Siena College Loudonville, NY Bachelor of Arts <i>History</i>
Experience	2013-present	Chair, History Department
	2002-2012	Teacher, History Department Catholic Memorial School Boston, Massachusetts
	1996-2002	Teacher, History Department Bishop Guertin High School Nashua, New Hampshire
Honors	2020	Fenway Bowl Honor Roll Recognized outstanding educators in New England
	2019	Excellence in Education Award Archdiocese of Boston
	2002	<i>Lowell Sun</i> Coach of the Year Boys Varsity Indoor Track and Field
	1994-1996	Marquette University Full Tuition Scholarship