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Organizational Climate in Schools Across the Archdiocese of Detroit

Ben Pogodzinski¹ and Anne Morris²

Abstract: To help inform continuous improvement efforts across Catholic Schools in the Archdiocese of Detroit (AOD), the Catholic Identity Program Effectiveness Surveys were administered to parents, students, and faculty/staff across schools in the AOD during Winter 2018. This work sought to identify variation in responses across respondents and schools. Additionally, we sought to identify an association between the survey responses and enrollment trends across schools. Our findings show some significant differences in responses across the domains of the survey as well as across respondent group. The initial analysis found no statistically significant association between measures of organizational climate and enrollment trends, though we acknowledge limitations in the data and call for continued research in this regard.

Keywords: Organizational climate, school choice, school effectiveness

In 2018, the Archdiocese of Detroit (AOD) had over 80 elementary and secondary schools that served nearly 28,000 students. While Catholic education in the AOD remains robust and dynamic (including parochial schools, lay sponsored schools, and religious order sponsored schools), the schools continue to face many challenges related to the recruitment and retention of students which has resulted in continued school closures in recent years. In an education market with changing family/student demographics and prolific public school choice options (Goldring & Rowley, 2006; Pogodzinski et al., 2018), Catholic schools face increased competition for a shrinking population of students in Southeast Michigan. Additionally, the State of Michigan constitution currently bars any “payment, credit, tax benefit, exemption or deduction, tuition voucher, subsidy,

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grant or loan of public monies or property, directly or indirectly” for use in nonpublic schools (Mich. Const. art. VIII §2), thus constraining Catholic schools’ ability to compete amid rising costs and tuition.

With growing challenges threatening the sustainability of a robust Catholic school system in the AOD, in Spring 2015 the Catholic Schools Council of the Archdiocese of Detroit was established with the expressed purpose of advising Archbishop Vigneron on broad matters related to the support of Catholic education. Working with the AOD Department of Catholic Schools, a vision for the future of Catholic education in Detroit was encompassed in four pillars: (a) proudly Catholic, (b) academically excellent, (c) accessible to all, and (d) sustainable for the future (Archdiocese of Detroit, 2019).

To help realize this vision, the CSC established four standing committees to advance the work of the council: (a) Academic Excellence, (b) Advancement and Development, (c) Catholic Identity, and (d) Finance and Governance.

The primary focus of the Academic Excellence Committee (AEC) was on supporting schools to ensure they were meeting or exceeding all national standards for academic performance in an environment that integrated faith, virtue, and knowledge. Therefore, the committee convened with representative members from local universities, the AOD Office of Catholic Schools (OCS), and school principals. One of the initial tasks of the AEC was to begin to establish systems to support the schools in working towards continuous academic/operational improvement.

To help inform continuous improvement efforts at the school and AOD levels, the AEC administered the Catholic Identity Program Effectiveness Surveys (CIPES) across schools within the AOD during Winter 2018. The CIPES are aligned with the National Standards and Benchmarks for Effective Catholic Elementary and Secondary Schools (NSBECS) and are intended to assess the extent to which a school is thriving in four key areas: (a) mission and Catholic identity, (b) governance and leadership, (c) academic excellence, and (d) operational vitality (Center for School Effectiveness, Loyola University Chicago, 2012; Ozar & Weitzel-O’Neill, 2013). These surveys are intended to measure school climate and effectiveness from the perspective of multiple stakeholders. Therefore, through surveying school faculty/staff, parents, and students, the CIPES provide potentially rich data to inform school improvement efforts at the individual school and archdiocesan levels.

Although many of the enrollment challenges that Catholic schools face are related to long-term structural changes within the Church and broader society (e.g., declining Church attendance, residential patterns, and public school choice options) and the rising costs of providing a Catholic education (often accompanied by rising tuition), research has identified perceived school quality as a significant influence on parental choice of school (Hanushek et al., 2007). For those who consider

Catholic education, most parents are not only seeking an education environment marked by high academic quality but one that is also Christ-centered. While that may be a universal goal of Catholic schools, it is imperative that research continues to assess the effectiveness of Catholic schools in providing an academically rich education with a strong Catholic identity, as these measures are likely associated with enrollment and other outcomes across Catholic schools.

Therefore, the objective of this research was to provide an initial reporting of stakeholder responses to the surveys, exploring associations between these measures and enrollment patterns. Specifically, we sought to answer the following questions:

1. Overall, how did respondents rate the organizational climate of Catholic schools in the AOD?
2. To what extent did the responses vary by respondent type?
3. To what extent did responses vary within schools and across schools?
4. What was the association between measures of organizational climate and change in student enrollment?

For this work, we define organizational climate as described by Hoy & Miskel (2008), “(S)chool climate is a relatively enduring quality of the school environment that is experienced by participants, affects their behavior, and is based on their collective perceptions of behaviors in schools” (p. 198).

Literature Review

The review of the literature consists of two areas of focus: the national enrollment trends for private schools (specifically Catholic schools), and the motivating factors which drive parents to enroll their children in private schools (specifically Catholic schools). The motivating factors section of the literature review is further segmented into four themes to broadly align with the focus of the CIPES: (a) academics; (b) social and emotional elements; (c) religion, values and beliefs; and (d) parent involvement and community. The focus of the study was on the CIPES survey areas of: (a) mission and Catholic identity, (b) governance and leadership, (c) academic excellence, and (d) operational vitality (Center for School Effectiveness, 2012; Ozar & Wietzel-O’Neill, 2013). While important in the overarching analysis of enrollment trends, other factors which dissuade parents from choosing private school enrollment (e.g., tuition cost and transportation) were not assessed as part of this study. The impact of Catholic school tuition on enrollment specific to AOD schools is an area for future research as the CSC continues to specifically address issues related to access. However, this study focused on variations in perceptions of organizational climate within and across schools.

Enrollment Trends

In the United States, Catholic school enrollment peaked in the mid-1960s with 4.5 million elementary school students and about 1 million high school students (United States Conference of Catholic Bishops (USCCB), n.d.). By 1995, the numbers of Catholic school students dropped to approximately 2 million elementary students and 600,000 high school students, further eroding to approximately 1.5 million and 595,000 respectively by 2015. Among private school enrollment, Catholic school enrollment dropped from 45% of all private school students in 1995 to 36% in 2015 (Broughman et al., 2017). As a point of comparison, the U.S. public school enrollment increased during that same two-decade period, from 50,759,000 students, elementary and high school combined, in 1995 to 55,836,000 students in 2015 (National Center for Education Statistics, 2011, 2018).

Academic Quality

A review of the literature shows that there are many reasons why parents choose to send their children to Catholic schools, but a few factors stand out as consistently reported across multiple studies. One of those motivating factors involves academics. Several studies have reported on academic quality as a motivating factor for parents who choose private schools in general (Bosetti, 2004; Braun et al., 2006; Diperna, 2013; Moe, 2001; Weiher & Tedin, 2002) and Catholic education specifically (Coleman, 1981; Jeynes, 2002; Trivitt & Wolf, 2011) indicated that 53% of private school parents, 38% of charter parents, and 25% of public (district) school parents reported being very satisfied with their children's school in terms of their expectations for student achievement. Trivitt & Wolf (2011) found that parents who sought a school with high academic standards, and identified as Catholic themselves, were more likely to select a Catholic school for their children. Jeynes (2002) attributed the higher levels of academic achievement in Catholic schools to personal religious commitment, and stated that the positive effects are greatest at the high school level. Carbonaro (2006) concurred with Jeynes that the Catholic students performed significantly better academically than their public school peers, but that was only the case at the high school level and not in the elementary schools. Erickson (2017) reviewed previous studies and found that parents did not choose a private school for religious instruction only, but rather, they also factored in academic quality when making their decision.

In the literature, the higher academic achievement levels in Catholic and private schools were not consistent across all demographic groups. Some studies reported that economically disadvantaged students performed better in Catholic schools (Bryk et al., 1993; Figlio & Stone, 1997; Neal, 1997). Other studies found no positive academic effect, and in some cases, children from low-income families or non-Caucasian students were found to be performing at a level below their public school peers (Berends & Waddington, 2018; Elder & Jepsen, 2014; Hallinan & Kubitschek, 2012; Sander, 1996).

Schneider & Buckley (2002) examined internet search keywords and found that parents with a college education were more likely to look for schools with higher reported test scores than parents without a college education. However, Schneider et al. (1998) studied families currently enrolled in private school and found that less educated parents put more value in high standardized test scores, while parents with more education selected alternate school situations for their children based on performance measures of academic achievement. Hamilton & Guin (2005) noted that motivating academic factors might extend beyond test scores to incorporate a broader definition of student achievement. Likewise, several studies focused on other academic-related factors that parents reported as important in their decision to send their children to private school such as teacher quality (Barrows et al., 2017), teacher autonomy (Alt & Peter, 2002; Forster & Andrea, 2009), extracurricular opportunities (Figlio & Stone, 1997; Harris & Larsen, 2015), and smaller class sizes (Bosetti, 2004; Diperna, 2013; Kelly & Scafidi, 2013; Rivkin et al., 2005; Zeehandelaar & Winkler, 2013)

Social and Emotional Factors

The second theme in terms of parent motivation when choosing a private school related to social and emotional factors. According to the Collaborative for Academic, Social, and Emotional Learning (2013),

Social and emotional learning (SEL) involves the processes through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. (p. 4)

Prichard & Swezey (2016) studied parents in private, Christian schools. They found that parents chose schools based partially on their children's social needs, with the goal to have happy and content children. Quinn (2018) identified a preference on the part of parents to have their children develop what she referred to as "purpose." Quinn found that the Catholic school values and belief system helped adolescents with self-awareness and their role in relationships with others. The students in Quinn's study saw helping others as part of the definition of their own purpose.

Issues related to classroom management, discipline, and behavior were shown in the literature to motivate parents to choose private schools (Barrows et al., 2019, 2017; Coleman, 1981; Figlio & Stone, 1997; Kelly & Scafidi, 2013; Schneider et al., 1998) found that Catholic schools in particular were focused on instilling self-discipline in their students. They reported that students in Catholic schools were less likely to act out or be disruptive, showed greater self-control, and were more self-disciplined than students in other private or public schools. Barrows et al. (2017) found that 46% of private school parents reported they were very satisfied with discipline in their child's school, as

compared to 34% in charter schools and 17% in public (district) schools. Weiher & Tedin (2002) stated that discipline ranked in the top three reasons that parents gave for participating in a school choice program. This was consistent across the racial groups of White, African-American and Hispanic parent respondents. Student safety was frequently cited as a reason why parents chose private school over public options (Cheng & Peterson, 2017; Vassallo, 2000). This was especially true for lower-socioeconomic parents and those who identified as racial minorities (Schneider et al., 1998; Teske et al., 2007).

Religion, Values, and Beliefs

The third theme that emerged from a review of the literature pertains to religion, values, and beliefs. It is not surprising that the research showed Catholic parents often chose a Catholic school in order to provide their children with a religion-based curriculum (Baker et al., 1996; Barrows et al., 2019; Bosetti, 2004; Catt & Rhinesmith, 2016; Jensen et al., 2014; Sander, 1996; Wadsworth & Walker, 2017). Catholic parents who attended church regularly were more likely to send their children to Catholic school (Sander, 2005). In the Latino community, Suhy (2012) found that urban parents had a strong preference for Catholic education for their children. Furthermore, Sander (2001) stated that people who had attended a Catholic school were more likely to regularly attend Mass, pray daily, and retain their Catholic identity as adults. Outside of motivating factors involving religion, parents also selected private schools in order to have their children in an environment that shared their values and beliefs (Boerema, 2009; Bosetti, 2004; Bryk et al., 1993; Catt & Rhinesmith, 2016; Hausman & Goldring, 2000; Weiher & Tedin, 2002; Zeehandelaar & Winkler, 2013).

Community

The fourth theme is based on parent involvement in their children's education and a sense of community. Over 50 years ago, Pope Paul VI proclaimed that the way in which Catholic schools were perceived was changing from the school as an institution to the school as a community (Miller, 2006). Numerous studies indicated that a factor which motivated parents to engage in school choice was the opportunity to be more involved in their children's education (Boerema, 2009; Goldring & Phillips, 2008; Goldring & Rowley, 2006; Trivitt & Wolf, 2011; Vassallo, 2000). The collaborative relationship between families and educators was viewed as a mutually beneficial situation which was valued by both parents and teachers (Alt & Peter, 2002; Bryk & Driscoll, 1988; Huber, 2009; Miller, 2006). When asked if they were satisfied with how school staff interacted with them, 75% of private school parents responded that they were very satisfied, as compared to 59% of charter school parents and 49% of public (district) parents (Cheng & Peterson, 2017). In parochial Catholic schools, educators are often members of the parish which facilitates students having more frequent and informal interactions with their teachers outside of the classroom (Bryk & Driscoll, 1988). Coleman (1989) identified the religious community surrounding a Catholic school

as a valuable asset for students without a strong family support system. Cook & Simonds (2011) stated that modern Catholic schools could be a platform to build a culture of relationships and that this would be a differentiating facet of the education offered in the schools. Huber (2009) explained, “The Catholic school thus serves as a quality academic institution and as a community of follows of Jesus who pray, worship, celebrate and mourn together as one community” (p. 10).

Conceptual Framework

The work presented here draws from the literature review and is broadly grounded in organizational climate theory. Specifically, a school’s organizational climate reflects the policies, practices, and norms that define the organization, and further relate to the ways that members perceive and evaluate these formal and informal structures (Hoy & Miskel, 2008; Litwin & Stringer, 1968; Tagiuri, 1968). As such, the organizational climate of a school may influence specific actions of actors tied to the school as it relates to their thoughts and feelings regarding the organization (Gilmer, 1966; Hoy & Miskel, 2008). For example, organizational climate may influence parental decisions to continue to enroll their child in a specific school or influence a teacher to remain teaching in a particular school. Certain aspects of organizational climate have also been found to be related to important student outcomes, such as student achievement growth and attendance (Bryk et al., 2010; Gershenson, 2016; Pogodzinski et al., 2018).

For Catholic schools, an important measure of organizational climate relates to the extent to which a school’s policies, practices, and norms reflect the NSBECS. According to Ozar and Weitzel-O’Neill (2013), the NSBECS “provides Catholic school educators and stakeholders with research-based criteria for operating a mission-driven, program-effective, well-managed, responsibly governed Catholic school” (p. 157). Therefore, the CIPES are intended to provide data on the extent to which schools are organized through policies and practices to promote effective Catholic education as defined by the NSBECS. Furthermore, the measures broadly relate to what is reflected in research regarding parental choice, specifically related to preferences concerning academic quality, care for the whole child (social and emotional wellbeing), religion/values/beliefs, and community. We hypothesize that there is a relationship between the organizational climate of a school and parental choice for enrolling their child in that school, particularly within an educational landscape marked by high levels of school choice and increasing tuition costs. In other words, parents who are paying tuition may be more sensitive to the school climate than those whose kids attend a public school.

Methods of Data Collection and Analysis

Through a partnership between the Center for Catholic School Effectiveness (Loyola University Chicago) and the Roche Center for Catholic Education (Boston College), the CIPES were developed

to gather information from faculty/staff, parents, and students regarding their assessment of the organizational climate of their schools (CIPES, 2012). Specifically, respondents were asked to state their level of agreement (1 = strongly disagree to 5 = strongly agree) to questions that pertain to the policies and practices within a school and measure a school's alignment with the NSBECS across the four domains of a) mission and Catholic identity, b) governance and leadership, c) academic excellence, and d) operational vitality. In Winter 2018, at the request of the AEC and through a partnership with faculty at Madonna University and the University of Detroit Mercy, surveys were administered to faculty/staff, parents, and students (grades 5-8) across elementary schools (K-8) in the AOD. There were over 7,600 usable unique responses across 61 schools used in this analysis (see Table 1).

Table 1
Characteristics of Survey Responders

Variable	Students	Parents	Staff
N	3,132	3,560	924
% Female	52	77	88
%Catholic	87	89	91
Race			
% African American	5	4	1
% Asian	5	2	1
% Other Race	7	4	1
% White	83	90	97
Ethnicity			
% Hispanic	9	5	2

The demographics of the student respondents were generally in-line with the overall student population with AOD Catholic schools. For example, approximately 6% of students in AOD K-8 schools were African American, 2% were Asian, 4% were “other race” (including two-or more races), and 88% were white (collected via the NCEA demographic report and received from the AOD via personal correspondence). Teacher demographics at the diocesan level were not available from AOD.

To address the first two research questions, we first calculated mean responses across the four domains for each of the respondent groups. Table 2 provides information on the survey items and Cronbach alphas; as shown there was a high level of internal consistency across domains and respondent groups. We also created an “overall” measure of climate for each respondent category by taking the mean response across all items for each respondent group. We then estimated a series of ANOVA models to identify the extent to which responses varied across respondent group (i.e., students, parents, and faculty/staff).

Table 2*Survey Items*

Domain	# of Questions	Students Cronbach α	# of Questions	Staff/Faculty Cronbach α	# of Questions	Parents Cronbach α
Mission and Catholic Identity	9	0.87	13	0.91	13	0.94
Governance and Leadership	3	0.88	7	0.92	7	0.94
Academic Excellence	12	0.90	14	0.93	14	0.96
Operational Vitality	3	0.75	8	0.92	8	0.95
All Items	27	0.95	42	0.98	42	0.98

To answer the third research question, we estimated a set of unconditional multi-level models to identify the percentage of variance in responses within and between schools. The following represents the general model:

$$Y_{ij} = \mu_{00} + u_{0j} + r_{ij} \quad (1),$$

where Y_{ij} is the measure of respondent i 's assessment of organizational climate in school j , μ_{00} is the grand mean, u_{0j} is the level 2 variance (school specific error term), and r_{ij} is the level 1 variance (respondent error term). Error terms were assumed to be normally distributed at the two levels:

$$r_{ij} \sim N(0, \sigma^2), u_{0j} \sim N(0, \tau^2).$$

To address the last research question, we estimated an ordinary least squares (OLS) regression with change in enrollment as the outcome of interest:

$$Y = \beta_0 + \beta_1 \text{Student} + \beta_2 \text{Parent} + \beta_3 \text{Staff} + \beta_4 S + \beta_5 P + \beta_6 C + e \quad (2).$$

This model predicts the percent change in enrollment (2014-15 to 2017-18) as a function of a school-level composite measures of organizational climate (Student, Parent, and Staff), a set of school attributes (S) (e.g., tuition), a set of parish attributes (P) (e.g., percent change in registered households), and a set of community attributes (C) (e.g., percent change in population). Error terms were assumed to be normally distributed. Table 3 provides descriptive information for all variables included in the model.

As indicated, the focal independent variables are school-level composite measures of organizational climate for each respondent category, which were calculated by taking the mean response across all items for all respondents within a school for each category of respondent. We did this for three key reasons. First, the CIPES Technical Report found that "each survey reliably captured a single factor or dimension reflecting the Defining Characteristics or Standards for effective Catholic Schools" (Weaver, 2012, p. 4). In other words, collectively the items of each survey (i.e., student, parent, and staff surveys) were measuring a single construct of organizational climate. Second, the composite measures for each respondent category in our own analysis showed a very high level of internal consistency (i.e., Cronbach α of 0.95 or higher), indicating that the survey

was measuring a single dimension of organizational climate for each respondent category. Lastly, we did initially estimate some models with measures of the domains for each respondent category and tested for multicollinearity. Based on the variable inflation index (VIF) for these measures, there was strong indication that multicollinearity was present (i.e., VIF over 5 for these measures), making interpretation of the relationship between these individual predictors and the outcome difficult and potentially misleading. Therefore, we only included the overall composite measure (e.g., mean for all items) for each respondent category. We estimated five models, including a model that did not include any of the focal independent variables (to get a baseline of model fit), three models with the respondent climate composite measures entered separately, and a final model with all three composite measures included.

Table 3

Descriptive Information about Variables used in OLS Regression (School-level)

	Description	Mean	Std Dev	Min	Max
%Δ enroll	Percent change in enrollment (2013-14 to 2016-17)	-7.03	21.53	-81.73	47.31
Student climate	School-level composite student measure of organizational climate	4.02	0.54	1.00	4.93
Parent climate	School-level composite parent measure of organizational climate	4.01	0.29	3.08	4.61
Staff climate	School-level composite staff measure of organizational climate	4.30	0.28	3.42	4.73
Enrollment	Total school enrollment (2017-18)	249.43	167.31	19.00	753.00
Tuition	Per pupil tuition (2016-17)	3996.42	967.19	2080.77	6089.17
Parishioners	Number of registered households in parish	1719.69	1110.23	307.00	4772.00
%Δ parishioners	Percent change in number of registered households in parish	-7.39	17.28	-72.52	37.60
Total pop	Total population in community catchment zone	387166.52	298766.74	24653.00	1314940.00
Δ population	Change in population in community catchment zone (2010-2016)	-0.76	2.73	-7.31	7.21
%White	Percent community population that is white	69.92	17.66	22.27	93.52
Median Income	Median income in community	57803.90	15781.00	24773.08	95004.41

Results

Rating of Catholic School Climate by Respondent Category

To address the first and second research questions, we first report overall mean response rates by category of respondent followed by the ANOVA results. As reported in Figure 1, on average respondents across respondent group rated school climate relatively high across all domains. There was some variation in the measures across respondent group, for example, on average students rated Mission the lowest while parents rated Mission the highest. Also as shown, staff gave the highest ratings among respondent groups for three out of four domains (see Table A1 in the Appendix for more detailed information of responses by respondent category).

Figure 1

Mean Responses by Respondent Group

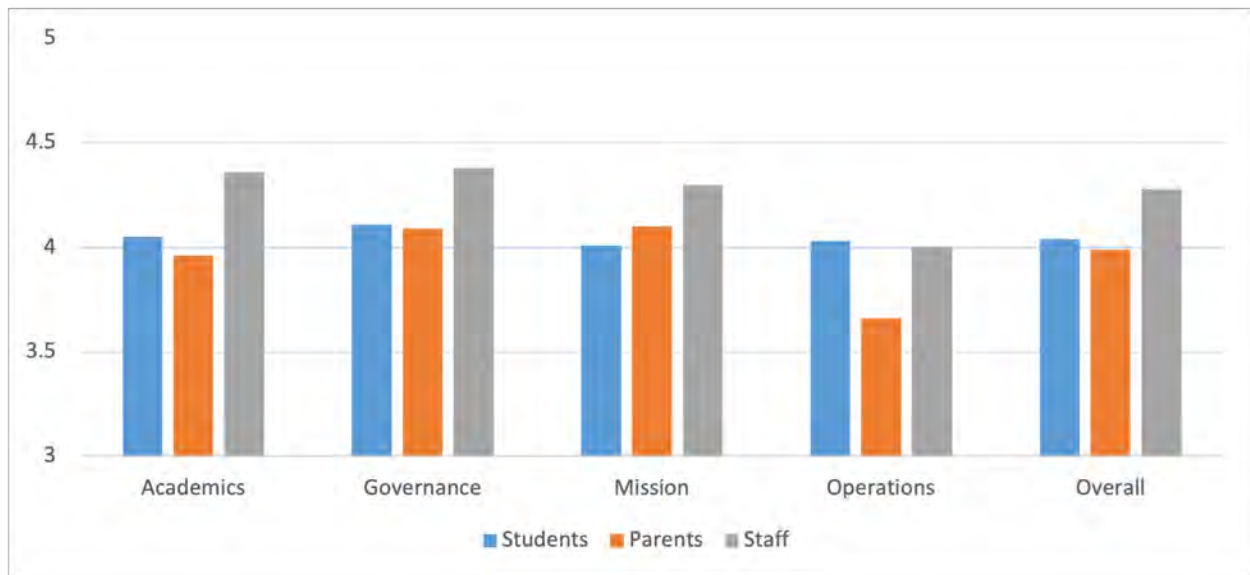


Table 4 reports the ANOVA results and provides more insight regarding variation in responses by respondent group. As shown, there were statistically significant differences in responses among respondent groups for all four domains and the overall composite measure (as indicated by the F-value and $p < 0.0001$).

Table 5 provides more details regarding which respondent groups significantly varied from one another across the domains. The column labeled “Grouping” indicates whether or not there were statistically significant differences ($p < 0.05$) in responses across respondent group. Specifically, for each domain, respondent groups with different letters indicates statistically significant differences in mean responses. For example, if two respondent groups both have an “A” in the grouping column, there is no statistically significant difference in their mean responses. Conversely, if one

Table 4*ANOVA for Climate Measures as a Function of Respondent Group*

Variable	Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Academic Climate	Model	2	110.897156	55.448578	79.25	<.0001
	Error	7216	5048.499832	0.699626		
	Corrected Total	7218	5159.396989			
Governance	Model	2	62.97	31.485	32.51	<.0001
	Error	7207	6978.97	0.96836		
	Corrected Total	7209	7041.94			
Mission	Model	2	57.183461	28.59173	48.57	<.0001
	Error	7249	4267.568142	0.588711		
	Corrected Total	7251	4324.751602			
Operations	Model	2	229.480418	114.740209	103	<.0001
	Error	7125	7936.793314	1.113936		
	Corrected Total	7127	8166.273732			
Overall	Model	2	62.350014	31.175007	50.49	<.0001
	Error	7252	4477.940688	0.617477		
	Corrected Total	7254	4540.290702			

has an “A” and the other a “B”, it indicates that there was a statistically significant difference in their mean responses.

As shown in Table 5, students, parents, and staff differed in their mean rating for Academics and Mission, in addition to the overall composite measure (as indicated by all having different letters in the Grouping column). There was not a statistically significant difference between student and parent ratings with regard to governance, and there was not a statistically significant difference between student and staff rating with regard to operations. Overall, staff consistently rated their school higher than students and parents, and on average parents gave the lowest rating (particularly with regard to operations).

Variation in Measures of Climate Across Schools

To address the third research question, we estimated a series of unconditional multi-level models. As shown in Table 6, the vast majority of variation in organizational climate ratings resided among respondents within schools (~90-95% of variation), although for each category the variation between schools was statistically significant. In other words, although there was some difference in climate ratings across schools, there was more likely to be divergence among stakeholders within a given school.

Table 5
ANOVA Results by Category of Responder

	N	Mean	Grouping
Academics			
Students	3,061	4.05	B
Parents	3,273	3.96	C
Staff	885	4.36	A
Governance			
Students	3,052	4.11	B
Parents	3,271	4.09	B
Staff	887	4.38	A
Mission			
Students	3,065	4.01	C
Parents	3,296	4.10	B
Staff	891	4.30	A
Operations			
Students	3,051	4.03	A
Parents	3,196	3.66	B
Staff	881	4.00	A
Overall			
Students	3,066	4.04	B
Parents	3,297	3.99	C
Staff	892	4.28	A

Note. Groups designated with different letters are statistically significantly different from each other ($p < 0.05$).

Table 6
Covariance Parameter Estimates for Within and Between School Responses

	Academics	Governance	Mission	Operations	Overall
σ^2 (within)	0.6843 (0.0114)	0.9014 (0.0151)	0.5715 (0.0095)	1.0491 (0.0177)	0.5895 (0.0098)
τ_π (between)	0.0418 (0.0098)	0.0977 (0.0203)	0.0320 (0.0074)	0.1157 (0.0238)	0.0482 (0.0105)
n	7,219	7,210	7,252	7,128	7,255

Note. All parameter estimates were statistically significant, $p < 0.0001$.

Association Between Climate and Change in Enrollment

Table 7 reports the results of estimating the regression analysis to address the fourth research question. Overall, only three of the models indicated improved model fit compared to a completely unconditional model (indicated by the F-value), and only at a lower threshold for statistical significance ($p < 0.10$). As shown, the coefficients for the focal climate measures in models 2-5 were not statistically significant, indicating that there was no statistically measurable association between

climate and percent change in school enrollment. It should be noted, however, that in model 3, which included the parent climate measure, the overall model fit remained statistically significant as measured by the F-value ($p < 0.10$), and had a slightly higher R^2 compared to the baseline model (model 1). Surprisingly, the coefficient for parent climate was negative (but again, not statistically significant, $p = 0.20$). Additionally, the measure of model fit for model 4 (which included the staff climate measure) was also statistically significant (F-value, $p < 0.10$) and had a comparable R^2 with the baseline model.

There were some additional independent variables that are of note. For example, the coefficient for change in population was consistently positive and statistically significant ($p < 0.05$ or lower) across all five models, indicating that an increase in residential population was associated with increases in attendance over time, *ceteris paribus*. Additionally, in all five models, the coefficient for total number of registered parishioners was negative and statistically significant ($p < 0.10$ or lower), suggesting that parish size had a slightly negative association with change in enrollment. Conversely, the coefficient for change in the number of registered parishioners was positive in all five models, and statistically significant ($p < 0.05$) in three of them, suggesting that not surprisingly, parish growth was associated with increases in enrollment.

Discussion

Variation Across Respondent Category

The goal of this research was to identify variation in school organizational climate measures across schools in the AOD, and to begin to explore possible associations between these measures and enrollment change. In this exploratory analysis, we have shown that the stakeholders who completed the surveys rated their schools relatively high with regard to the policies and practices related to the NSBECS. At the same time, there were some significant differences in how the schools were rated with respect to respondent group. Specifically, staff consistently rated their schools higher compared to students and parents; conversely, parents consistently gave the lowest ratings among the three groups.

While it could be argued that staff have more information on how a school actually operates across the domains measured in the CIPES, parents' perceptions of the school are critical as they relate to school choice. While school leaders should be attentive to the perceptions of staff as they are essential partners when it comes to school improvement, when considering the recruitment and retention of students, school leaders need to be particularly sensitive to the perceptions of students and specifically parents, even if those perceptions are not fully informed. Additionally, although the CIPES survey items largely measure a single construct of school climate (Weaver, 2012), school leaders may still want to consider the individual domains as they seek to improve their schools.

Table 7*Estimates for Percent Change in Enrollment*

Variable	(1)	(2)	(3)	(4)	(5)
Intercept	108.716*** (33.073)	60.012* (31.508)	172.006*** (58.946)	142.077** (58.516)	76.090 (55.156)
Student climate		1.454 (4.763)			-0.020 (4.916)
Parent climate			-14.854 (11.499)		5.496 (14.453)
Staff climate				-8.848 (10.591)	-10.081 (12.107)
Enrollment	0.045* (0.025)	0.019 (0.022)	0.041 (0.025)	0.036 (0.025)	0.008 (0.021)
Tuition	-0.007 (0.004)	-0.002 (0.004)	-0.005 (0.005)	-0.006 (0.005)	-0.000 (0.004)
Parishioners	-0.011** (0.004)	-0.007* (0.004)	-0.010** (0.004)	-0.011** (0.004)	-0.006* (0.004)
%Δ parishioners	0.563** (0.236)	0.296 (0.214)	0.515** (0.236)	0.551** (0.237)	0.281 (0.214)
Total pop	-0.000 (0.000)	-0.000** (0.000)	-0.000* (0.000)	-0.000 (0.000)	-0.000* (0.000)
Δ population	6.514*** (2.120)	4.534** (1.881)	6.513*** (2.101)	6.356*** (2.120)	4.142** (1.870)
%White	-0.560** (0.246)	-0.309 (0.216)	-0.580** (0.245)	-0.577** (0.245)	-0.296 (0.216)
Median Income	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
N	45	41	45	44	40
F-value	2.14*	1.15	2.12*	1.85*	0.91
R ²	0.3220	0.2500	0.3529	0.3283	0.2632

Note. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Variation Across Schools

Another important finding was that the vast majority of variation in responses was among respondents as opposed to between schools. In other words, opinions about a school were as diverse within a given school as they were between schools. This may be an artifact of the overall high ratings that respondents gave their school. This lack of variation may mask real formal and informal structural differences in how these schools actually operated.

Although school climate surveys are often used to inform local school improvement efforts (often as part of accreditation procedures), diocesan/archdiocesan school leaders can also use

such information to help support local efforts at school improvement. Specifically, having more fine grained information regarding variation in school climate measures between schools within a diocese (even if relatively small differences) can help direct support and resources to schools that need it the most.

Association Between Climate and Enrollment

The last analysis was an initial foray into modeling change in student enrollment as a function of organizational climate in the Catholic school context. As shown in models 2-5, we did not find a statistically significant association between any of the measures of organizational climate and change in student enrollment. In addition to the most straightforward interpretation, that these measures of climate are not good predictors of enrollment trends, since these were school-level models, the lack of variation in the measures of climate across schools may have constrained our ability to identify a significant association.

As previously stated, these models represent an exploratory analysis and were not intended to approximate the identification of causal relationships. There were a limited number of schools used in the analysis, and school leaders who may have been particularly worried about negative responses may have chosen not to administer the survey (e.g., selection bias). Furthermore, it would have been preferred to have prior measures of organizational climate (e.g., longitudinal data) to predict enrollment change. Specifically, not having longitudinal data likely contributed to “attrition bias.” In other words, it is likely that those who had a particularly negative view of a school had already exited, thus those families and staff who remained may have had more favorable views of the school.

Finally, the data set lacked several key variables that are known to be associated with school enrollment in Catholic schools, specifically additional information on cost factors. Although the models controlled for tuition per pupil, longitudinal data on change in tuition over time would be a more appropriate control variable in modeling change in enrollment. Additionally, although we controlled for median income within communities served by the schools, more specific ability-to-pay information would be helpful when modeling change in enrollment as an outcome.

The primary focus was modeling the association between measures of school climate and change in enrollment, and although there were limitations in this part of the analyses presented, it provides some particular insights for future research. Specifically, comprehensive longitudinal data collection across a diocese/archdiocese should include measures of school organizational climate, in addition to information about tuition, enrollment, student testing, etc. It is only through better data collection that we can begin to identify the association between climate and student enrollment independently and jointly with other key measures (such as cost-to-families). Clearly, Catholic schools and dioceses need to work towards improving access for families, but parents will likely be hesitant to send their children to schools that are academically weak or are not carrying out their stated Catholic missions.

Conclusion

Overall, we contend that the findings suggest a need for continued research into how stakeholders assess the organizational climate of their Catholic schools and how these measures may be related to student enrollment. Specifically, the findings suggest a potential need for school leaders to pay attention to diverse perceptions of the school environment across multiple stakeholders. As the literature review and framework suggest, parents in particular are looking for specific school characteristics when choosing a school for their children. Catholic schools in a given geographic region are not only competing for enrollment with public school options, but with other private schools and particularly Catholic schools. Therefore, both diocesan- and school-level leaders are encouraged to take steps to further understand how measures of organizational climate aligned to the National Catholic Standards and Benchmarks may play in the calculus of parents' school decision making.

In order to do so, schools and school systems need to take additional steps to continue to collect measures of organizational climate to produce longitudinal data that can be more readily used in analyzing the associations between school climate and key student and school outcomes. Specifically, this type of data can be better used to model changes in enrollment, but also be used in analyses focused on student achievement growth and social/emotional wellbeing. In other words, such data could be used to dive deeper into areas of importance for parents, students, and schools. As such, we believe these surveys hold great potential to further research of Catholic schools to better inform policy and practice at the diocesan- and school-levels.

References

- Alt, M. N., & Peter, K. (2002). *Private schools: A brief portrait. Findings from The Condition of Education, 2002. (NCES 2002-013)*. U.S. Department of Education, National Center for Education Statistics. <https://files.eric.ed.gov/fulltext/ED546116.pdf>
- Archdiocese of Detroit. (2019). *Unleashing our Catholic schools: A strategic vision for the future of the Archdiocese of Detroit*. <https://spark.adobe.com/page/bvZWetoxQOAY2/>
- Baker, D., Han, M., Keil, C. T., Riley, R. W., & Robinson, S. P. (1996). *How different, how similar? Comparing key organizational qualities of American public and private secondary schools*. U.S. Department of Education, National Center for Education Statistics.
- Barrows, S., Cheng, A., Peterson, P. E., & West, M. R. (2019). Do charters pose a threat to private schools? Evidence from nationally representative surveys of U.S. parents. *Journal of School Choice*, 13(1), 10-32. <https://doi.org/10.1080/15582159.2018.1547589>

- Barrows, S., Peterson, P., & West, M. (2017). What do parents think of their children's schools? *Education Next*, 17(2).
- Berends, M., & Waddington, R. J. (2018). School choice in Indianapolis: Effects of charter, magnet, private, and traditional public schools. *Education Finance and Policy*, 13, 227-255. https://doi.org/10.1162/edfp_a_00225
- Boerema, A. J. (2009). Does mission matter? An analysis of private school achievement differences. *Journal of School Choice*, 3(2), 112-137. <https://doi.org/10.1080/15582150902996708>
- Bosetti, L. (2004). Determinants of school choice: understanding how parents choose elementary schools in Alberta. *Journal of Education Policy*, 19(4), 387-405. <https://doi.org/10.1080/0268093042000227465>
- Braun, H., Jenkins, F., & Grigg, W. (2006). *Comparing private schools and public schools using hierarchical linear modeling (NCES 2006-461)*. <https://files.eric.ed.gov/fulltext/ED492570.pdf>
- Broughman, S., Peterson, J., & Parmer, R. (2017). *Private School Universe Survey (PSS): Public-use data for school year 2015-16*. National Center for Education Statistics.
- Bryk, A. S., & Driscoll, M. E. (1988). The high school as community: Contextual influences and consequences for students and teachers. *National Center on Effective Secondary Schools*.
- Bryk, A. S., Lee, V. E., & Holland, P. B. (1993). *Catholic schools and the common good*. Harvard University Press.
- Bryk, A. S., Sebring, P. B., Allensworth, E., Easton, J. Q., & Luppescu, S. (2010). *Organizing schools for improvement: Lessons from Chicago*. University of Chicago Press.
- Carbonaro, W. (2006). Public-private differences in achievement among kindergarten students: Differences in learning opportunities and student outcomes. *American Journal of Education*, 113(1), 31-65. <https://doi.org/10.1086/506493>
- Catt, A. D., & Rhinesmith, E. (2016). *Why parents choose: A survey of private school and school choice parents in Indiana*. Friedman Foundation for Educational Choice.
- Center for School Effectiveness, Loyola University Chicago. (2012). *Catholic identity program effectiveness surveys (CIPES)*. <https://www.catholicschoolstandards.org/assessment-tools/perception-surveys/program-effectiveness>.
- Cheng, A., & Peterson, P. E. (2017). How satisfied are parents with their children's schools? *Education Next*, 17-17.
- Coleman, J. (1981). Public and private schools. *National Opinion Research Center*. <https://files.eric.ed.gov/fulltext/ED197503.pdf>
- Coleman, J. (1989). Community key to school success - Catholic education's broad triumph. *Wall Street Journal*.
- Collaborative for Academic, Social, and Emotional Learning. (2013). *Effective social and emotional learning programs*. Author.

- Cook, T. J., & Simonds, S. (2011). The charism of 21st-century Catholic schools: Building a culture of relationships. *Journal of Catholic Education*, 14(3), 319-333. <https://doi.org/10.15365/joce.1403042013>
- Diperna, P. (2013). *What do mothers say about K-12 education?* Friedman Foundation for Educational Choice.
- Elder, T., & Jepsen, C. (2014). Are Catholic primary schools more effective than public primary schools? *Journal of Urban Economics*, 80, 28-38. <https://doi.org/10.1016/j.jue.2013.10.001>
- Erickson, H. H. (2017). How do parents choose schools, and what schools do they choose? A literature review of private school choice programs in the United States. *Journal of School Choice*, 11(4), 491-506. <https://doi.org/10.1080/15582159.2017.1395618>
- Figlio, D. N., & Stone, J. A. (1997). *School choice and student performance: Are private schools really better?* Institute for Research on Poverty.
- Forster, G., & Andrea, C. (2009). *Free to teach: What America's teachers say about teaching in public and private schools.* Friedman Foundation for Educational Choice.
- Gershenson, S. (2016). Linking teacher quality, student attendance, and student achievement. *Education Finance and Policy*, 11(2), 125-149.
- Gilmer, B. H. (1966). *Industrial psychology.* McGraw-Hill.
- Goldring, E., & Phillips, K. J. (2008). Parent preferences and parent choices: the public-private decision about school choice. *Journal of Education Policy*, 23(3), 209-230. <https://doi.org/10.1080/02680930801987844>
- Goldring, E., & Rowley, K. J. (2006). Parent preferences and parent choices: The public - private decision about school choice. In *American Educational Research Association, San Francisco, CA* (p. 1-37).
- Hallinan, M., & Kubitschek, W. N. (2012). A comparison of academic achievement and adherence to the common school ideal in public and Catholic schools. *Sociology of Education*, 85(1), 1-22. <https://doi.org/10.1177/0038040711431586>
- Hamilton, L. S., & Guin, K. (2005). Understanding how families choose schools. In J. R. Betts & T. Loveless (Eds.), *Getting choice right: Ensuring equity and efficiency in education policy* (p. 40-60). Brookings Institution Press.
- Hanushek, E. A., Kain, J. F., Rivkin, S. G., & Branch, G. F. (2007). Charter school quality and parental decision making with school choice. *Journal of Public Economics*, 91(5-6), 823-848. <https://doi.org/10.1016/j.jpubeco.2006.09.014>
- Harris, D. N., & Larsen, M. F. (2015). *What schools do families want (and why)?* Education Resource Alliance for New Orleans.
- Hausman, C., & Goldring, E. (2000). Parent involvement, influence, and satisfaction in magnet schools: Do reasons for choice matter? . *The Urban Review*, 32(2), 105-121. <https://doi.org/10.1023/a:1005121214860>

- Hoy, W. K., & Miskel, C. G. (2008). *Educational administration: Theory, research, and practice*. McGraw Hill.
- Huber, J. B. (2009). What church documents say about Catholic education. *Momentum*, 12(40), 8-10.
- Jensen, S., Tuthill, D., & Wolf, P. (2014). Panel discussion: The state of play for parental choice. *Journal of Catholic Education*, 18(1), 174-184.
- Jeynes, W. H. (2002). A meta-analysis of the effects of attending religious schools and religiosity on Black and Hispanic academic achievement. *Education and Urban Society*, 35(1), 27-49. <https://doi.org/10.1177/001312402237213>
- Kelly, J. P., & Scafidi, B. a. (2013). *More than scores: An analysis of why and how parents choose private schools*. Friedman Foundation for Educational Choice.
- Litwin, G. H., & Stringer, R. A. (1968). *Motivation and organizational climate*. Harvard University Press.
- Miller, J. M. (2006). Five essential marks of Catholic schools. In *The Holy See's teaching on Catholic schools*. Sophia Institute Press.
- Moe, T. M. (2001). Hidden demand: Who would choose private schools? *Education Next*, 1(1). <https://www.educationnext.org/hidden-demand/>
- National Center for Education Statistics. (2011). *Projections of education statistics to 2020*. Author.
- National Center for Education Statistics. (2018). *Private school enrollment 1999-2015*. Author.
- Neal, D. (1997). The effects of catholic secondary schooling on educational achievement. *Journal of Labor Economics*, 15(1), 98-123.
- Ozar, L., & Weitzel-O'Neill, P. (2013). National Catholic school standards: Focus on governance and leadership. *Journal of Catholic Education*, 17(1), 157-162. <https://doi.org/10.15365/joce.1701092013>
- Pogodzinski, B., Lenhoff, S. W., & Addonizio, M. F. (2018). The push and pull of open enrolment policy in metro Detroit. *Educational Review*, 70(5), 622-642. <https://doi.org/10.1080/00131911.2017.1359148>
- Prichard, T. G., & Swezey, J. A. (2016). Factors affecting Christian parents' school choice decision processes: A grounded theory study. *Journal of Research on Christian Education*, 25(1), 3-24. <https://doi.org/10.1080/10656219.2016.1105712>
- Quinn, B. P. (2018). Purposeful explorers: Adolescents finding their purposes in a Catholic high school. *Journal of Catholic Education*, 21(2).
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417-458. <https://doi.org/10.1111/j.1468-0262.2005.00584.x>

- Sander, W. (1996). Catholic grade schools and academic achievement. *The Journal of Human Resources*, 31(3), 540-548.
- Sander, W. (2001). *The effects of Catholic schools on religiosity, education, and competition*. National Center for the Study of Privatization in Education.
- Sander, W. (2005). Religion, religiosity, and private schools. *Journal of Catholic Education*, 9(1), 7-21. <https://doi.org/10.15365/joce.0901022013>
- Schneider, M., & Buckley, J. (2002). What do parents want from schools? Evidence from the internet. *Educational Evaluation and Policy Analysis*, 24(2), 133-144. <https://doi.org/10.3102/01623737024002133>
- Schneider, M., Marschall, M., Teske, P., & Roch, C. (1998). School choice and culture wars in the classroom: What different parents seek from education. *Social Science Quarterly*, 79(3), 489-501.
- Suhy, T. M. (2012). Sustaining the heart: Attracting Latino families to inner-city Catholic schools. *Journal of Catholic Education*, 15(2), 270-294. <https://doi.org/10.15365/joce.1502092013>
- Tagiuri, R. (1968). The concept of organizational climate. In R. Tagiuri & G. Litwin (Eds.), *Organizational climate* (p. 11-32). Harvard University Press.
- Teske, P., Fitzpatrick, J., & Kaplan, G. (2007). *Opening doors: How low-income parents search for the right school*. Center on Reinventing Public Education.
- Trivitt, J. R., & Wolf, P. J. (2011). School choice and the branding of Catholic schools. *Education Finance and Policy*, 6(2), 202-245. https://doi.org/10.1162/edfp_a_00032
- United States Conference of Catholic Bishops (USCCB). (n.d.). *History of the Catholic Church in the United States*. <http://www.usccb.org/about/public-affairs/backgrounders/history-catholic-church-united-states.cfm>
- Vassallo, P. (2000). *More than grades: How choice boosts parental involvement and benefits children*. CATO Institute.
- Wadsworth, A. A., & Walker, J. K. (2017). Religiosity and the impact of religious secondary schooling. *Journal of School Choice*, 11(1), 131-147. <https://doi.org/10.1080/15582159.2016.1257900>
- Weaver, S. R. (2012). Technical report: Examination of the psychometric properties of the Catholic School Program Effectiveness and Defining Characteristics Survey. <https://www.catholicschoolstandards.org/images/docs/surveys/Survey-Validity-and-Reliability-Study.pdf>
- Weiher, G. R., & Tedin, K. L. (2002). Does choice lead to racially distinctive schools? Charter schools and household preferences. *Journal of Policy Analysis and Management*, 21(1), 79-79. <https://doi.org/10.1002/pam.1041>
- Zeelandelaar, D., & Winkler, A. M. (2013). *What parents want: Education preferences and trade-offs* (Vol. 84). Fordham Institute. <https://doi.org/10.1097/CCM.obo13e3182632ac5>

Organizational Climate in Schools

Appendix

Table A1

Mean Responses by Respondent Type

	N	Mean	Std Dev	Min	Max
Students					
Academics	3,061	4.05	0.80	1.00	5.00
Governance	3,052	4.11	1.05	1.00	5.00
Mission	3,065	4.01	0.76	1.00	5.00
Operations	3,051	4.03	0.95	1.00	5.00
Overall	3,066	4.04	0.75	1.00	5.00
Parents					
Academics	3,273	3.96	0.92	1.00	5.00
Governance	3,271	4.09	0.97	1.00	5.00
Mission	3,296	4.10	0.81	1.00	5.00
Operations	3,196	3.66	1.18	1.00	5.00
Overall	3,297	3.99	0.85	1.00	5.00
Staff					
Academics	885	4.36	0.62	1.25	5.00
Governance	887	4.38	0.76	1.00	5.00
Mission	891	4.30	0.61	1.85	5.00
Operations	881	4.00	0.94	1.00	5.00
Overall	892	4.28	0.62	1.83	5.00