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LEADERSHIP INNOVATION PRACTICES AND QUALITY EDUCATION IN CAPIZ

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ABSTRACT

Leadership is ever-evolving with approaches that employ innovation addressing institutional context-specific challenges while manifesting a level of quality. Employing a mixed-method research approach using explanatory sequential design, this study delves on leadership in the academe to uplift quality education through innovation practices for the development of learners to be globally capable in the future. Hence, this study described, differentiated, and correlated leadership innovation practices and quality education in Capiz as perceived by the 255 randomly selected integrated school teachers and 8 FGD participants coming from the Schools Divisions of Roxas City and Capiz respectively. Frequency, percentage, mean, t-test, ANOVA, and Pearson r were used to analyze the data from researcher-made questionnaires while the qualitative data were thematically analyzed. Results showed that leadership innovation practices as manifested by the school heads were significantly manifested through concrete pieces of evidence in addressing, valuing, and designing strategic innovative practices in terms of service, process, and marketing; quality education was comprehended as significantly manifested through policies and considering issues in the educative process reflective of quality in terms of accessibility, pedagogical leadership, and evidence-based practices; leadership innovation practices had a significant difference only when educational attainment of the respondents was considered; the demographics of the respondents did not affect the quality education; and, leadership innovation practices and quality are mutually dependent. Thus, leadership innovation schemes vis-à-vis school-based management strategies may be considered to enhance innovative facets of school management. Future investigation in leadership, innovation, and quality education is further recommended.

Keywords: *Leadership, Innovation, Quality education, Integrated school teachers*

1. Introduction

Leadership – a science and/or an art – is a product of the ingenious minds of theorists, academicians, and even the leaders themselves. Considered a highly valued commodity, the need for leadership is imperative towards progress (Northouse, 2016). Leadership plays a role in organization seen in Xue et al. (2022), Lee et al. (2020), Su et al. (2020), and Li et al. (2020). In the pre-Covid era, the need for leadership was acknowledged, "there is a great need, therefore, for a leader that can effect change, employ new exemplary styles, and innovate" (Vasquez, 2016, p. 2). Owing to this macro-treatment on the construct of leadership, it is, needless to say, that leadership provides different facets where it can still be studied and applied. Innovation is also at the forefront in today's

time. For Vincent-Lancrin et al. (2019), innovation explores for improvement by abandoning outmoded practices, accepting fresh ideas, and up-to-date technologies. Moreover, countries likewise echo their pledge to innovation (European Commission et al., 2023). Leadership and innovation can be investigated with other variables, such as creativity (Lee et al., 2019), style and collective approach (Zhang, 2022), role in the public sector (Sazzad et al., 2021), practices and collaboration (de Jong, 2020) and even using culture-related samples (Lin et al., 2022). The constructs of leadership and innovation provide inexhaustible avenues for further investigation amidst the changing environment and needs of the world. In like manner, Quality education is pursued by leadership through varied components. Cook et al. (2012) highlighted the importance of employing evidence-based practices to improve the quality of education. Kvernbekk (2015) explored how pedagogical approaches and decision-making are informed by empirical evidence. In the Philippines, Mirasol (2021) stated that "quality education is a pillar of national development" (p. 1).

Having the aforementioned studies from international and local settings, this study aimed to describe, differentiate, and correlate the degree of leadership innovation practices and quality education in Capiz. Specifically, this study sought to answer the following questions: What is the degree of leadership innovation practices in Capiz as perceived by respondents as a whole and in terms of service, process, and marketing? What is the extent of quality education in Capiz as perceived by respondents as a whole and in terms of accessibility, pedagogical leadership, and evidence-based practices? Is there a significant difference in the degree of leadership innovation practices in Capiz in terms of service, process, and, marketing when respondents are grouped according sex, age, civil status, length of service, and educational attainment? Is there a significant difference in the extent of quality education in Capiz in terms of accessibility, pedagogical leadership, and evidence-based practices when respondents are grouped according to sex, age, civil status, length of service, and educational attainment? Is there a significant relationship between the degree of leadership innovation practices and extent of quality education in Capiz? Hence, it is hypothesized that: there is no significant difference in the degree of leadership innovation practices in terms of service, process, and marketing and the extent of quality education in terms of accessibility, pedagogical leadership, and evidence-based practices when respondents are grouped according to sex, age, civil status, length of service, and educational attainment; and, there is no significant relationship between the degree of leadership innovation practices and extent of quality education in Capiz.

Anchored on the Path-Goal Theory as proposed by House in 1971 aimed to improve happiness, contentment, and motivation, leaders value members' needs without disregarding goals (Olowoselu et al., 2019). This theory propelled the study wherein the leaders' innovative practices are seen in varied settings: direction in innovating service delivery expressive of quality; consideration for quality without sacrificing welfare; exploring technological enhancements to related services; lastly, behavioral expressions for performance improvement and standards.

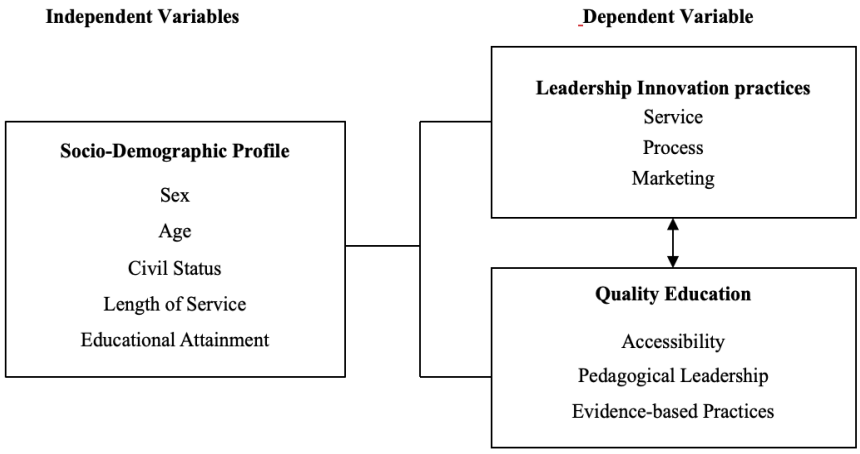

Figure 1. The schematic diagram of the study.

Figure 1 indicatively framed the schema of the following variables. The independent variable of this endeavor was the socio-demographic profile of the respondents in terms of sex, age, civil status, length of service, and educational attainment. On the other hand, the dependent variable was comprised of leadership innovation

practices of school heads, i.e. service, process, and marketing, and quality education of school heads, i.e. accessibility, pedagogical leadership, and evidence-based practices. The sociodemographic profile as the independent variable was deemed to have effects on the dependent variable covering leadership innovation practices and quality education with their corresponding sub-components. The line connecting leadership innovation practices and quality education represented the degree of association between both.

Using the constructs of leadership innovation practices and quality education, the researchers aim to contextualize these constructs in the local setting – the Province of Capiz. Delving on these terms is deemed beneficial to the academe – schools divisions, school heads, aspiring leaders, teachers, and other stakeholders – to lift up quality education through innovation practices for the upliftment of learners – being globally capable in the future.

2. Literature Review

Leadership innovation practices. There is an ongoing demand for innovation in higher education institutions (Sauphayana, 2021; Akpan, 2016). Burns (1978, as cited in Şen & Eren, 2012) conceptualized leadership innovation practices to "provide radical changes through new ideas, methods, processes, and techniques to solve the present and anticipated future problems" (p. 3). Thus, leadership innovation practices use novel strategies that address contextual issues inside the institution. Leadership and innovation have drawn several researchers, however, inconsistences on these two constructs have been pointed out (Rosing et al., 2011).

In the educational context, Gil et al. (2018) discovered that a learning organization and innovation development are significantly correlated with the promotion of learning values, strengthening empowerment, and decentralizing decision-making, which affect innovation. In the Netherlands, de Jong et al. (2020) described the two patterns for leadership practices either a facilitator or a team player. However, de Jong et al. (2020) suggested that future research endeavors must address the generalizability of the patterns and practices seen in collaborative innovation context. In Chinese schools, Pant (2020) underlined the significance of incorporating stakeholders consistent with collaborative leadership in education, where fostering a positive learning environment requires communication and collaboration from internal and external partners. While there may be some semblance with the current study, yet the focus is collaborative innovation. Hence, another area is yet to be uncovered – the innovative practices of leaders. In Pakistan, Khan et al. (2020) acknowledged that the association between leadership styles and innovation has gone unnoticed in Pakistan's higher education system recommending research be extended to either institutional or geographical setting.

In the Philippines, school administrators consistently employed efficient management approaches for stakeholder engagement, democratic leadership, instructional leadership, and financial management (Hernandez et al., 2023). Acuña and Ancho (2022) investigated the innovative methods that Filipino principals handled their teachers' professional development. Tendero (2023) presented the difficulties and chances administrators confront, emphasizing the necessity of flexible and culturally appropriate leadership approaches. These works of research inaugurate the constructs that this study investigated.

Service. Innovation in education has the power to change the traditional systems of delivery whether in administration, management, and the curricula. At the forefront, services inside the school should be revolutionized. Akpan (2016) delineated service innovation as "the introduction of a new service that greatly improves the management practices in schools" (p. 47). It alludes to new service strategies enhancing school management methods providing better experiences among the clients. Innovation, where digital learning environment with the use of ICT, Internet of Things, educational technology methods, and virtual and augmented reality applications, is the loci of research (Demir, 2021; Gros, 2016; Huang et al., 2013; Lin, 2016; Maipas et al., 202; Salvat, 2016; Sungkur & Maharaj, 2021; Vesin, 2018). Delivery of services in academic setting have to be revisited to cater societal demands and advancements.

Process. Innovation also points to the deployment of processes in service delivery in the school system. The goal of process innovation in education is to lower the cost per unit of service delivery while simultaneously improving quality (Akpan, 2016). The dynamic process of delivering services is to give learners the information and abilities they need to thrive in both their personal and academic lives vis-à-vis the collaboration of stakeholders. Swanger (2016) outlined several challenges faced by higher education institutions in the United States with propositions to

innovate, to be efficient, and to have better performance. On maintaining education services' long-term competitiveness, Gulicheva et al. (2017) illustrated the Russian university's innovative educational setting and described the circumstances for its operation driven by "globalization of the world processes" (p. 130). Thus, in order to have a sustainable competitive edge, educational institutions need to give equal weight to quality and innovation in the fast-paced business world of today.

Marketing. Educational institutions market their programs, draw in students, and establish their brand for the purposes of increasing enrollment, improving reputation, and communicating educational value they provide. Marketing is putting a new strategy into practice that makes major adjustments to a product's design, promotion or cost in schools (Akpan, 2016; Białoń, 2015; Klokar et al., 2021; OECD, 2016). Educational institutions need to market service delivery to draw in prospective clients just like the business sector (Rahmi et al., 2021). Marketing innovation has been defined by OECD (2016) as the "implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion, or pricing" (p. 15). With the trends in digitization, digital marketing is imperative to education to engage clients, improve online visibility, and successfully advertise courses and products (Gondane & Pawar, 2021; Khilukha et al., 2020; Chami & Yakhne, 2018). Consequently, educational institutions must innovate to be at par or be ahead of others to ensure survival by launching new services, streamlining structural processes or upgrading marketing strategies that attract clients in the educative arena.

Quality Education. The idea of quality education includes technology, learning resources, program enrolment, finished modules, lecturing style, attachments, credentials, extracurricular activities, performance awards, and the perspectives of students and instructors on intitutional management and evaluations of education (Hammond, 2013, as cited in Thangeda et al., 2016). Quality education is characterized by five (5) components: students' external experiences, learning environment, curriculum, methods of instruction, and results of learning (Agnihotri, 2017). With these, educational leaders must strive to be adoptive and adaptive to change for leaders play a role towards quality innovation in their institutions. Innovation in leadership provides important aspects of benchmarking and networking for the betterment of the institution.

In the Philippines, ASEAN integration, internationalization, K–12 education, the Philippine Qualifications Framework, and 21st century skills are some primal drivers behind the development of the Philippine educational system (Castillo et al., 2019). For a better 2030 and AmBisyon 2040, Edillon (2016) gave insightful information that may guarantee inclusive, equitable, and high-quality education. However, insufficient funding, low-quality and limited access to education, resources and infrastructure, and inadequate teacher development programs are just a few of the major issues brought to light (Bai, 2023; Enarsao, 2023; Gumarang & Gumarang, 2021; Mirasol et al., 2021; Orbeta & Paqueo, 2022; Tan, 2017). Measures to address these issues, such as, raising educational funding, enhancing teacher development, broadening access, innovation, and standards through curriculum reform, and technological advancements are suggested side by side with the cooperation required across public, business, and other sectors.

Accessibility. Every learner is accepted and accommodated (Department of Economic and Social Affairs Division for Social Policy and Development, 2015). This is the crux of accessibility. Stauber and do Amaral (2015) offered information on the problems associated with accessibility in education. There existed varied reasons that lead to unequal access to education, which includes social disparities, access rules, and exclusive policies. Policies, then, have been made for accessibility (UNICEF, 2016; University of Edinburgh, 2023). Ensuring accessibility requires the school heads to be informed of any need and maintain effective communication. A welcoming and equitable environment for students can be created by emphasizing accessibility and involving the entire school community through inclusivity and transparent communication.

Pedagogical Leadership. The improvement of the educative processes is the main goal of pedagogical leadership. As defined by Kapur (2016), pedagogical leadership is "commonly understood as the approaches to teaching. It is referred to the theory and practice of learning and how this process has an impact and is influenced by the social, cultural, economic and the political factors of the students" (p. 2). Operationally, pedagogical leadership

refers to teaching strategies influencing the educative process. In establishing a productive learning environment where students and teachers grow and improve, pedagogical leadership is crucial. It calls for a blend of leadership abilities, pedagogical knowledge, and dedication for continuous development. In the 21st century learning, pedagogical leadership plays a part (Male & Palaiologou, 2015; García-Martínez & Tadeu, 2018). Pedagogical leadership has been differentiated with other forms of leadership (Abel, 2016; Tirado-Calderon et al., 2021). The persona of a pedagogical leadership is manifested in building connections with mutual respect and trust, offering resources and research to support good pedagogy, providing prompt and insightful feedback, engaging in learning, and evaluating data to enhance strategies (Sheninger, 2021). The pedagogical leader establishes innovative standards that result in systemic development by conferring with others and establishing a setting wherein accessibility to excellent educational possibilities and opportunities is present.

Evidence-based Practices. A leader manifesting evidence-based practices uses data-based strategies to improve dynamics, decision-making, and group processes. Evidence-based is defined as "any concept or strategy that is derived from or informed by objective evidence – most commonly, educational research or metrics of school, teacher, and student performance" (The Glossary of Education Reform, 2016, para. 1). In various professional domains, the use of evidence-based procedures is crucial in fostering successful and efficient outcomes (Utuka, 2012). It entails a dedication to make decisions based on the best available data to raise the standard of services offered to communities and individuals (Sampul et al., 2020; Stetler et al., 2014). Harvey et al. (2020) provided examples of specific strategies that promote evidence-based practices such as fostering an environment of inquiry, offering instruction and training, incorporating employees in decision-making, and giving staff members' ability to use research in work. To create complementarity between enforcing and facilitating the use of evidence-based practice, leadership roles and tactics are required.

3. Method

The mixed-method research approach using explanatory sequential design was utilized to gather the data. Explanatory sequential design, as used in this study, has the intention to "first use quantitative methods and then use the qualitative methods to help explain the quantitative results in more depth" (Creswell, 2015, p. 6). The strength of using this design is manifested by Johnson and Christensen (2014) of the reduction of the probability to overlook something crucial by integrating two or more research methods with varying strengths and weaknesses in a study. Corroboration by means of triangulation was made to strengthen the findings of the quantitative and the qualitative approaches.

The random sampled respondents of the study, determined using Slovin's formula with a margin of error set at 0.05, were the 255 out of the 702 integrated school teachers in the Schools Divisions of Capiz and Roxas City for the School Year 2023-2024. The respondents were proportionally allocated using Bourley's Proportional Allocation Formula (Achonu et al., 2019). The FGD included 8 integrated school teachers in accord with Morgan's (2013) range of participation and with inclusion criteria used to address the issue on homogeneity: integrated school teachers; employed by the Schools Divisions of Capiz and Roxas City; in active service for the School Year 2023-2024; and, available and willing to share their perspectives.

There were 2 questionnaires used in this study. The researcher-made questionnaire for the quantitative approach was created from the constructs of leadership innovation practices (Akpan, 2016) and quality education (Hammond, 2013, as cited in Thangeda et al., 2016; Kapur 2016; The Glossary of Education Reform, 2016; and, Valdes, 1998, as cited in Department of Economic and Social Affairs Division for Social Policy and Development, 2015). This questionnaire was divided into 3 parts: Part I (The sociodemographic profile); Part II (The degree of leadership innovation practices); and, Part III (The extent of quality education. 5 response anchors were provided, namely, "significantly manifested," "regularly manifested," "occasionally manifested," "hardly manifested," and "not manifested." The semi-structured questionnaire for the qualitative approach was created from the *a priori* codes drawn from the definitions of leadership innovation practices and quality education. To have structure and avoidance of off-topic conversations, the ORID (objective – facts identification; reflective – feelings and subjective perceptions; interpretive – meanings and the potential impacts; and, decisive – decisional contexts) process of strategic questioning (Grayson, 2010) was used by the researchers to have a dynamic forward movement in getting the facts, feelings, and implications.

Ensuring validity, content validity was established for the quantitative and qualitative researcher-made questionnaires by systematically establishing the content validity index (Yusoff, 2019). This was done by 5 panel members who were adept in research as well as specialized fields to determine whether the items measured the constructs being investigated (Polit & Beck, 2006; Polit et al., 2007, as cited in Yusoff, 2019). To establish reliability (internal consistency) on the quantitative instrument, pilot testing was done to a randomly-selected 30 integrated school teachers of the Schools Division of Iloilo. The sufficient reliability coefficient (Cronbach's Alpha) for the questionnaire must be between 0.80 – 1 (Webb et al., 2006). Hence, the internal consistency (0.985) of the questionnaire was established using the Statistical Package for Social Sciences (SPSS) v. 26.

The data gathering procedures were divided into episodes to ensure accuracy and ethical soundness (Punch & Oancea, 2014). Firstly, the period of application for research approval from the Administrative Offices and pilot-testing were conducted. Secondly, the period of distribution and gathering of data was conducted. Lastly, the period for data preparation for analysis and interpretation.

In analyzing and interpreting the quantitative data, descriptive and inferential statistical tools were used. The frequency count and percentage were used for sociodemographic profile. The mean or "the sum of all the scores divided by the number of scores" (Ali & Bhaskar, 2016, p. 663) was employed. The T-test as well as ANOVA were used to determine the significant difference between variables. The Pearson r was used if "there is an association between two variables" (Hwee & Yew, 2018, p. 78). The analyses and interpretation of the qualitative data of the study followed procedural phases (Elliot et al. 2005, as cited in Vasquez, 2016): *Planning Phase.* A group with delineating tasks was formed during the FGD comprising a moderator, co-moderator, and assistants; *Execution Phase.* The FGD discussion ensued. *Analysis and Synthesis Phase.* Transcriptions were made for analysis. The bracketing, analyzing, intuiting, and describing steps for the analysis were from Wojnar and Swanson (2007). To avoid distractions in categorizing the data, dendrogram was utilized (Schutte, 2006, cited in Agapito & Vasquez, 2023).

Ethical standards were observed because the data came from human subjects – the integrated school teachers in Capiz – from the beginning until the research was finally concluded. The considerations were: the approval to conduct research; the principles of confidentiality and anonymity; informed consent and assent; risks; benefits and incentives/compensation; voluntary participation and right to withdraw; Data Privacy Act of 2012 (RA 10173); data storage; and, community considerations, aimed to protect the rights of the research participants and the research site.

4. Results and Discussion

Degree of leadership innovation practices

The degree of leadership innovation practices as a whole and in terms of service, process, and marketing, is presented in Table 1.

Table 1. Degree of leadership innovation practices in Capiz.

Indicators	Mean	Verbal Interpretation
Service	4.53	Significantly manifested
Marketing	4.53	Significantly manifested
Process	4.52	Significantly manifested
Grand Mean	**4.52**	**Significantly manifested**

Legend: 4.21- 5.00 = significantly manifested; 3.41- 4.20 = regularly manifested; 2.61- 3.40 = occasionally manifested; 1.81-2.60 = hardly manifested; 1.00-1.80 = not manifested.
Note: Components are presented from highest to lowest.

Table 1 presents a grand mean of 4.52 verbally interpreted as 'significantly manifested' when respondents assessed the level of leadership innovation practices in Capiz as a whole. Service and marketing both scored the highest (4.53) verbally interpreted as 'significantly manifested'. Process (4.52) followed service and marketing and is verbally interpreted as 'significantly manifested'. Establishing the ideal environment in which clients can obtain quality services is a major responsibility of leaders. The FGD tells:

> There is a need to improve the school services. Based on my seven years of teaching experience, I have observed that the main concern of the school head is to increase the number of enrolees. This is their primary focus because a higher number of enrolees leads to a larger operating budget. It is important for educational institutions to balance the need for financial stability with the goal of providing quality education and services to students. (Participant 5)

Views on objectives and expectations are frequently influenced by managerial policies and processes. Leaders develop creative service concepts more easily if all these components are used effectively. In corroboration with the results, Li et al. (2018) emphasized that service learning in developing industrial human resources may be motivated by innovation and service intention. Service has the potential to bridge the knowledge gap between service innovation practice and the academia. It also assists institutions of higher learning in forming strategic collaboration and partnerships with stakeholders and the larger society.

Educational leaders have a crucial role in identifying the need for educational services and delivering radically new sorts of educational offers when it comes to marketing and management of educational innovations (Klokar et al., 2021). To this effect, according to Klokar et al. (2021), educational innovation team, identification of the services market segment, establishment of criteria and conditions for specific types of services, provision of resources and practical approval of innovations, and customization for services, are some of the marketing principles that can be applied in the context of educational innovations. In the FGD, "Every school is required to have a Facebook page, for it is a way to advertise the school on social media" (Participant 4). This only shows the significance of marketing innovation in educational institutions that leadership should give attention to.

In terms of process, innovative leadership techniques play a crucial role in the effective execution of educational initiatives (Ortega & Palarisan, 2021). This corroborates the findings of the study that process innovation is manifestly significant in educational institutions in the eyes of the respondents and to be maintained. The FGD data affirmed the maintenance of the processes present in the school, "Our school head's innovations are already in place. I suggest the observance and maintenance of these innovations for they were intended for the good of everyone" (Participant 3). Innovative leadership processes are essential to the successful implementation of educational programs because they guarantee the engagement and commitment of all stakeholders to the program's success. In addition, FGD mentions that the school head "listens to the parents' feedbacks about each teacher. Also, basing from observations he [school head] knows that a teacher is trustworthy and good in teaching as the parents say… He [school head] always monitors if we [teachers] are teaching or not" (Participant 7).

Extent of Quality Education

The extent of quality education as a whole and in terms of accessibility, pedagogical leadership, and evidence-based practices, is presented in Table 2.

Table 2. Extent of quality education in Capiz.

Indicators	Mean	Verbal Interpretation
Accessibility	4.65	Significantly manifested
Pedagogical leadership	4.60	Significantly manifested
Evidence-based practices	4.57	Significantly manifested
Grand Mean	**4.61**	**Significantly manifested**

Legend: 4.21-5.00 = significantly manifested; 3.41-4.20 = regularly manifested; 2.61-3.40 = occasionally manifested; 1.81-2.60 = hardly manifested; 1.00-1.80 = not manifested.
Note: Components are presented from highest to lowest.

Table 2 shows a grand mean of 4.61 verbally interpreted as 'significantly manifested' when respondents considered the extent of quality education in Capiz as a whole. Accessibility (4.65) ranked first, pedagogical leadership (4.60) graded second; and, evidence-based practices (4.57) scored third. All components of quality education received the verbal interpretation of 'significantly manifested'. Having significantly manifested, quality education requires a holistic approach that addresses accessibility of educational opportunities (Council of Ontario Universities, 2012; Department of Economic and Social Affairs Division for Social Policy and Development, 2015; Stauber & do Amaral, 2015; University of Edinburgh, 2023), promotes pedagogical leadership (Abel, 2016;

Cheah & Lim, 2022; García-Martínez & Tadeu, 2018; Kapur, 2016; Male & Palaiologou, 2015; Sheninger, 2021; Tirado-Calderon et al., 2021), and embraces evidence-based approaches (Harvey et al., 2020; Reichenpfader et al., 2015; Stetler et al., 2014).

By focusing on these elements, educational systems give every learner an inclusive, equitable, and excellent learning experience. The findings significantly manifested, according to the perceptions of the integrated school teachers, the school heads' observable performances in relation with quality education in their respective posts in Capiz. These results coincided with the FGD data:

> There is an importance of time management and focus in providing quality education. Our system is time-bound, with classes expected to start at the exact time. There is an emphasis on being present and not being elsewhere before 7:30, which is the start of our school day. Once the exact time for the class starts, it is crucial to be in the classrooms and not leave the students unless there are important reports to be submitted. So, you need to focus on the students. (Participant 3)

In terms of accessibility, FGD data tells that "In DepEd [Department of Education], there is a policy that you cannot reject the child" (Participant 8). As in pedagogical leadership, FGD data states "Our first school head encouraged us to try to visit the homes of our students especially those who were always absent in class" (Participant 1). FGD data conveys views on evidence-based practices: "We pass DLL [Daily Lesson Log] weekly. He [the school head] checks if we file, we log, and if it follows the time" (Participant 3) and "We have ready-made educational objectives. We just need to download them" (Participant 5). Thus, the respondents provided proof confirming the expected extent of quality education which entails additional affirmation and praise in reference to quality education in Capiz province.

Differences in the respondents' degree of the leadership innovation practices when grouped according to selected demographics

The findings on the difference in the degree of the leadership innovation practices when respondents are grouped according to sociodemographic profiles are shown in Table 3.

Table 3. Differences in the respondents' degree of the leadership innovation practices when grouped according to sociodemographic profiles.

Variables	f/t-Values	Significant value	Probability
Leadership innovation practices and sex	0.443	0.658	n.s.
Leadership innovation practices and age	0.922	0.431	n.s.
Leadership innovation practices and civil status	0.086	0.918	n.s.
Leadership innovation practices and length of service	0.395	0.757	n.s.
Leadership innovation practices and educational attainment	2.436	0.048	s.

Legend: p-value > 0.05 = not significant (n.s.); p-value < 0.05 = significant (s.)

Table 3 shows no significant difference in the degree of leadership innovation practices when respondents were grouped according to sex, age, civil status, and length of service because their t-values had significant values higher than 0.05 alpha. Thus, the null hypothesis of no significant difference in the degree of leadership innovation practices in Capiz when respondents were grouped according to sex, age, civil status, and length of service is accepted. These results corroborated the findings of Berdecia-Cruz et al. (2022) that there are no significant differences between the innovative mentality of men and women and leadership style. On the other hand, as raised by Noviana's (2022) investigation, sex is a potential moderating factor when discussing leadership and innovation. There is no discernible difference in the level of innovative leadership practices in terms of age (Lowe et al., 2017). The notion that leaders of innovative companies are typically chosen more for their technical know-how (Gupta, 2015) rather than the demographics of age. Therefore, the level of innovative leadership methods may

not be dependent on the person's age. Although the references provided in this current study do not specifically address the impact of civil status and length of service on innovative leadership practices, the body of literature highlights the complex relationship between leadership and innovation. Thus, in the context of innovation, it is imperative to take into account the possible interaction between civil status as well as length of service and leadership innovation practices. A more thorough understanding of the dynamics at work might be facilitated by future study concentrating on the precise impact of civil status and length of service on innovative leadership practices.

However, there was a significant difference in terms of educational attainment because the f-value (2.436) had a significant value (0.048) lower than 0.05 alpha. The null hypothesis of no significant difference in the degree of leadership innovation practices in Capiz when respondents were grouped according to educational attainment is rejected. Respondents who have master's units perceived a higher degree of leadership innovation practices compare to other educational backgrounds. Academic degrees are prerequisites especially in the field of education. Noviana (2022) suggested that more attention be given to demographic factors especially education level in relation to leadership and innovation. However, greater study in this field would help to provide a more thorough comprehension of the dynamics at work to substantiate the connection between leadership innovation and educational attainment.

Differences in the respondents' extent of quality education when grouped according to selected demographics

The findings on the difference in the extent of quality education when respondents are grouped according to sociodemographic profiles are shown in Table 4.

Table 4. Differences in the respondents' extent of quality education when grouped according to selected demographics.

Variables	f/t-Values	Significant value	Probability
Quality education and sex	0.716	0.475	n.s.
Quality education and age	2.027	0.111	n.s.
Quality education and civil status	0.436	0.647	n.s.
Quality education and length of service	1.139	0.334	n.s.
Quality education and educational attainment	1.908	0.110	n.s.

Legend: p-value > 0.05 = not significant (n.s.); p-value < 0.05 = significant (s.)

In Table 4, there was no significant difference in the extent of quality education in Capiz when respondents were grouped according to demographics because the obtained t-values had significant values higher than 0.05 alpha. Thus, the null hypothesis is accepted. Opinions on whether sex has significance to quality education are divided. While some studies (Zheng et al., 2022; Eriksson et al., 2020; Bichi et al., 2019) found no significant differences between genders, others (Adeyeye & Ighorojeh, 2019; Cobb-Clark & Moschion, 2017) noted the existence of gender disparities in educational achievement. Moreover, it has been discovered that a number of variables – cultural, social, economic, and institutional variables – have an impact on how gender affects academic accomplishment (Aikman & Rao, 2012). In order to fully comprehend the complexity surrounding demographics and quality education, more research is necessary. Between age, civil status, and the level of quality education, further investigation is recommended because when respondents are classified based on age and civil status, it is not possible to conclude that there is a significant difference in the extent of quality education given the literatures currently available. On the contrary, the length of service may have an effect on quality through knowledge management and educational services (Al-Tabtabae & Yusuf, 2019; Wati et al., 2021). The impact of educational attainment on academic accomplishment found a substantial relationship between performance on teacher licensure exams and meeting course objectives and content mastery (Angeles, 2020). Consequently, it is conceivable that respondents' educational level may have an impact on the degree of quality education. To be definitive, more research especially focused on the relationship between educational attainment and quality education is necessary.

Relationship between the degree of leadership innovation practices and the extent of quality education

Table 5 presents the relationship between the degree of leadership innovation practices and the extent of quality education.

Table 5. Relationship between the degree of leadership innovation practices and the extent of quality education.

Variables	N	Pearson r	Significance Value	Probability
Leadership innovation practices Quality education	255	0.888	0.000	s.

Legend: Significance value < 0.05 = significant (s.)

Table 5 reveals that leadership innovation practices and quality education in Capiz have significant relationship because the Pearson r value (0.888) had a significant value (0.000) lower than 0.05 alpha. In consequence, these findings reject the hypothesis of no significant relationship between variables. Thus, the higher the leadership innovation practices, the higher the extent of quality education. Further, the connection between leadership and innovation is manifested by Gil et al. (2018) on the significance of leadership's involvement in the growth of innovation in educational organizations. To further emphasize the importance of influences of leadership styles, Yangailo (2023) provided additional evidence for the beneficial effects of leadership on innovation and high-quality results by demonstrating how transformational leadership promotes competitive advantage through significant innovations and quality results.

5. Conclusion and Implications

From the findings, the following were drawn: leadership innovation practices were significantly manifested by the school head through giving concrete pieces of evidence in addressing, valuing, and designing strategic innovative practices in their school's delivery of service, process, and marketing; quality education was significantly manifested in acts of enforcing policies and considering issues in the teaching-learning process reflective of quality in terms of accessibility, pedagogical leadership, and evidence-based practices; leadership innovation practices had a significant difference only when the educational attainment is considered; regardless of the demographics, quality education in terms of accessibility, pedagogical leadership, and evidence-based practices do not vary; and, leadership innovation practices and quality education are mutually dependent.

Based on the findings, it is recommended that schools division administration, with respect to DepEd's implementing guidelines, may create programs for school heads regarding: leadership styles, management and administration, creative leadership, empowerment on the use of technology, among others, reiterating the need for innovation in their respective assignments and emphasizing on the current trends in education in lieu with globalization, internalization, and ASEAN integration. School Governance and Operations Division vis-à-vis the Curriculum and Implementation Division offices, may provide strategic direction as well as technical inputs regarding innovation in school administration and innovation towards good governance, efficient operations, and effective curricular practices. Additionally, provision of technological equipment and technical knowledge should be given importance to aid the school heads in their academic processes and programs. Further, schools division administration may subscribe to quality assessment to uplift the levels of quality on the delivery of services and practices in their jurisdiction. School heads may diligently attend continuous development programs, benchmark to schools to emulate best practices for quality education, and invest on technology for governance, school operations, and curricular functions.

Future researchers may widen the constructs on leadership innovation practices and quality education by employing varied research approaches, designs, and tools to further investigate the constructs, thus, adding to the bulwark of knowledge on leadership styles, practices, and behaviors; creativity and innovation; and, quality education.

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