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The Relationship Between Christian School Accreditation and Students' Academic Performance: A Mixed-Method Study from the Association of Christian Schools International (ACSI)

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The Relationship Between Christian School Accreditation and Students' Academic Performance: A Mixed-Method Study from the Association of Christian Schools International (ACSI)

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Abstract

Accreditation is a vital aspect of evaluating school quality. While the literature has documented substantial evidence on how school accreditation improves school quality, especially students' academic performance, most of the evidence comes from public school settings. Various studies have provided evidence regarding the positive relationship between accreditation and student educational outcomes (e.g., Davis & Fultz, 2015; Eshelman, 2016; Langevin, 2010), unfortunately, virtually no study focuses on this topic from the context of Christian schools. Through this mixed-method study, we aim to bridge this gap. Utilizing the Iowa assessment data, we found that, on average, students in ACSI-accredited schools tend to outperform students in non-accredited schools, especially in math and reading. Our qualitative interviews uncover some factors contributing to this trend.

Keywords: Accreditation; Christian schools; Students' academic performance; Mixed-method study

A. Introduction

Accreditation has been an integral part of many private Christian schools. Accreditation is considered a voluntary process in which externally qualified independent agencies evaluate various components of the schools, including curricula, faculty, facilities, and overall operations (Yorke 1999; Kohler 2003). This accreditation process is essential because it can ensure quality assurance—whether the schools meet rigorous academic and operational standards as well as actively make continuous improvements of their programs and initiatives (Garfolo & L'Huillier 2015). This aligns with what McDonald (2003, p.3) asserted that "in a professional field there has to be some level of minimum competency. Accreditation gives some reasonable assurance of the content and quality of the education opportunities offered by an accredited program." In addition, accreditation not only enables educational institutions, both K-12 and postsecondary institutions, to reach and maintain their quality standard but also helps them attract students (Dill 2007; Dew 2009). In this global competition and internationalization of education, accreditation provides an answer to the issues of varied quality across countries as it provides a common standard (e.g. Bose et al., 2017; Lamico & Jensen 2003; Smith 2010).

Since findings from extant research support student academic growth as a significant indicator for the effectiveness and quality of an institution (Volkwein 2010), a growing body of literature on school accreditation has focused on student academic outcomes. While various studies have provided evidence regarding the positive relationship between accreditation and student educational outcomes across a variety of school levels and types, including public schools and postsecondary institutions (e.g. REL, n.d.), unfortunately, there is virtually no study that focuses on this topic from the context of Christian schools. Through this mixed-method study, we would like to answer these two questions:

Research question 1: What is the relationship between accreditation and students' academic achievement in a Christian school context?

Research question 2: How does accreditation drive students' performance in Christian schools?

B. Literature Review

Accreditation in Christian Schools in the US

Accreditation has a long history in the US, dating back to the early 1800s. The accreditation process has evolved from a simple stamp of approval to a more comprehensive evaluation of standards, programs, and practices that involve professional experts and a peer review team (Bose et al., 2017). With the growing demand for high-quality and standardized international education, US accrediting agencies for K-12 and higher education are estimated to be available in over 100 countries worldwide, including the Association of Christian Schools International (ACSI) —the largest Protestant Christian school association in the world (Eaton, 2009; Johnson et al., 2024).

ACSI as the largest Protestant school association in the US provides accreditation for their school members. ACSI's *Inspire* accreditation protocol (ACSI, 2023) aligns with ACSI, 2024) and provides schools a rigorous, research-based protocol for comprehensive self-assessment and continuous school improvement. According to this guideline, ACSI accreditation takes schools through the process of self-assessment in the following areas:

- Standard 1: Mission, Beliefs, and Foundations
- Standard 2: Spiritual Formation and Biblical Worldview Development
- Standard 3: Governance and School Leadership
- Standard 4: Caring Environment and Positive School Culture
- Standard 5: Stakeholder Engagement
- Standard 6: Community Engagement

- Standard 7: Instructional Program
- Standard 8: Curriculum Planning
- Standard 9: Assessment and Use of Learning Data
- Standard 10: Professional Development and Evaluation
- Standard 11: Legal and Ethical Compliance
- Standard 12: Staff Qualifications and Human Resources
- Standard 13: Student Support Services
- Standard 14: Financial Oversight
- Standard 15: Resource Planning
- Standard 16: Facilities and Transportation
- Standard 17: Instructional Resources
- Standard 18: Health and Safety
- Standard 19: Staff Wellness
- Standard 20: Student Wellness

In addition, the standard process for accreditation through ACSI includes the following:

- The ACSI member school submits the appropriate application and fee for accreditation.
- The school enters candidacy or foundational accreditation after an onsite visit verifies the information in the application and the school's potential to become ACSI accredited.
- The school completes a self-study with accurate and current information through a process that includes:
    - Engaging all stakeholders in the self-study process, including students, parents, staff, faculty, and board members

    - Establishing steering and domain committees and empowering them to do a comprehensive self-assessment
    - Encouraging a healthy professional dialog across the school community about the findings from the self-study process in each domain area
- The school hosts the visiting team of peer Christian educators who validate the self-study, highlight strengths, and collaborate with the school around the school's areas for improvement.
- The applicable ACSI Accreditation Commission reviews the visiting team report and ballot and votes on the accreditation status of the school.
- The school creates and submits an Accreditation Action Plan that is based on the visiting team's findings.
- The school engages in continuous school improvement by completing their Accreditation Action Plan and entering the self-study and visit process again near the end of their term.

Accreditation and Education Quality

In this study, we focus on the often-debated relationship between education quality and the accreditation process generally across all schools and specifically within the context of Christian schools. Given the comparatively low volume of published literature and the inconsistency of findings that pertain specifically to Christian schools, we present some of the most relevant and current research on this subject, particularly from the perspective of US elementary and secondary public schools. While all of these studies come from public school context, the findings of these studies are relevant to Christian schools especially ACSI schools since ACSI accreditation protocols follow similar guidelines from these accrediting bodies.

The first study from Davis & Fultz (2015) uses data from the Accrediting Commission for

Schools Western Association of Schools and Colleges (ACS WASC*). They found that about 98% of principals reported positive perceptions of the accrediting process through which they believe the accreditation cycle encourages overall continuous school improvement. Second, about 98% of the principals reported that the accreditation process positively affects their students' learning. In addition, over 98% and 95% of the principals also reported that the accreditation cycle helps them use data to improve the teaching practices at their school and to improve students' intervention, respectively. The qualitative part of this study also confirmed the survey findings. Multiple principals acknowledged that accreditation encourages continuous school improvement and allows schools to identify growth areas and aspects for improvement. Principals also mentioned that the accreditation process enables schools to gather valuable stakeholder feedback and that it was a meaningful venue for stakeholders to engage in dialogue and collaborative decision-making.

The second study comes from a Pennsylvania (PA) public high school. As a part of the accountability effort, some public high schools in PA have sought to improve student achievement by going through an accreditation process called the Middle States Association's (MSA)* Accreditation for Growth (AFG) along with the state's mandatory strategic plan. Compared to non-MSA-AFG-accredited schools, schools with MSA-AFG accreditation had overall higher student achievement. Specifically, accredited schools have significantly larger averages on their SAT, a statistically significantly higher graduation rate, and a higher percentage of students meeting the adequate yearly progress scores in reading, writing, and math compared to schools that only follow the state's mandatory strategic plan (Johnson, 2012).

The third study was conducted in Michigan public schools. Fleming (2018) examined the differences in academic achievement between schools accredited by the systemic approach of

continuous improvement (AdvancED)* and schools that do not use this approach (Michigan Department of Education). The author found that schools that follow systemic processes are more likely to exhibit higher scores on their performance rating and students' assessment (Fleming, 2018). One previous study that focused on the same accrediting approach as AdvancED (Langevin, 2010) also found differences across school characteristics among schools that used the systemic continuous approach. Particularly, Langevin (2010) found that low-resourced schools with low-income student populations were rated significantly lower in various areas of accreditation, including governance, teaching, resources, and stakeholder communication, when compared to the AdvancED schools of greater affluence. Langevin (2010) also found that while accreditation can improve students' performance, especially in low-income accredited schools, these schools still face many challenges, and student achievement gaps persist when compared with AdvancED schools of affluence.

The following study used mixed methods to examine if accreditation options influenced students' outcomes. Specifically, Eshelman (2016) examined the impact of different accreditation options in Nebraska, including the North Central Association (NCA) and the Southern Association of Colleges and Schools (SACS), on various academic outcomes, including students' ACT composite scores and the Nebraska State Accountability (NeSA) reading and math assessment scores. The author found that only the math NeSA assessment was influenced by accreditation choice. However, when the author followed up with qualitative semi-structured interviews with school leaders, the respondents did not attribute students' academic success to the accreditation process but more to the initiatives done by each district.

An emerging body of non-US-based public-school research has also documented evidence of the benefits associated with accreditation. For instance, Wood & Meyer (2011) did a mixed-

method study among public schools in Nova Scotia, Canada, to evaluate the impact of the Nova Scotia School Accreditation Program (NSSAP) on teaching and student learning at the high school level. They found that "At least 90% of survey respondents in this study indicated that the NSSAP was beneficial, indicating that it is a theoretically sound program with the potential to result in significant school improvement in teaching and student achievement if implemented in a particular manner under certain conditions" (Wood & Meyer, 2011, p.25). Research from Indonesia also showed somewhat similar results. Yustika et al. (2019) examined school accreditation as measured by the teacher competence test, English teachers' competence, and students' English performance. They found a significant relationship between students' English performance, accreditation, and teachers' pedagogical competence (UKG) in certain districts. This study shows that while accreditation might play an important factor in students' English performance, it is not the only determinant, as teachers' competency and regional variations also play a role in this observed relationship.

**Note: The reference section lists a handful of studies with WASC, MSA, and AdvancED (which is now called Cognia). ACSI has formal partnerships with each of those organizations, wherein those organizations have reviewed ACSI's protocol and determined that ACSI's protocol is substantially equivalent to their protocols.*

Theoretical Framework: Accreditation and Student Academic Performance

The system theory of organization, the theoretical framework for this discussion on accreditation and students' academic achievement, as proposed by Senge (2006), views all organizations, including Christian schools, as amalgamations of different aspects, components, and other systems. These entities continuously interact in a meaningful way, with the interaction process having a significant impact on the outcomes. School accreditation models this continuous interaction process, which is the backbone of the systemic process that enables schools to evaluate their specific standards and goals through continuous observation and data collection. Through accreditation and the recurring process cycle, schools are able to analyze their data,

implement improvement plans, monitor their progress, and make necessary changes to achieve their goals.

In addition, this system theory aligns with the *Moral Ecologies* framework from Hunter & Olson (2019). They argued that in any network of social institutions, some normative assumptions and principles guide them to answer these enduring questions of (a) What is good? (b) What do members owe one another? and (c) What one ought to do or not do? Christian schools operate as one of the social institutions that embody this moral ecology (Cheng & Djita, 2021). All of the ideals from this moral ecology framework are then infused explicitly and implicitly through practices, cultures, values, and other parts of the school, such as its curricula, accreditation, pedagogy, and goals, which then also shape the outcomes of the schools, both academically or non-academically (Cheng & Djita, 2021). For instance, since cultivating students' spiritual formation is one of the primary goals of Christian education, Christian schools will ensure that spiritual formation will always be embodied in every aspect of their schools, including through their policy and practices, pedagogy, family-school interactions, administrator and teacher hiring pipeline, or college preparation (e.g. Cheng et al., 2023; Cheng & Djita, 2022; Djita & Nie, 2024; Johnson et al., 2024; Lee & Djita, 2025; Lee et al., 2024). The same integrative process applies to academic outcomes. Since academic excellence is also a priority in Christian schooling (Djita & Nie, 2024), and Christian schools are also open systems where their subsystems interact not only with each other but also with other external parties, organizational improvement through accreditation is an essential aspect of Christian schooling that may help them with their quality assurance, accountability, and sustainability of the schools to serve their constituents. Consequently, since the accreditation process not only holds schools accountable for their objectives but also mandates them to be more adaptable, making necessary changes to

achieve these goals, it is reasonable that Christian schools that actively engage in the continuous accreditation process are more likely to have better outcomes than those that do not.

C. Data and Analyses Plan

C.1 Quantitative Data: Iowa Assessment

ACSI member schools participate in Iowa assessment, which are administered three times each year during the fall, winter, and spring months. The Iowa assessment is primarily administered to students in grades 2 through 8, assessing subjects such as reading, math, language, and science. In some cases, they may also be given in kindergarten or high school, though this is less common. Two subject matter tests are universally administered to all grades: mathematics and reading, which are the subject tests used for comparison in our analyses. Iowa assessment is administered through a third-party administrator, Riverside Insights, which collects and houses Iowa assessment data through a standardized process that includes test administration (either paper-based or online), processing through their proprietary algorithm, scoring and standardizing responses, and securely storing the data in compliance with privacy regulations through their online web-based platform, *DataManager.* For these analyses, Iowa assessment data for all eligible grades (K-12) were pulled from the Riverside data warehouse through ACSI's platform login, with the data for each grade level broken down by ACSI Region and by accreditation status. The eight ACSI regions, along with their respective school counts, are shown in Table 1.

C.1.1. Iowa Assessment: Norms, Scoring, and Percentile Conversions

Iowa assessment raw scores (the number of correct item responses on a given subtest) are converted into standardized scores through a process called scaling, which adjusts for test difficulty and ensures consistency across different test versions by measuring scores across a nationally representative (norm) group of students within that grade. The scaled standardized score (SS) ranges vary by grade level based on academic ability. For example, kindergarten

standardized scores for the spring cohort range from 95 to 179, while, for 12th grade, scores range from 170 to 384. These score ranges account for the progressive academic rigor and complexity of subject matter for each grade level while ensuring compatibility and a standardized approach to measuring ability across grade levels based on normed expectations for age-appropriate student achievement. Standardized scores can also be averaged at the school level, or within a specified grade across multiple schools, or even across entire geographic regions, but not across grade levels.

C.1.2. Converting School-Level Data to Grade-Level Data

Riverside Insights collects data at the individual test level for each student, and reporting is aggregated and shared at the individual grade level for each school. To transform school-level data for each grade (K-12) to grade-level data, weighted averages were calculated using each school's grade-level NINC, which is the number of student subtest participants for each school within each grade, along with the school-level Standardized Score. The NINC subtest total for each school is divided by the summed total number of student subtest takers for the grade to arrive at the school-level weight. The school-level weight is then multiplied by the Standardized Score to arrive at the weighted SS for each school. The sum of all weighted SS's for the grade provides the grade-level weighted average for the reading and mathematics subtests. The details about this can be seen in Tables 2-3.

C.2.1 Qualitative Data: Semi-structured Interviews

To understand the mechanism as to how accreditation might be able to boost students' academic performance through Iowa assessment, we utilized representative samples of school leaders (heads of schools or principals), teachers, and educational/curriculum coordinators who handle Iowa assessment in ACSI schools. This list contains accredited and non-accredited ACSI schools that participated in the Iowa assessment, that representing different regions, school sizes, school

admission policies, and levels of experience, as in Johnson et al. (2024). Through this representative sample, we interviewed nine educators with the following characteristics:

Table 4: Interviewee List for Qualitative Interviews

Interviewee number	Role	Years of Experience	ACSI Accredited School	ACSI Division
1	Achievement Test Coordinator	5	No	Western
2	Teacher	5	No	Central
3	Test Coordinator	7	Yes	Central
4	Head of School	15	Yes	Western
5	Principal	12	Yes	Central
6	Teacher	4	Yes	Western
7	Head of School	30	Yes	Eastern
8	Director of Academic	7	Yes	Eastern
9	Head of School	34	Yes	Eastern

Note: Western division: California/Hawaii, Northwest and Rocky Mountains. Central division: Mid-America, and South Central. Eastern division: Florida, Southeast and Northeast regions.

Table 1: Iowa Assessment Participating School Distribution

School Count (n=)	471	659	741	858	855	848	829	774	698	394	351	271	110
ACSI Regions	K	1	2	3	4	5	6	7	8	9	10	11	12
Region 1: California/Hawaii	60	89	109	129	129	127	122	115	104	34	29	25	9
Region 2: Florida	41	48	50	59	59	59	59	57	57	31	25	16	5
Region 3: Mid-America	82	108	119	119	118	116	115	109	105	71	66	53	24
Region 4: Northeast	64	93	111	128	125	128	123	118	110	64	57	49	15
Region 5: Northwest	22	35	34	42	44	43	37	38	36	22	20	15	5
Region 6: Rocky Mountains	23	30	35	41	42	42	43	39	34	14	12	11	5
Region 7: South Central	71	97	105	126	125	124	123	105	84	50	42	26	6
Region 8: Southeast	108	159	178	214	213	209	207	193	168	108	100	76	41

Likewise, the distribution of students by grade level and region for the reading and mathematics subtests is displayed below:

Table 2: Iowa Assessment Participating Student Distribution in Reading

NINC Reading (n=)	9823	14153	16099	17854	17158	16886	17259	15734	13434	6096	4948	3075	705
ACSI Regions	K	1	2	3	4	5	6	7	8	9	10	11	12
Region 1: California/Hawaii	1290	2345	2913	3121	2974	2908	3004	2675	2423	462	514	292	85
Region 2: Florida	1260	1495	1515	1636	1571	1518	1558	1489	1501	699	456	227	21
Region 3: Mid-America	1598	1979	2167	1961	1990	1822	1891	1737	1563	1011	1093	609	155
Region 4: Northeast	889	1438	1773	1809	1734	1820	1725	1590	1425	707	570	425	61
Region 5: Northwest	413	635	648	781	799	721	657	579	533	212	189	124	18
Region 6: Rocky Mountains	523	664	778	826	836	765	819	727	540	195	120	92	48
Region 7: South Central	1442	1917	2187	2594	2446	2474	2382	1968	1282	606	460	276	25
Region 8: Southeast	2408	3680	4118	5126	4808	4858	5223	4969	4167	2204	1546	1030	292

Table 3: Iowa Assessment Participating Student Distribution in Math

NINC Mathematics (n=)	10052	14170	16101	17843	17142	16845	17324	15760	13487	6370	4744	3078	708
ACSI Regions	K	1	2	3	4	5	6	7	8	9	10	11	12
Region 1: California/Hawaii	1347	2338	2908	3125	2985	2917	2999	2664	2425	468	510	292	85
Region 2: Florida	1321	1504	1520	1633	1571	1518	1628	1565	1574	700	457	227	21
Region 3: Mid-America	1604	1980	2167	1929	1989	1823	1891	1734	1548	1273	909	618	158
Region 4: Northeast	894	1435	1778	1820	1694	1761	1722	1582	1419	705	569	422	61
Region 5: Northwest	422	639	649	780	804	724	661	566	536	210	191	123	18
Region 6: Rocky Mountains	533	661	776	825	835	763	815	721	546	196	125	93	48
Region 7: South Central	1486	1923	2184	2604	2457	2481	2386	1963	1280	609	447	279	25
Region 8: Southeast	2445	3690	4119	5127	4807	4858	5222	4965	4159	2209	1536	1024	292

C.3.1 Descriptive statistics (Quantitative)

C 3.1.1. Data Analyses

We will use two analysis plans for this data, as Swaner & Djita (2024) did. First, we will present descriptive analyses without controlling for other demographic characteristics. For this approach, we will run simple regression following this model:

$$y_i = \beta_0 + \beta_1 + \varepsilon$$

y_i represents the outcome variable of our analyses, which is standardized scores of students in reading and Math. β_1 represents our main independent variable of Christian schools' accreditation status. This variable is a binary variable that takes the value of 1 if the school is an ACSI-accredited school and 0 if otherwise. Lastly, the ε represents an error term that is not captured by the simple regression model above.

The second approach utilizes simple multivariate regressions for our outcome variable by considering all the relevant demographic characteristics in the data (X), including school size, urbanicity, students' socioeconomic status, and schools' year of operation. While this approach cannot provide us with causality, we argue that it will provide us with a sufficient picture of the relationship between school accreditation and students' academic performance. This second approach follows the following model:

$$y_i = \beta_0 + \beta_1 + X + \varepsilon$$

C 3.1.2 Thematic Analyses (Qualitative)

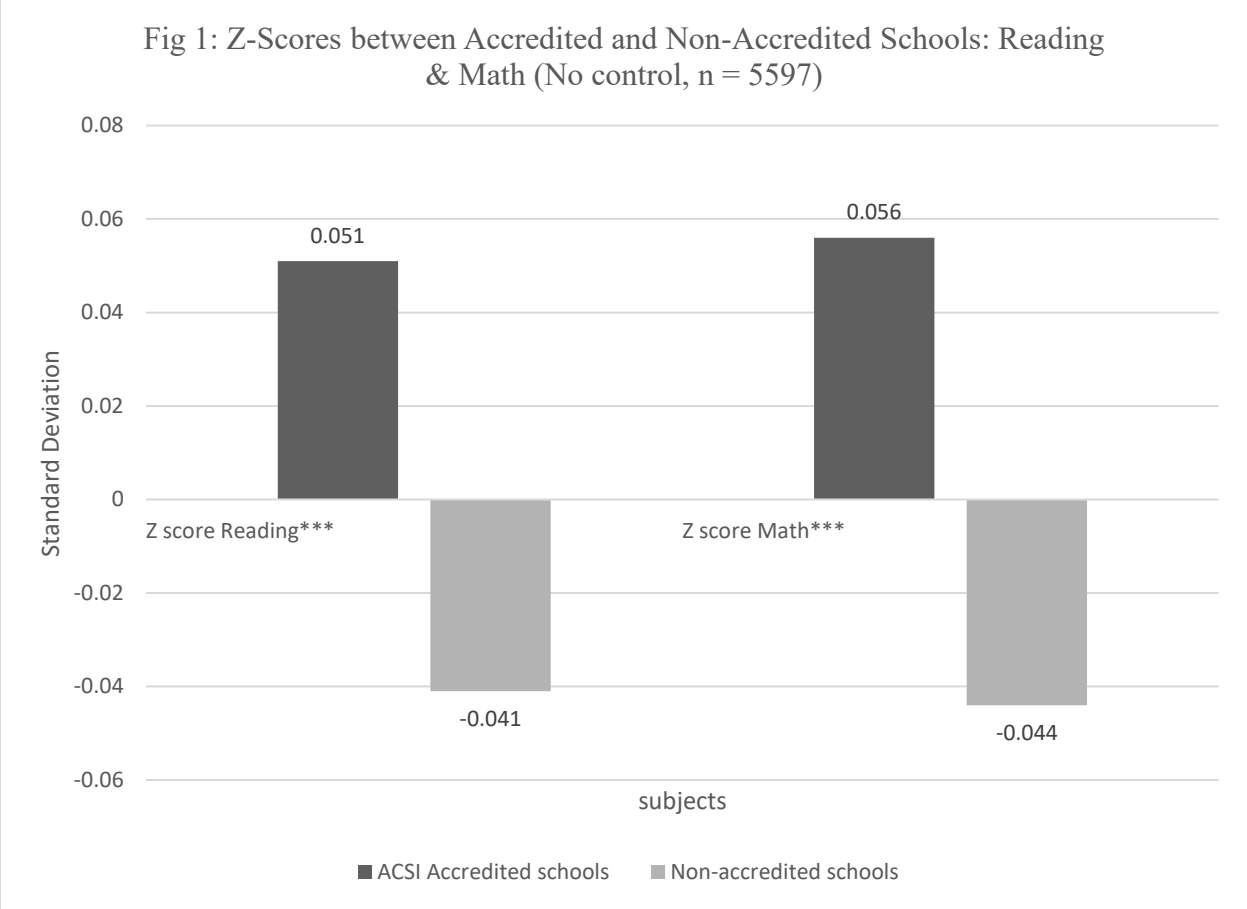
We conducted Zoom interviews in March–May 2025 and then transcribed the interviews. We then used thematic analyses to identify emerging themes across interview sessions (Johnson et al., 2024). We followed the thematic analyses framework from Braun & Clark (2006) from familiarizing ourselves with data (step 1), creating codes from the interview (step 2), looking for themes (step 3), reviewing themes (step 4), defining and naming the themes (step 5), and producing the report (step 6). We made sure that all authors collaboratively coded and redefined

each of the emerging themes until all authors reached an agreement about all the emerging themes from the interview.

D. Results

D.1 Quantitative Results

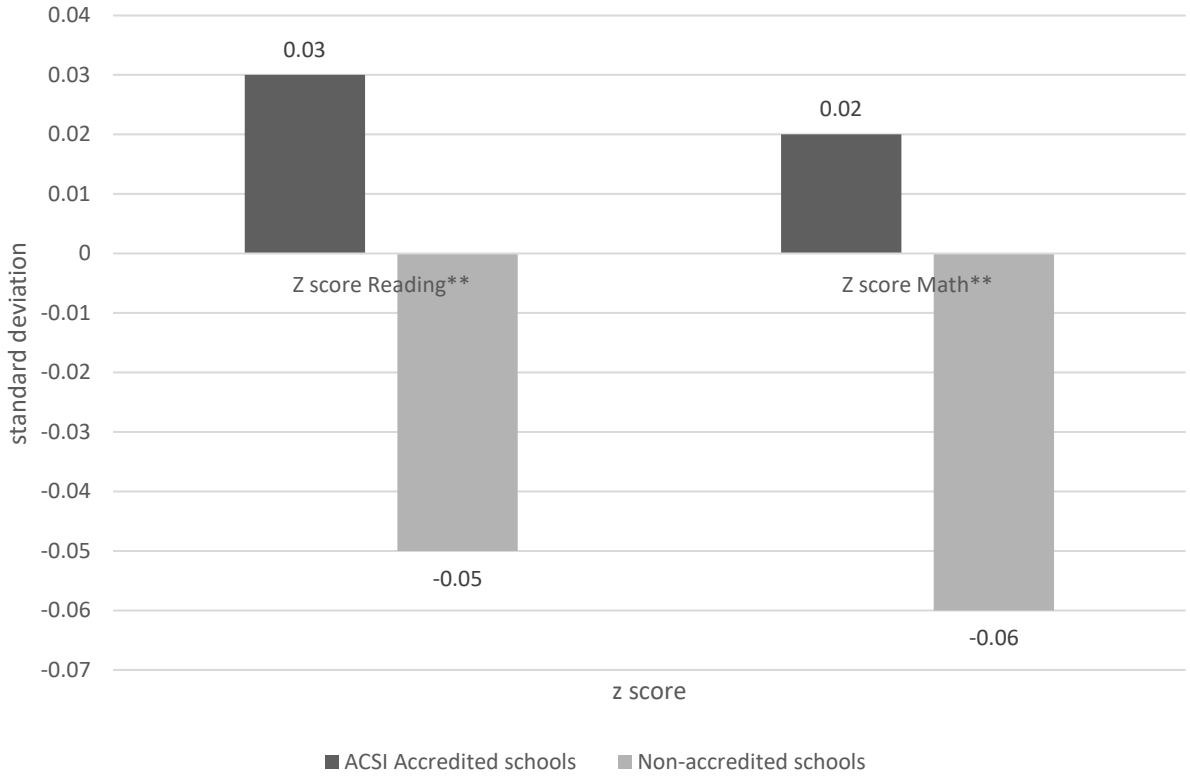
This study seeks to answer this question about Christian schools' accreditation and students' academic performance. From our analysis, we found several important results. First, we found that on average, ACSI-accredited schools outperformed non-accredited schools by 9.2% standard deviation (SD) in reading and 10% SD in math. These results are statistically significant at 99% level of confidence ($p<0.01$). (see Figure 1). It is also important to note that students in ACSI-accredited schools on average perform above the mean for both reading and Math.



We understand that there might be some confounding factors in schools that may contribute to

this relationship. Therefore, we ran the same analyses and control for school characteristics that we argue are relevant to this relationship, such as school size, students' socio-economic status, and schools' years of operation. Even after controlling for students' and schools' characteristics, we still observe similar trends. All else equal, students in ACSI-accredited schools outperformed their counterparts in non-ACSI-accredited schools by 8% SD both in reading and math, and these results are statistically significant at 95% confidence levels ($p < 0.05$) (see Figure 2).

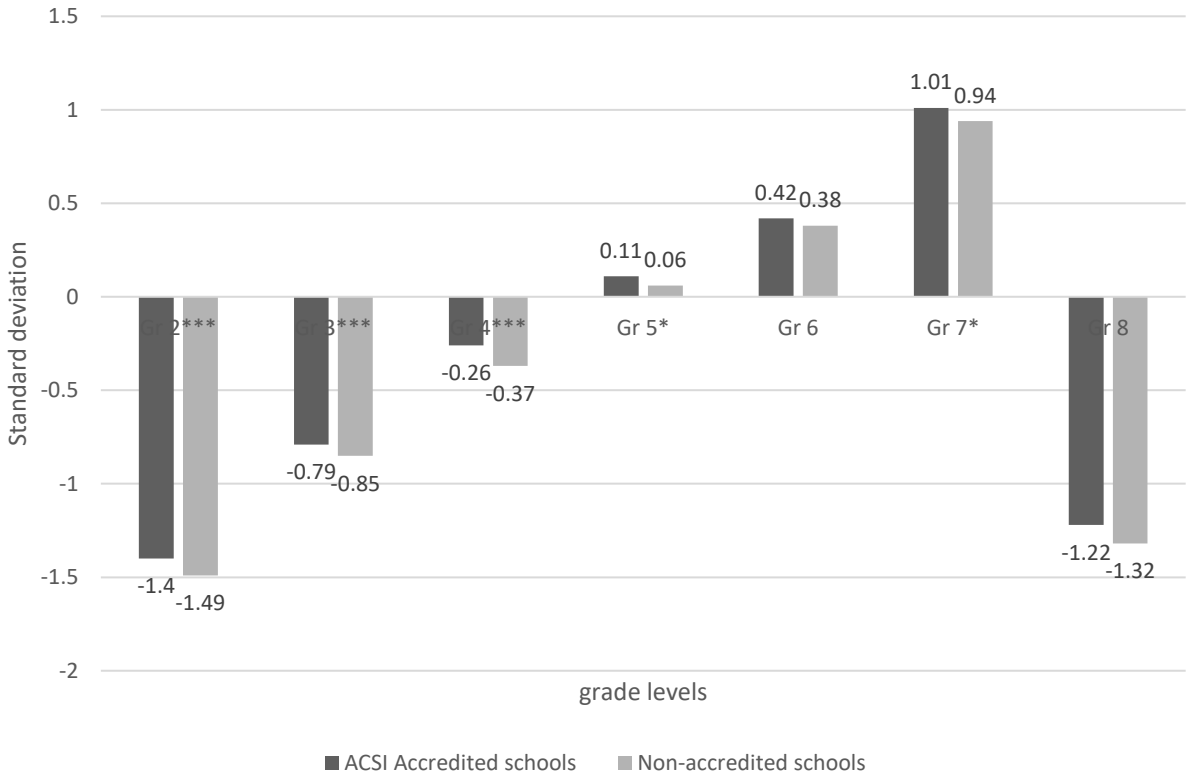
Figure 2: Z-Scores between Accredited and Non-Accredited Schools: Reading & Math (WITH control , n = 3499)

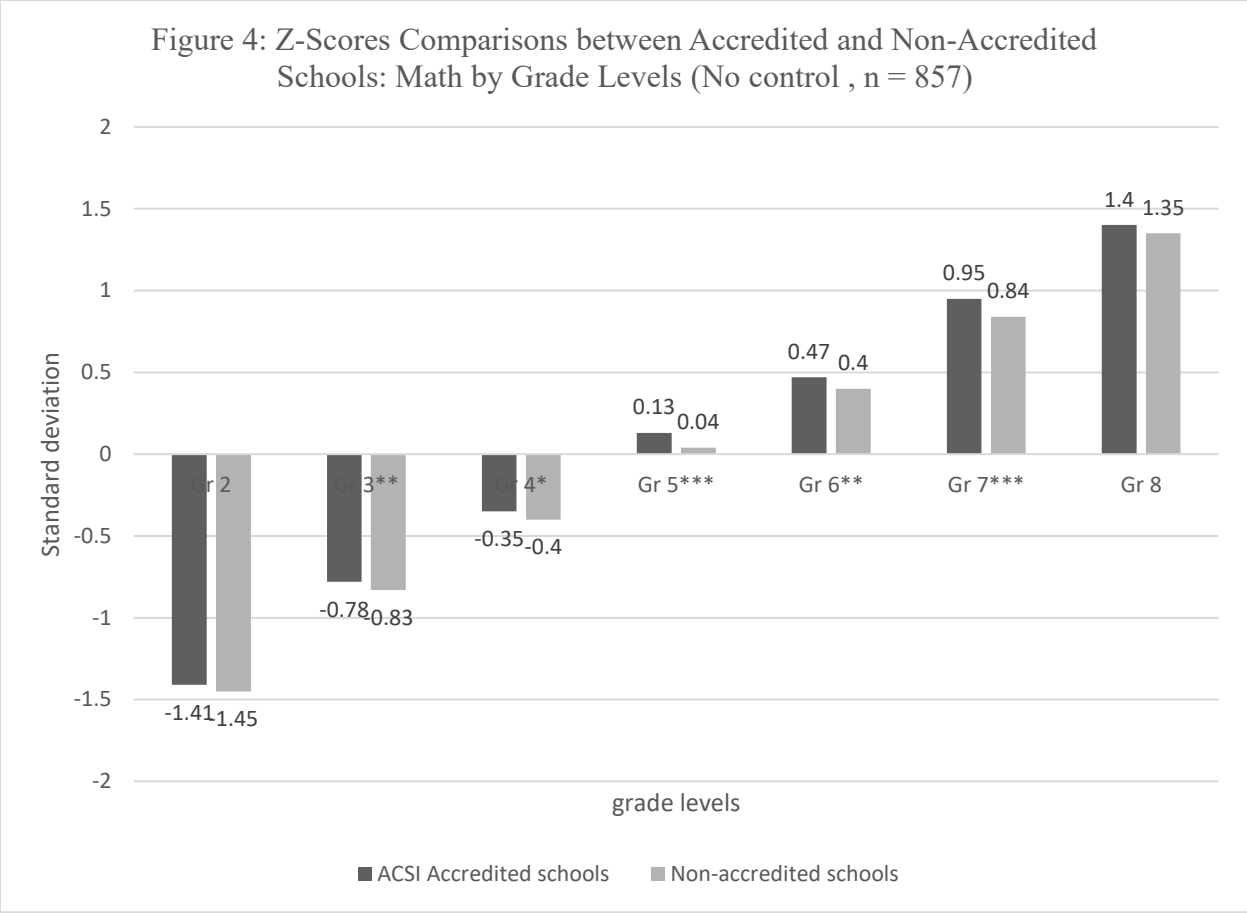


Second, while on average, we found students in ACSI-accredited schools outperformed their counterparts from non-ACSI-accredited schools in all grade levels (grades 2-8) and in both subjects, not all estimates are statistically significant. For instance, in reading, being students in ACSI-accredited schools are associated with an increase of test scores by about 9% SD ($p < .0.01$) for grade 2, 6% SD ($p < .0.01$) for grade 3, 9% SD for grade 4 ($p < .0.01$), 5% SD for

grade 5 (p <.0.1) and 7% SD (p <.0.1) for grade 7 (see Figure 3). Conversely, in Math, we found statistically significant results almost in all grade levels, ranging from a 5% SD increase in grades 3 and 4 (p <.0.01, p <.0.1, consecutively) to a 11% SD increase for grades 7 (p <.0.01) (see Figure 4).

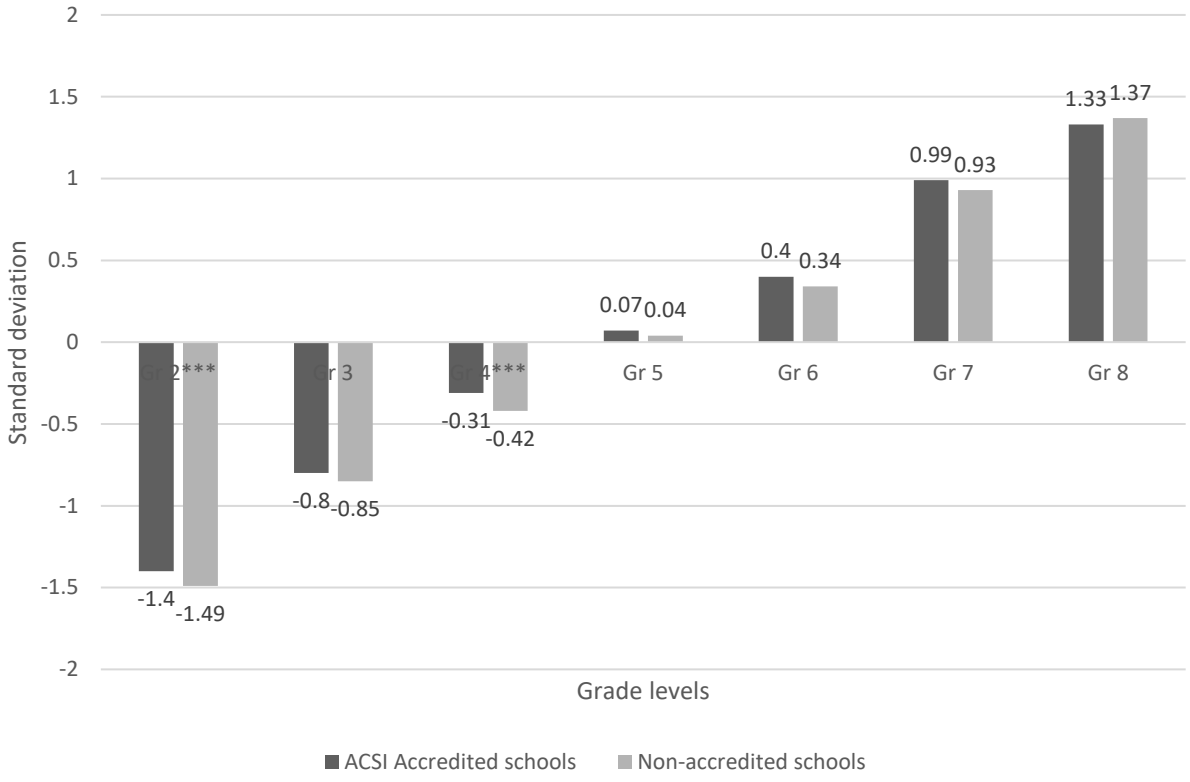
Figure 3: Z-Scores Comparisons between Accredited and Non-Accredited Schools: Reading by Grade Levels (No control , n = 858)

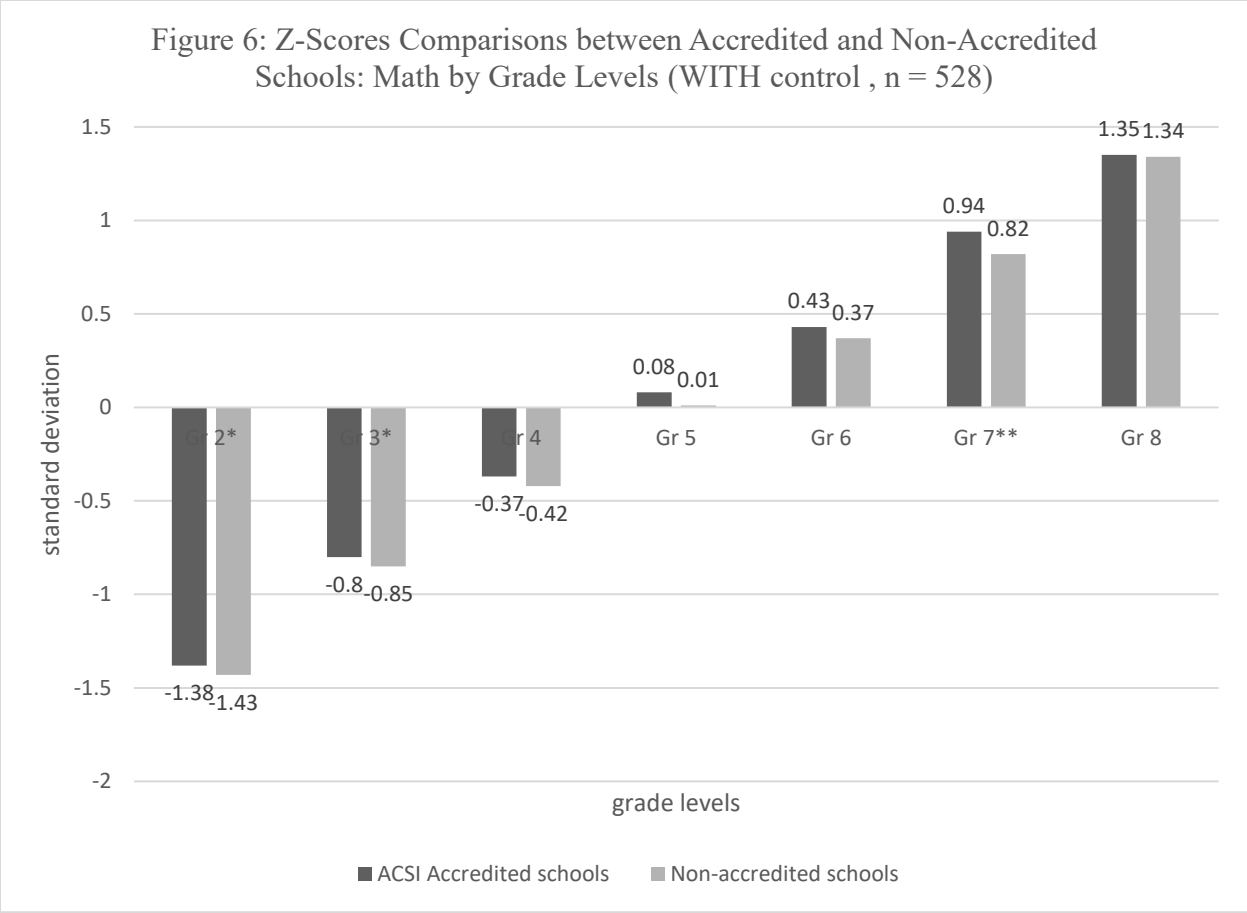




When we did the same analyses by controlling students' and schools' characteristics, we observed that the significant results attenuated, leaving significant results only in grade 2 and 4 for reading (5% SD increase, 9% SD increase, consecutively) and grade 7 in Math (12% SD increase, $p < 0.05$). See Figures 5-6 for details.

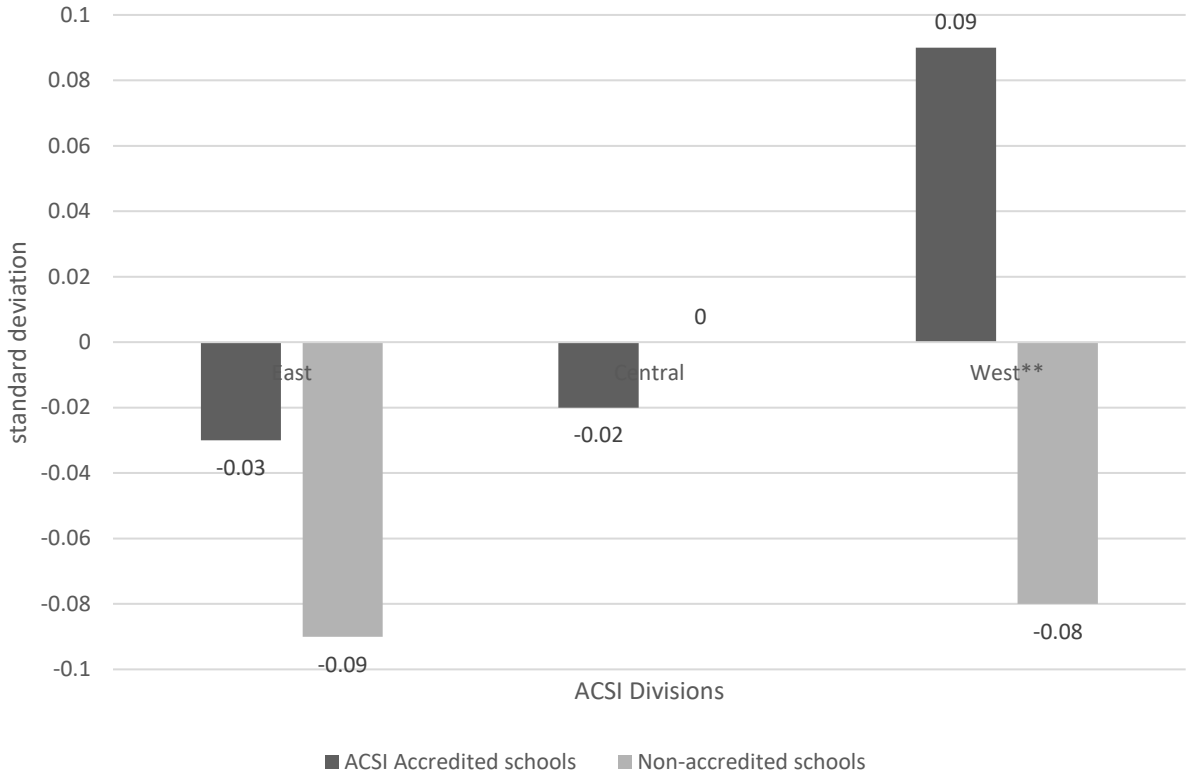
Figure 5: Z-Scores Comparisons between Accredited and Non-Accredited Schools: Reading by Grade Levels (WITH control , n = 529)

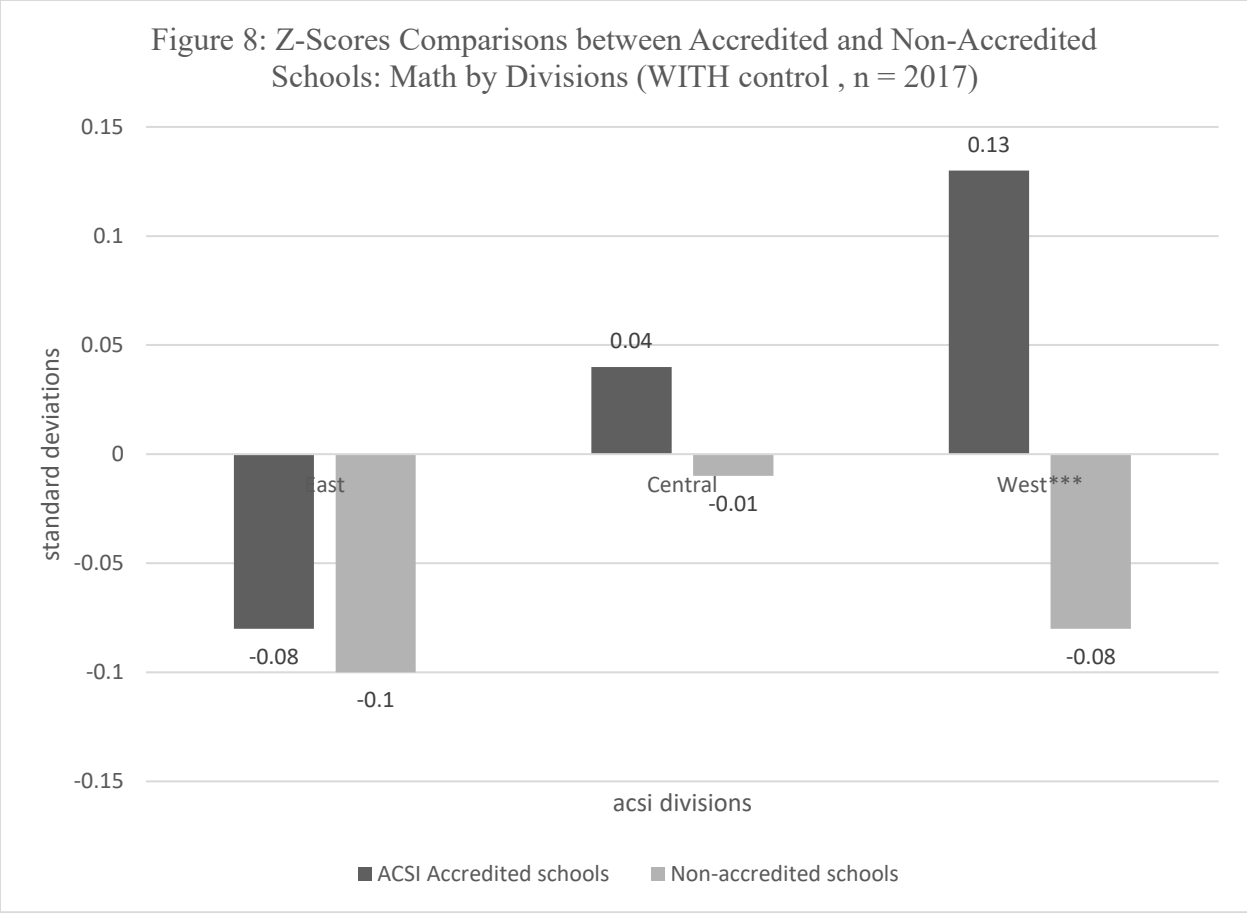




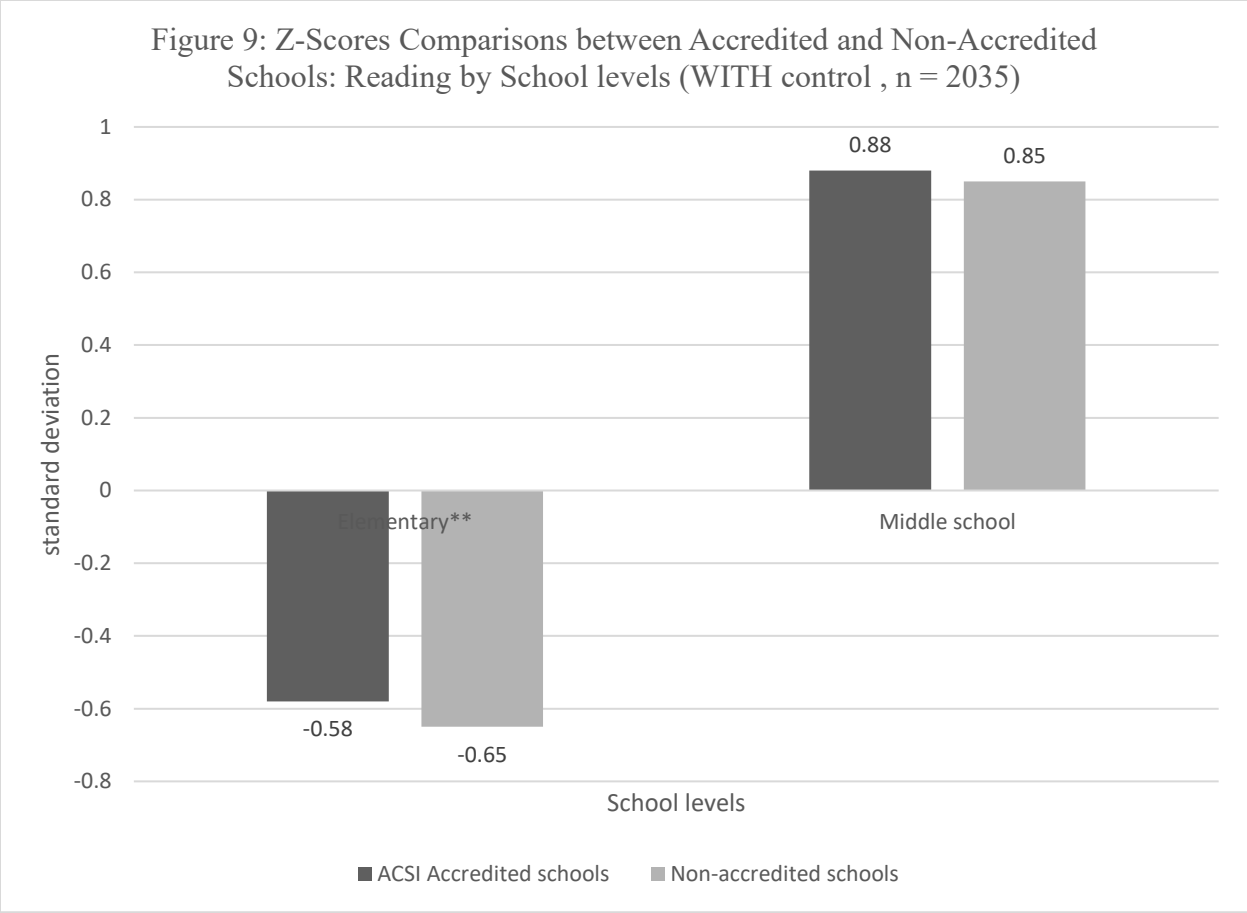
The next sets of analyses are when we look at the results by school levels and ACSI divisions. We found that, while ACSI-accredited schools in all US regions showed higher student performance, we only found statistically significant results in the Western division (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming). Specifically, we found that students who attended ACSI-accredited schools are associated with higher testing scores by about 17% SD ($p < 0.01$) in reading and 21% SD ($p < 0.01$) in math compared to students who attended non-ACSI-accredited schools in the same division (see Figures 7 & 8).

Figure 7: Z-Scores Comparisons between Accredited and Non-Accredited Schools: English by Divisions (WITH control , n = 2017)





Moreover, when we look by school levels—elementary school (grades 2-5) and middle school (grades 6-8) —we find that there are statistically significant differences in students' performance between ACSI-accredited schools and non-ACSI-accredited schools in the elementary level for reading (7% SD increase, $p < 0.05$). However, we only find marginally significant results ($p < 0.1$) for math in both elementary level (5% SD increase) and middle school level (7% SD increase). See figures 9-10 for more details.



D.2 Qualitative Results

While the number of participants is relatively small, through this semi-structured interview, we reached saturation points on the responses, which indicate that even with a larger number of interviewees, it will not significantly change the interview findings. We found five different emerging themes from the interview:

Theme 1: The use of the Iowa assessment for Christian schools

Regardless of their school's accreditation status, all participants mentioned that the Iowa assessment plays a significant role in internal curriculum evaluation, instructional alignment, and data-driven decisions. In addition, while the results of this assessment are not used for some types of accountability relating to teachers, all participants acknowledged that being able to

reflect on the students' performance results from this assessment enabled them not only to make necessary changes to their pedagogy but also to make continuous improvements in their professional development and teaching and learning, which later can be communicated to broader school community members, including parents and staff.

> "For our school, it's mostly internal data. A parent can request the data from the office and then the office communicates with the achievement test coordinator to say, can you print off so-and-so's data so the parent can have the information? Otherwise, it stays in. It helps drive our instruction. It helps drive to see, okay, what holes does our curriculum have? So for example, in the last few years, we've been struggling with the computation aspect of being able to have students master their addition, subtraction, multiplication, and division. We implemented a program called Rocket Math to help with the computation"–**Interviewee #1**

> "This is our fourth year completing the Iowa [assessment]. We have testing next week… Kindergarten through eighth grade participate. Fifth and eighth grade take the CogAT, too. We get results much faster now… so we made sure that we have a professional development day set aside in May. So May 1st will be a professional development day, and we will make sure that we have our Iowa assessments back by then… teachers look at it before they even go on summer break."–**Interviewee #3**

> "We take a look at [the results] as school as a whole. And then we will let teachers see their grade, how they did. What can they do? And then they form goals. They ask the whys and then what am I going to do to help improve that? Or we look at the test and say, okay, what about the test and curriculum? Is there something the test is asking for that the curriculum might not be asking at this grade level, but at the next grade level. We have to ask that question why and what are we going to do about it? So they get [the results], [and] they know those results pretty soon. And then before summer, we let the parents know the results of all their testing. We communicate that [results and]… We just send it to them, and we show them how to interpret it and all of that too. And then, of course, our school bases… goals on all that information"–**Interviewee #4**

Theme 2: The uniqueness of ACSI accreditation

When we asked the participants to elaborate on ACSI's accreditation process, all the participants from ACSI-accredited schools mentioned that it is a rigorous and comprehensive process that allows them to align their mission with their operational practices. Most of these participants acknowledge that the uniqueness of ACSI's accreditation process lies in the fact that it requires

schools to not only emphasize the academic rigor aspect but also to integrate their academic standards with a strong biblical worldview that prioritizes students' spiritual development and the school's overall continuous improvement and self-evaluation. While this accreditation process is rigorous, the emphasis on the self-evaluation aspect from schools makes it much more bearable. Schools find value not only in the accountability part of the accreditation but also in the affirmation and guidance that ACSI provides throughout the process.

> "The ACSI accreditation process is a process where a school looks at itself to determine: are we meeting the standards and goals that we have set for ourselves? And we set it at the high standard that matches what ACSI recommends that Christian schools should be doing… whether that's academics, whether that's spiritual, whether that's athletics. We look at all components of our school… basically looking at ourselves to say, yes, we are absolutely doing what we are committing to our families that we are doing."–**Interviewee #5**

> "They're going to look at our governance, our financials, our spiritual life, how we influence the community, how we use our data… all of those pieces. For example, one of our recommendations from the last visit was to use data more effectively. I'd like to say we've made some headway with that… we've made it a point to model how to analyze and use data to improve curriculum and instruction."–**Interviewee #8**

> "We're dual accredited by ACSI and Cognia. I've been involved with ACSI accreditation for 25 years in different capacities. We have a team approach. It's six domains—from how your board works to your academics, facilities… what I like about the new model is that we're more in control of what we think we need to do. And then the team just comes in and agrees with that or not—or adds something we might be blind to. When you live it, it's different than when fresh eyes come in."–**Interviewee #7**

> "It gives us the credibility within our constituency. Are you a school that can do what I need for my child to go to the next level? That's one layer of it. The other is it gives affirmation. You're not a lone wolf in Christian education. And it gives you accountability and an outside entity confirming what you're doing."–**Interviewee #9**

While one participant from ACSI non-accredited schools also mentioned something similar—the uniqueness of ACSI accreditation—they also elaborated as to how some administrative changes prevented them from continuing with ACSI accreditation:

> "I know that we were going to pursue the ACSI accreditation a few years ago because its

> emphasis on spiritual formation and academic rigor. However, [at] the final stage of the accreditation process, unfortunately, we were going through an administrative change. At the time, our retiring head of school, who was going to be our new head of school, wasn't going to pursue and continue this accreditation process because she was doing her graduate studies." –**Interviewee #2**

Theme 3: Why ACSI accredited schools outperformed non-accredited ones

In the quantitative part of this research, we have found that, on average, ACSI-accredited schools tend to outperform non-accredited schools in their student performance, and the results differ by grade level and region. While the quantitative part provides us with some meaningful trends about students' performance, we cannot pinpoint the blackbox or mechanism that drives these trends. From the interviews, we learned that students in ACSI-accredited schools tend to outperform their counterparts in non-accredited schools on standardized tests like the IOWA assessment because accreditation is a form of healthy accountability for schools to operate under a continuous-improvement mindset in which schools are structured to achieve goals with the resources that they have. This external accountability from the accreditation process not only provides schools with a moment to reflect on how their practices align with their mission but also provides a framework on how to strive for excellence. It is also important to note that while there are many important factors contributing to the success of an accreditation process, undeniably, many participants acknowledge that school resources still play an important role in shaping the success of not only the accreditation process but also schools' overall success.

> "At an accredited school, there's a system of checks and balances. We collect surveys from students, parents, teachers—then we reflect on that feedback. We set goals. There's intentionality. Without accreditation, there's less external pressure to do that… I think the difference is mindset. If a school is seeking accreditation, they're actively pursuing excellence. Some smaller schools may not even know what they're missing or can't justify the cost. But the accredited schools, they know the value of delivering high-quality education and are constantly looking for ways to improve." –**Interviewee #4**
> "[Accreditation process gives us] new eyes and they just verify, what you see, or they will see something that might [be] important... I see the value of, yeah, that's an

> affirmation too, you know, because you need that affirmation, you're not a lone wolf in the area of Christian education. And it gives you accountability and an outside entity confirming what you're doing. Well, [accreditation also] gives us credibility within our constituency...[If] you're asking if I find it a surprise that accredited schools would be more than [non-accredited schools], no, that doesn't surprise me because when you're in accredited school, that means you're taking steps for improvement to make your program better and to do best practices to, you know, just fulfill your mission and so it doesn't surprise me." –**Interviewee #9**

> "I get why accredited schools do better. They may have more resources than we do… students may come from affluent families with access to tutors and support… They can afford to buy the supplemental texts to help them prepare not just for the Iowa test, but for SATs, ACTs, and whatever else is out there." –**Interviewee #1**

Theme 4: Students' performance across grade levels

When we looked closely at the quantitative trends, we found that, on average, younger students tend to struggle more on this standardized test than older students. We then asked participants to elaborate on possible factors associated with this trend. We found that this performance trend gap across grade levels might be attributed to younger students' lack of experience in taking standardized testing like Iowa assessment, underdeveloped skills, and curricula alignment gaps. On the contrary, older students benefit from their familiarity with the test, maturity, and motivation. It is also important to note that these results can vary from one school to another depending on the emphasis on the preparation for standardized testing, student intake, and many other factors.

> "There's definitely a dip in fourth grade. It's their first time in a high-stakes, timed environment. They can't get help or prompting—even if they have an IEP; the accommodations are specific. It's stressful. I've seen students panic and freeze. But by fifth grade, they know what to expect, and their performance improves significantly."–**Interviewee #3**
>
> "Students in middle and high school are more goal-oriented. They know what they're working toward—college, career, trades—and that urgency impacts how seriously they take tests. But for younger students, especially in K–2, we have to build the foundation and help them see the value of learning, not just test performance."–**Interviewee #5**
>
> "We saw something interesting in our school: K through 3rd grade students outperform our 4th through 8th graders, particularly in reading and math. A reading expert told us

that our lower grade curriculum was solid in phonics but not preparing them for higher-level thinking. That misalignment shows up in the data, so now we're reviewing our ELA curriculum."–**Interviewee #8**

"It depends on which [public school] student comes to us. [If] we get a really high-quality student coming to us, they're going to bump our average up, [and] vice versa. Our school is unique in that we're the only one in our locality that deals with students of low academic ability. Because we're the only school private school like that, we draw in a lot of those [public school] students. Our scores are reflected based upon our student population of having those students in the averages that we look at. We get a lot of transfer students from public schools who are one or two years behind. It skews the data. Sometimes their IEPs don't align with what we can offer, and we have to make difficult admissions decisions. That's especially common in math and reading"–**Interviewee #2**

"It's pretty much across the board and we'll usually get will get an influx in January when the Christmas holiday is over. And then sporadically during the spring, you know, one of the things is [our location] is a cowboy roping area. Some of the kids that we have come in and out of school. So we have some kids that are ropers that will be here from like November throughout the 1st part of March. We had about six of them that left last week, and then they'll be back next week. So they'll be here for testing. And then they'll be gone. They'll be here two more weeks and then they'll be gone again. And that affects our results too."–**Interviewee #1**

Theme 5: Regional differences in students' academic performance

Lastly, we also asked our participants about regional trends that we observe, and many of our participants mentioned that there are a lot of variables involved that shaped these differences, including different state policies, economic ability, school sizes, and many more.

"When I moved from [the] western region to this [southern state], I saw a clear gap. What was taught in kindergarten here was already covered in preschool in my previous state. There, students often come into kindergarten already reading. In [here], they're just starting letter sounds. It creates a trickle effect that impacts middle school years later. Also, here, they just started free preschool last year. I expect we'll see changes soon, but right now, the difference is real. Students in the [western region] often enter school a full year ahead in terms of reading and number sense."–**Interviewee #3**

"I've noticed that southern states have historically lagged in certain areas, but that's changing. I think the rise of Christian education and school choice has created a push for higher standards across the board. Eventually, the regional gaps may close as schools focus more on excellence regardless of location."–**Interviewee #5**

> "COVID disrupted education across all regions. Some schools were shut down longer than others. Some families pulled their kids and switched to online or private options. All of that is still affecting test scores now, especially in K–5." –**Interviewee #4**

E. Discussions and Conclusions

We argue that this study offers valuable insights into the relationship between Christian school accreditation and students' achievement, an uncharted area of study. Our primary analyses have shown a positive association between ACSI accreditation and students' performance, especially in Math and reading, even after considering key school and student characteristics. We observe a magnitude of about 8%-10% SD increase in students' performance in accredited schools, indicating that ACSI accreditation may play a role in cultivating a positive learning environment that influences students' academic outcomes. However, we also have to highlight that the nuanced nature of the results warrants further study.

This positive result between accreditation and student performance aligns with many previous studies from the context of public schools (e.g., Davis & Fultz, 2015; Johnson, 2012; Fleming, 2018). Current literature around the topic has mentioned that since accreditation is built upon the frameworks of not only continuous improvement and data-driven decision-making but also active stakeholder involvement in the process, it is understandable that, on average, schools that are accredited are more likely to have a better quality of education measured by students' achievement. Accredited schools must regularly assess their programs and set and maintain rigorous standards in curriculum, instruction, faculty qualifications, resources, and overall school operations to keep their accreditation status. By adhering to all these standards, schools can ensure that they can provide high-quality education to their students, which is manifested well in their students' performance. In addition, the accreditation process also requires schools to implement data-driven decision-making policies on various key indicators, enabling schools to identify areas for improvement, especially in terms of students' performance.

It is also important to highlight the variability of statistical significance across grades or subjects. The attenuation of significance among the results as we take into account schools' and students' characteristics might signal an essential message that these factors, such as students' socio-economic factors, school size, years of operation, regions, and other factors, explain some of the relationships we observed between school accreditation and students' performance. This again suggests the complex interplay of factors that influence students' performance. Our qualitative approach attempts to disentangle the unique contribution of accreditation to students' academic achievement and performance.

From our qualitative part, we found that several reasons drive the positive relationship between ACSI accreditation and students' academic performance. First, the rigorous accreditation process provides schools with some guidelines or external accountability for schools to achieve their educational goals. This accountability enables schools to continuously improve their standards and quality, which trickles down to student performance. This recurring process of observation and reflection in the accreditation process allows schools to analyze their data, implement improvement plans, monitor their progress, and make some necessary alignments—especially in their curricula and relationships with their constituents, as well as teaching and learning, which have been proven to improve both students' achievement and non-cognitive outcomes positively (e.g. Cheng et al., 2023; Cheng & Djita, 2022; Djita & Nie, 2024; Johnson et al., 2024; Lee & Djita, 2025; Lee et al., 2024). Second, we also have to acknowledge that there are some other contributing factors related to accreditation that might also drive students' performance, including school size and resources, certified teachers, parental involvement, etc.

While this paper is the first attempt to understand the relationship between accreditation and

students' achievement in the context of Christian schools, it is still important to note that this paper does not claim a causality relationship between the two. As this study is a preliminary investigation using observational data often subject to confounding variables, readers should take caution as they interpret the results. There is a black box of mechanisms between accreditation and student achievement that is worth exploring for future research. While it is consistently shown by the findings that, on average, students in accredited ACSI schools have higher student performance than students in non-accredited ACSI schools, this paper cannot causally identify which aspect of accreditation (e.g., curricula used, school leadership, certified educators, parental involvement, etc.) may drive this relationship. Future research should delve into this black box of mechanisms, exploring how components and standards evaluated in the accreditation process contributed to students' performance through a more rigorous research design that allows researchers to either establish causal implications or shed light on how this black box works on improving students' achievement.

Despite all of these limitations, our study greatly contributes to understanding the relationship between school accreditation and student performance in Christian schools. We hope that these empirical findings, showing a positive relationship between school accreditation and student achievement, stimulate more conversation and research in the future to deepen our understanding of the topic.

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