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SCHOOL HEADS' INNOVATIVENESS, LEADERSHIP COMPETENCE AND PRODUCTIVITY

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Abstract : This study determined the school heads' innovativeness, leadership competence and productivity among elementary schools in the School Division of Antique, Philippines for School Year 2023-2024. This study was conducted in April to May, 2024. The respondents were 365 randomly selected teachers of public elementary schools in the Schools Division of Antique. Stratified proportionate random sampling was used by the researcher to draw the samples to participate in this study. The descriptive-correlational research design was used by the researcher in this study. The dependent variables were school heads' innovativeness, leadership competence and productivity while the independent variables were age, sex, highest educational attainment, type of school and length of service. The research instrument used in this study was a questionnaire on school heads' innovativeness adopted from Sarafidou and Zafakos (2020), leadership competence adopted from Kadri et al. (2022) and productivity adopted from Ahmed and Patricia (2022) and validated by jury of experts. Frequency, percentage, and mean were used as descriptive statistical tools while t- test, ANOVA, and Pearson's r as inferential statistical tools set at .05 level of significance. All statistical computations were processed through the Statistical Package for the Social Sciences (SPSS) software. Findings of the study indicated that the level of school heads' innovativeness, leadership competence and productivity was "Very High" as assessed by the respondents when taken as a whole and when classified according to age, sex, highest educational attainment, type of school, and length of service. Moreover, no significant differences existed in the level of school heads' innovativeness, leadership competence and productivity as assessed by the respondents when classified according to age, sex, type of school, and length of service while significant differences existed when classified according to highest educational attainment. Finally, significant relationships were found among school heads' innovativeness, leadership competence and productivity.

***IndexTerms*-school heads' innovativeness, leadership competence, productivity** \

INTRODUCTION

Background of the Study

Rapid changes in social structure have affected educational systems and the roles and behaviors of those who are managing these systems. To cope with the changing environmental and organizational conditions and problems, educational leaders must be innovative and must possess the leadership competence as it is widely recognized as being central to the implementation of educational reforms and to ensure productivity (Chin, 2019).

Effective leadership is widely accepted as being a key constituent in achieving school improvement. A highly effective school head is not called to the job per se, but more importantly to the opportunity to make a difference in the school. This could mean a change in the educational landscape, heal an ailing school, or work for the concepts of greater accountability, equity and excellence (Sergiovanni, 2022).

Considering the importance of leadership competence in schools nowadays, it is therefore necessary that they should be led by a competent school leader, who acts as a catalyst for innovation and capable of making significant changes for the benefit of every school member (Wang, 2022).

However, a number of educational leaders in Schools Division of Antique are deficient in terms of innovativeness and competence in the sense that they failed to effect necessary changes that will benefit the whole school community and they failed to gain the trust, admiration, loyalty and respect of their teachers, personnel and student-clientele.

Furthermore, there are a number of non-performing schools as shown by the results of district, regional, and national achievement tests. In fact, most schools in the Schools Division of Antique failed to meet the national standard of 75% in the recent National Achievement Test conducted in 2022. This situation lingers on the researcher's mind a question "Is the performance of schools in the district, regional and national achievement test contributed to the innovativeness, leadership competence and productivity of school heads?

The above question prompted the researcher to assess the innovativeness, leadership competence and productivity of public elementary school heads in the Schools Division of Antique, hence, this study.

Statement of the Problem

This study aimed to determine the school heads' innovativeness, leadership competence and productivity among elementary schools in the School Division of Antique, Philippines for School Year 2023-2024.

Specifically, this study sought answers to the following questions:

1. What is the level of school heads' innovativeness as assessed by the respondents when taken as a whole and when classified according to age, sex, highest educational attainment, type of school, and length of service?
2. What is the level of school heads' leadership competence as assessed by the respondents when taken as a whole and when classified according to age, sex, highest educational attainment, type of school, and length of service?
3. What is the level of school heads' productivity as assessed by the respondents when taken as a whole and when classified according to age, sex, highest educational attainment, type of school, and length of service?
4. Are there significant differences in the level of school heads' innovativeness as assessed by the respondents when classified according to age, sex, highest educational attainment, type of school, and length of service?
5. Are there significant differences in the level of school heads' leadership competence as assessed by the respondents when classified according to age, sex, highest educational attainment, type of school, and length of service?
6. Are there significant differences in the level of school heads' productivity as assessed by the respondents when classified according to age, sex, highest educational attainment, type of school, and length of service?
7. Are there significant relationships among school heads' innovativeness, leadership competence and productivity?

Hypotheses

Based on the aforementioned problems, the following hypotheses were tested:

1. There are no significant differences in the level of school heads' innovativeness as assessed by the respondents when classified according to age, sex, highest educational attainment, type of school, and length of service.
2. There are no significant differences in the level of school heads' leadership competence as assessed by the respondents when classified according to age, sex, highest educational attainment, type of school, and length of service.
3. There are no significant differences in the level of school heads' productivity as assessed by the respondents when classified according to age, sex, highest educational attainment, type of school, and length of service.
4. There are no significant relationships among school heads' innovativeness, leadership competence and productivity.

Theoretical Framework

This study was anchored on the Leader-Member Innovation Theory which suggests that leaders and followers develop unique relationships based on their social exchanges, and the quality of these exchanges within an organization can influence employee outcomes (Graen & UhlBien, 2019; Liden et al., 2020). The theory also suggested that efficient use of strategic thinking, innovative thinking, exposure and mastery of the skills, the actions being undertaken and the communication skills should link with the prevailing standards of the organizations and the practices circulating the system in order to meet the total productivity and efficiency of the organization (Liden et al., 2020).

Likewise, this study was linked to Individual Innovativeness Theory of Rogers (2003) which asserts that there is always new information within the social system and that this new information is processed by adopters (Rogers, 2003). In the process of adaptation, adopters act upon their perceptions regarding the characteristics of the innovation. Although there are a number of contextual factors, some findings are influential on adopters' decisions regarding adaptation to innovation. In other words, individuals are likely to have certain perceptions regarding a new technology that they have met in their social environments. These perceptions are quite important in terms of innovativeness. (Jackson, Yi & Park, 2020).

In the context of this study, school heads should be innovative. Depending on their psychological states, it is possible to determine the individual innovativeness of individuals. In this respect, determining school heads' innovativeness will help them play the leading role in innovation and changes in their institutions.

As regards leadership competence, this study was grounded on Path-Goal Theory of Leadership developed by House and Evans (2008). This theory asserts that the way the leader impresses the followers, the way goals about the work are perceived, and the ways to achieve the goals are taken into consideration. According to this theory, motivations, satisfactions, and work performances of followers depend on the leadership competence of their administrators (Yukl, 2019).

As to productivity, this study was linked to the Walberg's Theory of Educational Productivity (1981). This theory tackles about the influences on learning that affects the academic performance of a student that leads to productivity of teachers. It is an exploration of academic achievement wherein Walberg used a variety of methods on how to identify the factors that affects the academic performance of a student. Its fundamental objective is to analyze what causes poor student performance. Being aware of the factors and variables that condition it, as these are clues as to why a student is not reaching their full potential. That is why their grades don't match their capabilities (Walberg et al., 1986).

In the context of House and Evan's and Walberg theories, the researcher in this study also believes that school head's leadership competence and productivity are influenced by several factors internal and external to the person.

Conceptual Framework

This study aimed to determine the school heads' innovativeness, leadership competence and productivity among elementary schools in the Schools Division of Antique, Philippines for school year 2023-2024. The respondents were classified as to their age, sex, highest educational attainment, type of school, and length of service.

In terms of age, the respondents were classified as to young (40 years old & below) and old (41 years old & above). The researcher believed that young and old respondents differ in their innovativeness, leadership competence and productivity.

In terms of sex, the respondents were classified as to male and female. The researcher believed that male and female respondents differ in their innovativeness, leadership competence and productivity.

In terms of highest educational attainment, the respondents were classified as bachelor's degree, master's degree and doctorate degree holders. The researcher believed that doctorate degree holders differ in their innovativeness, leadership competence and productivity with that of bachelor's and master's degree holders.

In terms of type of school, the respondents were classified as to central and non-central. The researcher believed that respondents who came from central schools differ in their innovativeness, leadership competence and productivity with that of respondents who came from non-central schools.

In terms of length of service, the respondents were classified as short (10 years and below) and long (11 years & above). The researcher believed that respondents with long years of service differ in their innovativeness, leadership competence and productivity with that of respondents with short years of service.

In addition, the researcher assumed that school heads' innovativeness and leadership competence are related to their productivity. This means that the more innovative and competent the school heads are in performing their administrative tasks, the more productive they become.

The relationship among variables is shown in Figure 1.

Research Paradigm

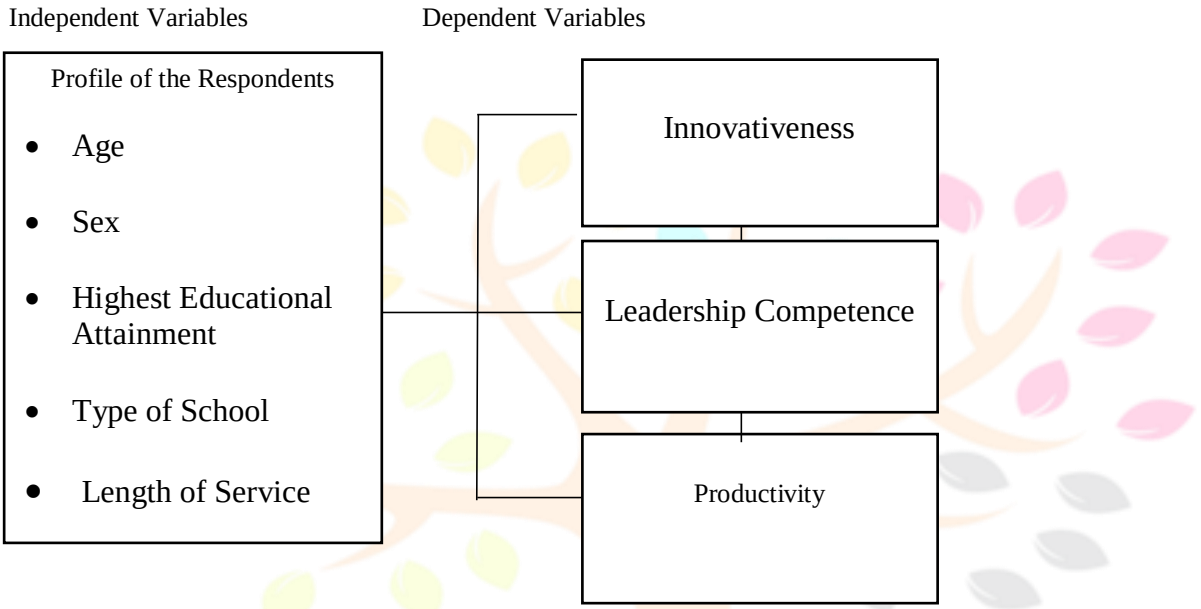

Figure 1: A Schematic Diagram of the Study showing the relationship between the independent and dependent variables

Significance of the Study

The results of this study were beneficial to the following:

Department of Education (DepEd) Officials. The findings of this study helped higher officials of the Department of Education particularly the Human Resource Development (HRD) unit because they were furnished with valuable information regarding the innovativeness, leadership competence and productivity of their school heads which served as baseline data in the development of leadership training programs for school heads to become effective leaders in their respective schools.

School Heads. The results of this study benefited most the school heads because they were informed about the level of their innovativeness and leadership competence in carrying out their administrative tasks as well as their productivity. This awareness gave them opportunity to make necessary improvements in their level of innovativeness, leadership competence and productivity for the benefit of their teachers, learners and the entire school community.

Teachers. The teachers likewise benefited from the findings of this study because it put into light the innovativeness, leadership competence and productivity of their school heads. Awareness of these things encouraged teachers to give their full support and cooperation to their school heads for the good of the entire school.

Learners. Findings of this study ultimately benefited the learners since they were informed about their school head's innovativeness, leadership competence and productivity. Having innovative, competent and productive school heads would redound to effective educational experiences and quality education that eventually benefit the learners.

Researcher. The findings of this study gave insights and ideas to the researcher about the topics being investigated. This also gave him opportunity to reflect his own innovativeness, leadership competence and productivity being one of the school heads in public elementary schools.

Future Researchers. This study provided future researchers useful ideas and information about concepts of school heads' innovativeness, leadership competence and productivity which served as one of their local references in conducting similar researches.

Definition of Terms

For common understanding of the different terms used in this study, the following terms were defined conceptually and operationally:

Innovativeness. This term refered to the tendency to engage in and support new ideas, novelty experimentation, and creative processes that may result in new products, services, or technological processes (InfoScipedia, 2024).

In this study, "innovativeness" referred to the level of school heads' ability to be creative, have new ideas and discover new ways of doing things as measured by School Heads' Innovativeness Questionnaire categorized as very high, high, moderate, low, and very low.

Leadership Competence. This term referred to leadership skills and behaviors that contribute to superior performance (Oxford Dictionary, 2023).

In this study, "leadership competence" referred to the ability of the school heads in leading their schools towards successful attainment of educational goals as measured by School Heads' Leadership Competence Questionnaire categorized as very high, high, moderate, low, and very low.

Productivity. This term referred to a measure of the quantity and quality of work done, considering the cost of the resources used (Muindi, 2022).

In this study, "productivity" referred to the level of efficiency of school heads in performing their administrative tasks categorized as very high, high, moderate, low, and very low.

Scope and Limitations of the Study

This study aimed to determine the school heads' innovativeness, leadership competence and productivity among elementary schools in the Schools Division of Antique, Philippines for school year 2023-2024.

This study was conducted in April to May, 2024. The respondents of the Schools Division study were 365 randomly selected teachers of public elementary schools in the of Antique. The Slovin's formula was employed to determine the sample size. Stratified proportionate random sampling was used by the researcher to draw the samples to participate in this study.

The descriptive-correlational research design was used by the researcher in this study. The dependent variables were school heads' innovativeness, leadership competence and productivity while the independent variables were age, sex, highest educational attainment, type of school and length of service.

The research instrument used in this study was a questionnaire on school heads' innovativeness adopted from Sarafidou, and Zafakos (2020), leadership competence adopted from Kadri et al. (2022) and productivity adopted from Ahmed and Patricia (2022) and validated by jury of experts.

Frequency, percentage, and mean were used as descriptive statistical tools while t- test, ANOVA, and Pearson's r as inferential statistical tools. Level of significance wa set at .05 at two-tailed test.

All statistical computations were processed through the Statistical Package for the Social Sciences (SPSS) software.

Chapter 2

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents a review of conceptual literature and related studies that are relevant to the present study on school heads' innovativeness, leadership competence and productivity.

Conceptual Literature

On School Heads' Innovativeness

Innovation in general means something new. Innovation is used to signify any shift, no matter how little. Innovation is not only characterized by introducing or executing new ideas or practices. The description or meaning of innovation can be described as a process that includes several activities to discover innovative ways to do things. It must not be mistaken for inventing, because this can be described as the act of making, creating, or delivering something. Nevertheless, new innovations can be associated with inventiveness. There is little research on what innovation will bring about to the organization (Çoban & Atasoy, 2020).

Previous research considered that the acceptance of innovation stimulates an organization and directs to better organizational performance. The advancement of new technology has created innovative practices in education, business and in government. To maintain the speed with the globalization, the educational leaders have adopted innovative practices developing from the beginning of new skills in the school management (Akpan, 2021).

The significance of innovation to success is accepted (Fernandes et al., 2021). But on the other side, knowing the significance of innovation is a bit more confrontational, particularly in the academic sector (Birkinshaw et al., 2020).

In school, innovativeness generally concentrates on creating a learning organization in order to accept the innovative practices and methods and adapt to the environmental changes rapidly. In the educational area, this term is believed as adaptation of schools to innovative practices and methods. In order to do this, school heads must act as instructional leaders and they must build an image for their schools. Furthermore, Gumuş et al. (2021) stated that the principals in the school build an encouraging, cooperative atmosphere for the teachers. Therefore, to find a clear knowledge of the meaning of innovativeness, it becomes essential to know it ahead of transforming technology. In the modern period, educational organizations are encountering the task of doing extra with a small amount of resources as they attempt to meet up the difficult and ever-changing needs of the people (Akpan, 2021). Modern and innovative methods are now being applied in educational management and in teaching. Innovation in school management and teaching, motivate innovative practices in schools (Akpan, 2021). In order for the school head to be successful in the delivering of his/her administrative roles, the person requires to be familiarized with the use of innovations in school management (Akpan, 2021). According to Uchendu (2022) innovativeness is a practice in which brand-new procedures or methods are placed or introduced into the process of an organization to substitute older or ineffectual ones.

Furthermore, a necessary condition for schools functioning as learning organizations are school leaders that are themselves learning models (Bush & Middlewood, 2020). School heads who are innovative, empower others in the school environment to challenge existing practices and find novel solutions to problems, while stimulating an ongoing discourse necessary for reflection (Coleman, 2021). School heads who are constantly updated on new research results and current educational trends are able to support with arguments their vision and implement innovative changes for school improvement. Innovative schools have school heads who discover new ways of doing things and are creative with resources and professional development. Rogers (2023) described innovativeness as "the degree to which an individual is relatively earlier in adopting new ideas than the other members of a system." Therefore, the school head's innovativeness inspires and motivates others to work together to generate new ideas and master new skills, thus creating an innovative school climate. The question arises whether the school head's innovativeness affects the school climate and research culture only through his/her leadership style or s/he has an additional impact because of her/his role as a model for the profession.

On School Heads' Leadership Competence

Competence represents implementing knowledge, know-how and attitudes, which are mobilized effectively in any given situation; thanks to the appropriate resources, the person will be able to handle the situation successfully (Jonnaert, 2022; Le Boterf, 2020). It is a "complex know-how that builds on an effective mobilization and a combination of a variety of internal and external resources within a range of situations" (Tardif, 2020). This implies that competence is in the doing, where internal resources such as knowledge, know-how and attitude, in addition to outside resources such as networks, peers, laws and procedures, will enable an individual to deal effectively with various situations in their work (Tardif, 2020).

School heads' leadership competence refers to the professional capabilities of the school heads in terms of managing and leading school using various leadership styles which are aligned to school heads professional training received (Pont, 2021).

In an educational organization, school heads assume the responsibility of managing and leading all school people according to their respective needs. In addition, school leaders are liaison agents to realize the directives of stakeholders and policy makers. To perform this responsibility, school heads need to have the competence and ability to administer the school (Mahmud, 2020).

School heads are the driving force behind the success of the changes made. They have an important role in an educational institution because leadership style influences the level of acceptance of a change and can support continuous improvement in the school (Fullan, 2020). At the same time, change is closely linked to the leadership of a school. According to Bush (2021), school heads determine the changes that need to be made in a school and play an important role in determining the effectiveness of those changes. Fullan (2020) states that the leadership of the school head to some extent determines the success of a change.

The Interstate School Leaders Licensure Consortium (2021) explains that the leadership competence of school heads is based on knowledge of organizational formation, working with stakeholders, providing feedback and influencing others. Mahmood (2022) described competence as an important element in school excellence because it is closely related to the initiative of school

heads in setting school mission, curriculum and pedagogy knowledge, school administration skills and relationships with external parties.

The leadership competence of school heads need to be emphasized in ensuring the effectiveness of schools. Every school head must be efficient and have high leadership competence in carrying out their duties as school leaders. He needs to emphasize aspects of learning and facilitating, school improvement, and student performance and well-being (Leithwood et al., 2021).

According to Kanak and Kiflee (2021), effective leadership begins with the mastery of school heads in theoretical and practical skills in the field of administration and the overall process of management. In this regard, excellent leaders can inspire other school people to succeed. At the same time, school leaders should have skills and knowledge in areas of knowledge application and pedagogy such as 21st century learning. Therefore, school heads should be proactive in improving the competencies, skills and expertise of teachers. High expertise will give more power and opportunities to lead effectively.

In recent years, the duties and expectations of the school heads towards changing student behaviors have expanded and become increasingly complex (ATA, 2021). As a consequence, all school heads need to acquire knowledge and develop the skills that experience has concluded are necessary for effective practice. School heads' roles and responsibilities are school planning, providing support for school facilities and infrastructure, designing strategies which contribute to the quality of education (Rohrmann, 2023). Moreover, school heads have the duty to initiate change, if external factors force them to, by restructuring school, influencing stakeholders to support the new structures, and getting teachers' commitment towards the new initiatives (Simkins et al., 2023). Therefore it is necessary to understand the minimum requirements of leadership competence for school heads. Several professional institutions have designed leadership competence for school heads' framework which should be refined to the school authority's requirements and the conditions of the schools to reflect the local context (ATA, 2021). Some of the leadership competencies are: (1) embodying visionary leadership (creating and sustaining shared vision, mission, values, principles and goals); (2) promoting the highest standard of conduct, ethical principles, and integrity in decision making, implementing policies, actions and behaviors (ATA, 2021); (3) managing school operations and resources to ensure a safe, caring, and effective learning environment; and (4) providing instructional leadership to ensure that each student has access to quality teaching and the opportunity to engage in quality learning experiences (ATA, 2021). These competencies are interrelated and are not presented in rank order. A review of effective school heads in several countries (such as US, Australia, England, Norwegian, Denmark) performed by Leithwood and Riehl (2023) has identified three core competencies. They are (a) setting directions; (b) developing people; and (c) developing the organization. "Managing the instructional program" is later added in their further study (Leithwood et al., 2021).

On School Heads' Productivity

Productivity is critical for the long-term competitiveness and profitability of organizations. According to Bernolak (2022), productivity means "how much and how good one produce from the resources used," whereas the European Association of National Productivity Center (EANPC, 2021) defines productivity as "how efficiently and effectively products and services are being produced." Measuring productivity can help firms to follow the mission, vision, policies, objectives and targets (Dixon, Nanni, & Vollmann, 2021).

According to Muindi (2022), productivity is a measure of the quantity and quality of work done, considering the cost of the resources used. Duo-Aka (2021) defined productivity as a measure of overall production efficiency, effectiveness and performance of individual organization. Neely (2021) contends that productivity is the "measure of how well a nation's resources are utilized for accomplishing a set of results… reaching the highest level of performance with the least expenditure of resources, including human resources". This is a synthesized definition of productivity. Neely (2021) further maintained that productivity is an attitude of the mind. It is the mentality of progress and constant improvement of that which exists. It is the certainty of being able to change that which exists. It is the certainty of being able to do better today than yesterday. It is the will to improve on the present situation, no matter how good it may look. It is the continued effort to apply new techniques and it is the faith in human capabilities.

The employee productivity is concerned with the final and specific outputs desired from the employee considering the resources spent on the employee (Mwiti, Maringa, & Gongera, 2022). The employee productivity involves measuring the time spent in the production of the desired outputs from an employee. The employee involves also the measurement of the employee related costs incurred by the organization in the production of desired output. Productivity has often been confused with efficiency. Efficiency is generally seen as the ratio of the time needed to perform a task to some predetermined standard time (Nigel & Mann, 2022).

Productivity is a performance measure encompassing both efficiency and effectiveness. It is important, therefore, to know who the productive workers are. Productivity is a performance measure encompassing both efficiency and effectiveness. High performing, effective organizations have a culture that encourages employee involvement. Therefore, employees are more willing to get involved in decision-making, goal setting or problem solving activities, which subsequently result in higher employee performance (Mullins, 2021). Encourage a more modern style of participatory management, raise employee productivity and satisfaction, and even lower workers‟ compensation rates (Terry & Franklin, 2020).

According to Miller and Monge (2021), job satisfaction increases productivity through bringing high quality motivation and through increasing working capabilities at time of implementation. There is evidence that participative climate has a more substantial effect on worker's satisfaction then participation in specific decision and it appears that participation in goal setting does not have strong effect on productivity. Participation has a strong effect on both job satisfaction and productivity (Bhatti & Quereshi, 2022).

When the factors affecting the productivity are managed properly the situation becomes favorable. The resulting effects productivity may include improved working conditions, introduction of needed technology, training of employees, motivation, better leadership, favorable rules, regulations, policies and career development opportunities which will in turn influence performance standards positively thereby resulting in higher customer satisfaction levels, which is good for business (Miller & Monge, 2021).

Related Studies

Foreign Studies

Mirfani (2022) explored the innovativeness and decision-making skills of school principals. The survey has been conducted on 120 principals of primary school in Bogor Regency. The purpose of the survey was to find out the trend of innovative maps and urgent decision-making skills of principals. Methods performed through innovative potential tests and weigh the position of
decision-making updates. The findings of the study indicate that the general trend of innovativeness still in the category of early majority and late majority. The tendency of decision-making skills is in a low category.

Sarafidou and Xafakos (2020) examined the principals' innovativeness and dimensions of transformational leadership as possible predictors of innovative school climate and teachers' attitudes towards research. Self-administered questionnaires were completed by 190 primary school teachers. The questionnaire included inventories measuring a) principals' innovativeness, b) three dimensions of transformational leadership style (vision building, individual consideration, intellectual stimulation), c) innovative school climate, and d) different aspects of teachers' attitudes towards educational research. Results demonstrate that principals are very innovative and their innovativeness tends to coexist with a leadership style that is transformational. Moreover, an innovative school climate is very likely to be established if the school principal not only provides stimulation and personalized care for teachers but also s/he acts as a model of innovativeness in school. Nevertheless, principals' innovativeness and transformative leadership do not also ensure a research orientation in school.

Şentürk et al. (2021) explored the relationship between individual innovativeness and techno-pedagogical levels of school administrators and teachers. A total 1735 school administrators and teachers' individual innovation qualifications and techno-pedagogical education competences were investigated, who are working at primary, middle school and preschool levels in Turkey's province Samsun. Within the scope of the research, personal information inventory, Techno pedagogical Education Competence (TPACK - deep) Scale and Individual Innovativeness Scale were used. In the analysis of the data, the SPSS package program was used. According to the results of the research, it was found out that school administrators had very high level of innovativeness. It was also found that the techno pedagogical education proficiency score of the participants was 4.01 which is in the advanced level. The average score that teachers got from the Individual Innovativeness scale was found to be 70.60 (category in the pioneer). According to the results of the correlation analysis, it was determined that both individual innovativeness and techno-pedagogical education competences levels have a significant correlation relationship with each other.

Kocarasac (2021) determined and evaluated the innovative characteristics of school heads working at public-private science and social sciences high schools in Turkey. Science and social sciences high schools were established as educational institutions for students who will be scientists and are expected to be open to innovations, information technologies, learning, development and cooperation. There were 384 school heads participated in this study.

According to the findings, school heads perceive their being open to innovations, information technologies, learning, development and cooperation to be at a high level in the scope of sub-dimensions of innovative characteristics. The mean scores of the factors show that the innovative characteristics of the school heads differ significantly according to the types of schools (public-private), seniority, foreign language level and branch. On the contrary, they do not differ in terms of gender and education level.

Hartijasti and Afzal (2022) explored the leadership competence of private school principals in Pakistan urban and rural areas. Content analysis was utilized to analyze written responses from 26 private schools. This study revealed that in urban and rural areas private school principals are perceived to have strong personal characters but lack the competences to drive results. The main finding of this study was that leadership competence of personal characters and driving results are perceived as two independent aspects, instead of complimenting to one another. This is one of the reasons why many private schools fail to retain students to complete a full cycle of basic education.

Yen, Hung and Vu (2021) identified the factors that influence the competence of school leadership in today's increasingly smarter school landscape. Research was conducted using qualitative and quantitative research methods. The research sample consisted of 295 high school principals from five provinces and cities in Vietnam. The results showed that smart school leadership competence depend on individual factors, school-level factors, and educational community-level factors. Smart school development policy and innovation of smart school infrastructure and facilities were identified as the most important factors.

Oabebl and Plessis (2023) investigated the leadership competencies for teacher professional development in the perspectives of Namibian principals, heads of departments and teachers. The study was approached from a pragmatist perspective employing a mixed-methods methodology. The sequential explanatory design employed combined quantitative and qualitative data obtained from school principals, HODs and teachers. Analysis entailed the generation of descriptive statistics using SPSS and open coding of qualitative data to generate themes. It was found that school leaders require multiple competencies, such as accountability,

effective communication, good interpersonal relations, subject-matter competencies, administrative competencies, digital competencies and listening skills to be able to support their teachers' professional development efforts.

Fapohunda (2021) investigated on the exploration of the effect of work-life balance on productivity. The aim of the study was to explore the connection between work-life balance and organization productivity and whether work-life balance practice possibly decreases teacher turnover and absenteeism. There were 200 respondents in the banking industry were used for the survey. A structured questionnaire was used to collect data. The findings of the study indicated that there was a positive relationship between work-life balance practice and teacher productivity. It also found out that management support was not satisfactory.

Clampitt and Downs (2021) analyzed productivity in two different companies. He used one company from service organization and the other one from manufacturing organization. The study found that productivity of the employee was indicated by "the amount of work" an employee does. Subsequently, the second most important indicator of productivity seemed to be "getting the job done", followed by "how good the employees are with customers". The study referred productivity as quantity; quality; getting job done; please customers; goals; timeliness; and best efforts. The study stated that service companies concentrate more on external factors since they have a closer contact with customers. And retail being the customer centric sector, the productivity shall be measured based on the basis of external factors.

Ahmed and Patricia (2022) also investigated school heads' productivity and factors affecting productivity. The study was on the use of modern technology, teacher training programs, store size, location and financial positions. The findings of the study indicated that school heads had very high level of productivity and this was influenced by several factors.

Voordt (2021) in his findings on productivity and teachers' satisfaction talked about the importance of flexible workplace, modern information and communication technology, cost savings, workplace innovation and teacher satisfaction. The study focused upon teachers' productivity in relation to an open structure in an organization. Literature on real estate, facility management, business administration and environmental psychology stated the following indicators to measure productivity like actual labor productivity, perceived productivity, amount of time spent, absenteeism due to illness and indirect
indicators of which perceived productivity provides a reasonable indicator to measure actual productivity.

Mmakwe and Ojiabo (2021) investigated the relationship between work-life balance and productivity in the banking sector in Port Harcourt, Rivers state. The findings revealed a strong correlation between the measures of work-life balance and the measures of teachers' productivity. Subsequently, the study recommends that organizations in the banking sector should promote policies and structures which foster a balance between the personal commitments and responsibilities of an employee and his organizational roles and duties in order to effectively enhance teacher productivity.

Finally, Obiageli, Uzochukwu and Ngozi (2021) examined work-life balance and productivity in selected commercial banks in Lagos State. The problem identified in this study was poor working organizational culture in the commercial banks which may not encourage various types of work-life balance practices. The specific objective of this research was to determine the extent to which leave policy affects service delivery which is also in line with the research question and hypothesis. It was discovered that there was a significant positive relationship between leave policy and service delivery. The findings revealed that leave policy motivate employee ability to deliver services efficiently and effectively, in conclusion work-life balance practice is an important factor in increasing teacher productivity. The researcher recommends that managers of these commercial banks should prioritize creating different work-life balance incentives that will improve productivity.

Local Studies

Hernandez et al. (2023) described and examined innovativeness and productivity among school heads assigned in Bustos District in the Schools Division of Bulacan. The study was participated by thirteen (13) school heads who were purposively drawn by the researchers. Results revealed that school heads always practiced innovativeness in leading their schools and had very high productivity. Further, school heads' innovativeness was found positively related to their productivity.

Wenceslao, Misa and Tugonon (2020) investigated the leadership capabilities, management competence and performance of elementary public administrators in Ormoc City Division, Ormoc City in terms of vision, customer focus, integrity, accountability, communication, shared ownership, empowerment and knowledge. Findings revealed that school administrators got Very Good ratings in all these areas. In the aspect of summary of leadership skills of school administrators, they obtained a rating of 3.49 which is interpreted as Very Good. The management competence of school administrators in all aspects were generally rated as very good. The planning skills, implementing, assessment, communication, supervision, and community relations, staff development,
and conflict management generally had an interpretation of very good as rated by the respondents. This implies that the School Administrators in Ormoc District IV has a potential and capacity to management the whole school system. In general, the weighted mean of performance was very satisfactory.

Mungania (2022) investigated the influence of work-life balance on productivity of the banking industry. Specifically, the study sought to determine the influence of flexible work-arrangement, wellness programs, family responsibilities and lastly influence of work-life conflict on productivity of the banking. The study found that flexible work arrangements, wellness programs, family responsibility concerns were more strongly related to productivity of the banking industry. It also found that institutions that support teachers in work-life balance practices had higher productivity. Work-life conflict negatively influenced productivity which implies there was negative relationship between work-life conflict and performance in the banking industry. The study

recommends that organizations could try and support family responsibilities, offer flexible work arrangements and wellness programs to its teachers for increased performance. The study also recommends that organizations should diagnose teachers' work-life balance practice needs and develop practical solutions by implementing them so as to be able to achieve business goals.

Finally, Estrada and Gumban (2024) investigated the level of school heads' leadership competence and productivity. The study was conducted to 80 school heads of the Division of Cadiz City. Mean and standard deviation were used for descriptive analysis, Mann-Whitney, Krustal Wallis, and Welch Anova Test for comparative analysis, and PPM Person Product Moment of Correlation was utilized to determine relationship among variables. Self-made questionnaire based from the domains of the PPST was used. The results revealed that school heads had very high level of leadership competence and productivity. Furthermore, there was no significant difference shown in the school heads' competence and productivity when grouped according to age, sex and highest educational attainment. Also, there was a significant relationship between the school heads' leadership competence and productivity.

Relevance of Related Literature and Studies

The literature reviewed in this chapter served as a foundation for the researcher's research work on school heads' innovativeness, leadership competence and productivity. In addition, the literature review, as previously described, provided the researcher knowledge and awareness of the current range of existing theories, concepts, related methodologies, and conceptual problems for the study, resulting in a more precise definition, coherence of the investigation, and appropriately focused on the relevance of the study.

Furthermore, because the researcher was familiar with the various research techniques and statistical treatment, he was more likely to select a more suitable methodology for the topic.

Finally, variables such as age, sex, highest educational attainment, type of school and length of service were revisited in the current study as variables that may impact the school heads' innovativeness, leadership competence and productivity.

Chapter 3

RESEARCH METHODOLOGY

This chapter deals with the research design, the respondents of the study, data gathering instrument, data gathering procedure, and statistical tools used.

Research Design

This study made use of a descriptive-correlational research design which aimed to determine the school heads' innovativeness, leadership competence and productivity among elementary schools in the Schools Division of Antique, Philippines for school year 2023-2024.

According to Rosenthal and Rosnow (2021), a descriptive method of research is the careful mapping out of a situation or set of events in order to describe what is happening behaviorally. Correlational research, on the other hand, involves collecting data in order to determine whether, and to what degree, a relationship exists between two or more quantifiable variables (Gay, 2020).

This design was appropriate for this study as it allows the researcher to determine the existence of relationships between school heads' innovativeness, leadership competence and productivity as dependent variables in relation to age, sex, highest educational attainment, type of school, and length of service as independent variables.

Respondents of the Study

The respondents of the study were 365 randomly selected teachers of public elementary schools from 22 school districts in the Schools Division of Antique for School Year 2023-2024.

The sample size of this study was determined by computing the Slovin's formula. Stratified proportionate random sampling technique was used to determine the number of teachers included for each district. Fishbowl technique was then used to draw the names of the teachers that participated in the study.

As presented in Table 1, 12 or 3.27% of the respondents came from Districts of Anini-y, Barbaza, Hamtic South and San Remigio I; 7 or 1.91% came from District of Belison, 21 or 5.85% came from the Districts of Bugasong, 17 or 4.77% came from the District of Caluya, 27 or 7.35% came from the District of Culasi, 16 or 4.37% came from Districts of Hamtic North, Laua-an, Patnongon II and Tibiao, 10 or 2.86% came from District of Libertad, 11 or 2.98% came from District of Pandan, 23 or 2.98% came from District of Patnongon I, 33 or 9.07% came from District of San Jose, 15 or 3.99% came from District of San Remigio I, 9 or 2.48% came from District of Sebaste, 26 or 7.16% came from District of Sibalom North, 22 or 5.97% came from District of Sibalom South, 19 or 5.25% came from District of Tobias Fornier, and 13 or 3.58% came from the District of Valderrama.

Table 1. Distribution of the Respondents

School District	N	n	%
Anini-y	137	12	3.27
Barbaza	134	12	3.20
Belison	80	7	1.91
Bugasong	245	21	5.85
Caluya	200	17	4.77
Culasi	308	27	7.35
Hamtic North	183	16	4.37
Hamtic South	136	12	3.25
Laua-an	180	16	4.30
Libertad	120	10	2.86
Pandan	125	11	2.98
Patnongon I	267	23	6.37
Patnongon II	186	16	4.44
San Jose	380	33	9.07
San Remigio I	138	12	3.29
San Remigio II	167	15	3.99
Sebaste	104	9	2.48
Sibalom North	300	26	7.16
Sibalom South	250	22	5.97
Tibiao	179	16	4.27
Tobias Fornier	220	19	5.25
Valderrama	150	13	3.58
Total	4,189	365	100.00

Data Gathering Instrument

The data in this study were obtained through a questionnaire composed of four parts.

Part I of the questionnaire listed the demographic profile of the respondents such as their age, sex, highest educational attainment, type of school and length of service.

Part II of the questionnaire obtained data on the school heads' innovativeness as assessed by the respondents.

This instrument consists of 15 items adopted from the study of Sarafidou, and Zafakos (2020). To answer the instrument, the respondents were requested to indicate their level of innovativeness by circling the number with the following response categories: 5- Always; 4-Often; 3- Sometimes; 2- Rarely and 1- Never.

The scores of the individual respondent were determined by adding the numerical equivalents of the options chosen and the mean was computed and transformed into numerical scale as shown below:

Scale of Means	Description	Interpretation
4.21 – 5.00	Very High	All school heads have the ability to be creative, have new ideas and discover new ways of doing things.
3.41 – 4.20	High	Most school heads have the ability to be creative, have new ideas and discover new ways of doing things.
2.61 – 3.40	Moderate	Some school heads have the ability to be creative, have new ideas and discover new ways of doing things.
1.81 – 2.60	Low	Few school heads have the ability to be creative, have new ideas and discover

		new ways of doing things.
1.00 – 1.80	Very Low	None of the school heads has the ability to be creative, have new ideas and discover new ways of doing t hings.

Part III of the instrument was used to gather data on the level of school heads' leadership competence as assessed by the respondents.

The instrument consists of 15 items derived from the study of Kadri et al. (2022) that required the respondents to indicate their extent of agreement to each statement in the questionnaire using these options: 5- Strongly Agree, 4- Agree, 3- Slightly Agree, 2- Disagree, and 1- Strongly Disagree.

The overall rating obtained was interpreted using the following scale:

Scale	Description	Interpretation
4.21 – 5.00	Very High	All school heads have the ability in leading their school towards successful attainment of educational goals.
3.41 – 4.20	High	Most school heads have the ability in leading their school towards successful attainment of educational goals.
2.61 – 3.40	Moderate	Some school heads have the ability in leading their school towards successful attainment of educational goals.
1.81 – 2.60	Low	Few school heads have the ability in leading their school towards successful attainment of educational goals.
1.00 – 1.80	Very Low	None of the school heads has the ability in leading their school towards successful attainment of educational goals.

Part IV of the instrument was used to gather data on school heads' productivity as assessed by the respondents.

The instrument consisted of 15 items derived from the study of Ahmed and Patricia (2022) that required the respondents to indicate their extent of agreement to each statement in the questionnaire using these options: 5- Always, 4- Often, 3- Sometimes, 2- Rarely, and 1- Never.

The overall rating obtained was interpreted using the following scale:

Scale	Description	Interpretation
4.21 – 5.00	Very High	All school heads are very efficient in performing their administrative tasks.
3.41 – 4.20	High	Most school heads are very efficient in performing their administrative tasks.
2.61 – 3.40	Moderate	Some school heads are very efficient in performing their administrative tasks.
1.81 – 2.60	Low	Few school heads are very efficient in performing their administrative tasks.
1.00 – 1.80	Very Low	None of the school heads is very efficient in performing administrative tasks.

Validity of the Research Instrument

To ensure the validity of the research instrument used in this study, it underwent content and face validation. For this purpose, a jury composed of five members was requested by the researcher to evaluate the instrument in terms of content and format. The suggestions given by these experts were considered by the researcher in the final revision of the instrument to ensure its validity.

In addition, to ensure that all questions in the instruments were appropriate, clear, reasonable, typical, and sufficiently inclusive, the researcher used the Good and Scates' Criteria of Validation.

Reliability of the Research Instrument

The validated data gathering instrument was pilot-tested to 30 teachers in the Schools Division of Antique who were not previously selected or who were not part of the actual respondents of this study to ascertain its reliability.

A Cronbach's alpha was computed from the results of pilot testing to find out if the validated instrument meet the required reliability coefficient of .80 or higher for the instrument to be considered as reliable and ready for their final administration to the target respondents of the study.

Results of reliability analysis revealed a Cronbach's alpha of .927 for school heads' innovativeness, .913 for school heads' leadership competence and .908 for school heads' productivity which signifies that the research instrument used in this study was highly reliable.

Data Gathering Procedure

Prior to gathering of data, permission to conduct the study was obtained from the Office of Schools Division Superintendent, Department of Education (DepED), Schools Division of Antique and from the Office of the Public School District Supervisor of each school district.

The administration of the research instrument followed which was personally distributed by the researcher to the respondents in their respective schools.

After a specified period of time, the questionnaires were retrieved by the researcher and they were tallied, analyzed, and interpreted.

Statistical Tools Used

The raw data obtained in this study were analyzed using the following statistical tools:

Frequency. This was used to determine the number of respondents belonging to each category of variables.

Percentage. This was used to determine the proportion of respondents belonging to each category of variables.

Mean. This was used to determine the level of school heads' innovativeness, leadership competence and productivity as assessed by the respondents.

t-test. This was used to determine the significant differences in the level of school heads' innovativeness, leadership competence and productivity as assessed by the respondents when classified as to variables with two categories such as age, sex, type of school and length of service.

ANOVA. This was used to determine the significant differences in the level of school heads' innovativeness, leadership competence and productivity as assessed by the respondents when classified as to variables with three or more categories such as highest educational attainment.

Pearson's r. This was used to determine the significant relationships among school heads' innovativeness, leadership competence and productivity.

Significance level for all inferential statistics was set at .05.

All statistical computations were processed through Statistical Package of Social Sciences (SPSS) software.

Chapter 4

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

This chapter presents the findings of the study. It presents the descriptive and inferential data including their respective analyses and interpretations.

Level of School Heads' Innovativeness as Assessed by the Respondents When Taken as a Whole

The level of school heads' innovativeness as assessed by the respondents when taken as a whole and classified according to age, sex, highest educational attainment, type of school and length of service was determined by computing the mean scores.

When taken as a whole, the level of school heads' innovativeness as assessed by the respondents is "Very High" with an obtained overall mean score of 4.28. A scrutiny of the means in the same table reveals that respondents obtained a highest mean score in the indicators "Acquires approval for the implementation of various programs and projects of the school" (M=4.62), "Looks for effective ways in performing their duties and responsibilities" (M=4.58), and "Mobilizes support for the implementation of MATATAG curriculum" (M=4.52) described as "Very High" while they obtained the lowest mean score in the indicators "Creates new ideas for difficult issues" (M=4.04), "Searches out new working methods, techniques or instruments" (M=4.11) and "Systematically introduces new techniques and strategies into work practice" M=4.20) described as "High."

This result means that respondents believe that all school heads have the ability to be creative, have new ideas and discover new ways of doing things. This is indicated by their approval for the implementation of various programs and projects of the school, looks for effective ways in performing their duties and responsibilities and mobilizes support for the implementation of MATATAG curriculum.

The study of Şentürk et al. (2021) affirms the above findings who found that school administrators had very high level of innovativeness.

Likewise, the study of Sarafidou and Xafakos (2020) and Kocarasac (2021) support the above findings whose results of their study demonstrate that principals are very innovativ

Table 2 presents the data.

Table 2. Level of School Heads' Innovativeness as Assessed by the Respondents When Taken as a Whole

Category	Mean	Description

Looks for effective ways in performing their duties and responsibilities.	4.58	Very High
Looks for opportunities to improve an existing process, technology, service or work relationship.	4.35	Very High
Recognizes opportunities to make a positive difference in managing the school.	4.21	Very High
Pays attention to non-routine issues in work.	3.81	Very High
Creates new ideas for difficult issues.	4.04	High
Searches out new working methods, techniques or instruments.	4.11	High
Generates original solutions for problems.	4.32	Very High
Finds new approaches to execute tasks.	4.33	Very High
Encourages teachers to be enthusiastic about innovative teaching and learning.	4.53	Very High
Attempts to convince the various stakeholders of the school to support new programs and policies.	4.22	Very High
Mobilizes support for the implementation of MATATAG curriculum.	4.52	Very High
Acquires approval for the implementation of various programs and projects of the school.	4.62	Very High
Systematically introduces new techniques and strategies into work practice.	4.20	High
Transforms new work techniques and strategies into useful application.	3.97	Very High
Contributes to the implementation of new programs and projects in school.	4.42	Very High
Overall Mean	4.28	Very High

Scale of Means: 4.21–5.00 Very High; 3.41 – 4.20 High; 2.61 – 3.40 Moderate; 1.81-2.60 Low; 1.00 – 1.80 Very Low

Level of School Heads' Innovativeness as Assessed by the Respondents When Classified According to Variables

When classified according to age, both young (M= 4.24) and old (M=4.31) respondents assessed the level of school heads' innovativeness as "very high."

When classified according to sex, male (M= 4.18) respondents assessed the level of school heads' innovativeness as "high'' while female (M=4.29) respondents assessed the level of school heads' innovativeness as "very high."

When classified according to highest educational attainment, respondents who are holder of bachelor's degree (M=3.91) and master's degree (M=4.10) assessed the school heads' innovativeness as "high"' while doctorate degree holders (M=4.36) assessed the level of school heads' innovativeness as "very high."

When classified according to type of school, respondents who came from central (M=4.40) and non-central (M=4.27) schools assessed the level of school heads' innovativeness as "very high."

When classified according to length of service, respondents with short (M=4.34) and long (M=4.26) length of service assessed the level of school heads' innovativeness as "very high." This result means that regardless of their profile, respondents of this study believe that all school heads have the ability to be creative, have new ideas and discover new ways of doing things

This is consistent with the findings of Hernandez et al. (2023) that school heads always practiced innovativeness in leading their school

Table 3 presents the data.

Table 3. Level of School Heads' Innovativeness as Assessed by the Respondents When Classified According to Variables

Variables	Mean	Description
Age		
Young (40 yrs. old & below)	4.24	Very High
Old (41 yrs. Old & above)	4.31	Very High
Sex		
Male	4.18	High
Female	4.29	Very High
Highest Educational Attainment		
Bachelor's Degree	3.91	High
Master's Degree	4.10	High
Doctorate Degree	4.36	Very High
Type of School		

Central	4.40	Very High
Non-Central	4.27	Very High
Length of Service		
Short (10 yrs. & below)	4.34	Very High
Long (11 yrs. & above)	4.26	Very High

Scale of Means: 4.21–5.00 Very High; 3.41 – 4.20 High; 2.61 – 3.40 Moderate; 1.81-2.60 Low; 1.00 – 1.80 Very Low

Level of School Heads' Leadership Competence as Assessed by the Respondents When Taken as a Whole

The level of school heads' leadership competence as assessed by the respondents when taken as a whole and classified according to age, sex, highest educational attainment, type of school and length of service was determined by computing the mean scores.

When taken as a whole, the level of school heads' leadership competence as assessed by the respondents is "very high" with an obtained overall mean score of 4.31. A scrutiny of the means in the same table reveals that respondents obtained a highest mean score in the indicators "Praises people for a job well done" (M=4.63), "Develops cooperative relationships among the people he/she works" (M=4.54), and "Evaluates the performance of teachers" (M=4.52) described as "very high" while they obtained the lowest mean score in the indicators "Sets a personal example of what he/she expects of others" (M=4.11), "Directs all supervisory activities for the teachers' improvement" (M=4.18) and "Assists teachers in evaluating student performance" (M=4.19) described as "high."

This result means that respondents believe that all school heads have the ability in leading their school towards successful attainment of educational goals.

The above finding affirms the study of Estrada and Gumban (2024) who found that school heads had very high level of leadership competence.

Likewise, it is consistent with the findings of Wenceslao, Misa and Tugonon (2020) that the management competence of school administrators in all aspects was generally rated as very good.

Table 4 presents the data.

Table 4. Level of School Heads' Leadership Competence as Assessed by the Respondents When Taken as a Whole

Category	Mean	Description
Assists teachers in lesson planning.	4.32	Very High
Assists teachers in developing/selecting instructional materials.	4.25	Very High
Helps teachers to evaluate curricula and suggest changes to meet the learners' needs.	4.37	Very High
Encourages teachers to use appropriate methods of teaching.	4.33	Very High
Assists teachers in evaluating student performance.	4.19	High
Directs all supervisory activities for the teachers' improvement.	4.18	High
Helps to facilitate teachers' access to professional resources.	4.40	Very High
Evaluates the performance of teachers.	4.52	Very High
Uses evaluation as a means for development of teachers.	4.32	Very High
Evaluates teachers only through their classroom performance.	3.80	Very High
Sets a personal example of what he/she expects of others.	4.11	High
Talks about future trends that will influence how school work gets done.	4.38	Very High
Seeks out challenging opportunities that test his/her own skills and abilities.	4.31	Very High
Develops cooperative relationships among the people he/she works.	4.54	Very High
Praises people for a job well done.	4.63	Very High
Overall Mean	4.31	Very High

Scale of Means: 4.21–5.00 Very High; 3.41 – 4.20 High; 2.61 – 3.40 Moderate; 1.81-2.60 Low; 1.00 – 1.80 Very Low

Level of School Heads' Leadership Competence as Assessed by the Respondents When Classified According to Variables

When classified according to age, both young (M= 4.23) and old (M=4.37) respondents assessed the level of school heads' leadership competence as "very high."

When classified according to sex, both male (M= 4.30) and female (M=4.31) respondents assessed the level of school heads' leadership competence as "very high."

When classified according to highest educational attainment, respondents who are holder of bachelor's degree (M=4.39) and doctorate degree (M=4.28) assessed the level of school heads' leadership competence as "very high" while respondents who are holder of master's degree (M=4.68) assessed the level of school heads' leadership competence as "high."

When classified according to type of school, respondents who came from central (M=4.44) and non-central (M=4.30) schools assessed the level of school heads' leadership competence as "very high."

When classified according to length of service, respondents with short (M=4.32) and long (M=4.31) length of service assessed the level of school heads' leadership competence as "very high." This result means that regardless of their profile, respondents of this study believe that all school heads have the ability in leading their school towards successful attainment of educational goals.

This is consistent with the findings of Yen, Hung and Vu (2021) that leadership competence depends on individual factors, school-level factors, and educational community-level factors.

Table 5 presents the data.

Table 5. Level of School Heads' Leadership Competence as Assessed by the Respondents When Classified According to Variables

Variables	Mean	Description
Age		
Young (40 yrs. old & below)	4.23	Very High
Old (41 yrs. Old & above)	4.37	Very High
Sex		
Male	4.30	Very High
Female	4.31	Very High
Highest Educational Attainment		
Bachelor's Degree	4.39	Very High
Master's Degree	3.90	High
Doctorate Degree	4.28	Very High
Type of School		
Central	4.44	Very High
Non-Central	4.30	Very High
Length of Service		
Short (10 yrs. & below)	4.32	Very High
Long (11 yrs. & above)	4.31	Very High

Scale of Means: 4.21–5.00 Very High; 3.41 – 4.20 High; 2.61 – 3.40 Moderate; 1.81-2.60 Low; 1.00 – 1.80 Very Low

Level of School Heads' Productivity as Assessed by the Respondents When Taken as a Whole

The level of school heads' productivity as assessed by the respondents when taken as a whole and classified according to age, sex, highest educational attainment, type of school and length of service was determined by computing the mean scores.

When taken as a whole, the level of school heads' productivity as assessed by the respondents is "Very High" with an obtained overall mean score of 4.41. A scrutiny of the means in the same table reveals that respondents obtained a highest mean score in the indicators "Monitors and evaluates the impact of the instructional program" (M=4.62), "Monitors and evaluates the management and operational systems" (M=4.62), and "Promotes the use of the most effective and appropriate technologies to support teaching and learning" (M=4.61) described as "very high" while they obtained the lowest mean score in the indicators "Monitors and evaluates progress and revise plans" (M=3.98) and "Creates a comprehensive, rigorous, and coherent curricular program" (M=4.20) described as "high."

This result means that respondents believe that all school heads are very efficient in performing their administrative tasks.

The study of Ahmed and Patricia (2022) and Hernandez et al. (2023) support the above findings who found that school heads had very high level of productivity and this was influenced by several factors.

Table 6 presents the data.

Table 6. Level of School Heads' Productivity as Assessed by the Respondents When Taken as a Whole

Category	Mean	Description
Collaboratively develops and implements a shared vision and mission.	4.39	Very High
Collects and uses data to identify goals, assess organizational effectiveness, and promote organizational learning.	4.28	Very High
Creates and implements plans to achieve goals.	4.32	Very High
Promotes continuous and sustainable improvement.	4.43	Very High
Monitors and evaluates progress and revise plans.	3.98	High
Nurtures and sustains a culture of collaboration, trust, learning, and high expectations.	4.28	Very High
Creates a comprehensive, rigorous, and coherent curricular program.	4.20	High
Creates a personalized and motivating learning environment for students.	4.47	Very High
Develops assessment and accountability systems to monitor student progress.	4.39	Very High
Develops the instructional and leadership capacity of teachers and staff.	4.44	Very High
Maximizes time spent on quality instruction.	4.49	Very High
Promotes the use of the most effective and appropriate technologies to support teaching and learning.	4.61	Very High
Monitors and evaluates the impact of the instructional program.	4.62	Very High
Monitors and evaluates the management and operational systems.	4.62	Very High
Obtains, allocates, aligns, and efficiently utilizes human, fiscal, and technological resources.	4.61	Very High
Overall Mean	4.41	Very High

Scale of Means: 4.21–5.00 Very High; 3.41 – 4.20 High; 2.61 – 3.40 Moderate; 1.81-2.60 Low; 1.00 – 1.80 Very Low

Level of School Heads' Productivity as Assessed by the Respondents When Classified According to Variables

When classified according to age, both young (M= 4.32) and old (M=4.47) respondents assessed the level of school heads' productivity as "very high."

When classified according to sex, both male (M= 4.39) and female (M=4.41) respondents assessed the level of school heads' productivity as "very high."

When classified according to highest educational attainment, respondents who are holder of bachelor's degree (M=4.41) and doctorate degree (M=4.33) assessed the level of school heads' productivity as "very high" while respondents who are a holder of master's degree (M=4.00) assessed the level of school heads' productivity as "high."

When classified according to type of school, respondents who came from central (M=4.44) and non-central (M=4.40) schools assessed the level of school heads' productivity as "very high."

When classified according to length of service, respondents with short (M=4.39) and long (M=4.41) length of service assessed the level of school heads' productivity as "very high." This result means that regardless of their profile, respondents of this study believe that all school heads are very efficient in performing their administrative tasks.

This corroborates with the findings of Estrada and Gumban (2024) that school heads had very high level of productivity when grouped according to age, sex and highest educational attainment.

Table 7 presents the data.

Table 7. Level of School Heads' Productivity as Assessed by the Respondents When Classified According to Variables

Variables	Mean	Description
Age		
Young (40 yrs. old & below)	4.32	Very High
Old (41 yrs. Old & above)	4.47	Very High
Sex		
Male	4.39	Very High
Female	4.41	Very High
Highest Educational Attainment		
Bachelor's Degree	4.49	Very High
Master's Degree	4.00	High
Doctorate Degree	4.33	Very High
Type of School		
Central	4.44	Very High
Non-Central	4.40	Very High
Length of Service		
Short (10 yrs. & below)	4.39	Very High
Long (11 yrs. & above)	4.41	Very High

Scale of Means: 4.21–5.00 Very High; 3.41 – 4.20 High; 2.61 – 3.40 Moderate; 1.81-2.60 Low; 1.00 – 1.80 Very Low

Differences in the Level of School Heads' Innovativeness When Classified According to Age, Sex, Type of School and Length of Service

As reflected in Table 8, no significant differences existed in the level of school heads' innovativeness as assessed by the respondents when classified according to age, $t = -.877$, $p > .05$; sex, $t = -.764$, $p > .05$; type of school, $t = .802$, $p > .05$; and length of service, $t = .913$, $p > .05$. Thus, the null hypothesis which states that there are no significant differences in the level of school heads' innovativeness as assessed by the respondents when classified according to age, sex type of school and length of service was not rejected.

The above findings indicate that respondents have the same assessment of the level of school heads' innovativeness regardless of their age, sex, type of school and length of service.

The above findings support the study of Kocarasac (2021) that innovative characteristics of the school heads do not differ in terms of gender while inconsistent with his findings that school heads differ significantly according to the type of school and seniority.

Table 8. Significant Differences in the Level of School Heads' Innovativeness as Assessed by the Respondents When Classified According to Age, Sex, Type of School and Length of Service

Variables	Mean	t-test value	p-value	Remarks
Age				
Young	4.24	-.877	.381	Not Significant
Old	4.31			
Sex				
Male	4.18	-.764	.445	Not Significant
Female	4.29			
Type of School				
Central	4.40	.802	.423	Not Significant
Non-Central	4.27			
Length of Service				
Short	4.34	.913	.362	Not Significant
Long	4.26			

p > .05, Not Significant

Differences in the Level of School Heads' Innovativeness as Assessed by the Respondents When Classified According to Highest Educational Attainment

Table 9 shows that significant differences existed in the level of school heads' innovativeness as assessed by the respondents when classified according to highest educational attainment, F = 9.325, p < .05. Results of post-hoc test revealed that the significant differences lie between bachelor's degree and master's degree with mean difference of 0.45. Thus, the null hypothesis which states that there are no significant differences in the level of school heads' innovativeness as assessed by the respondents when classified according to highest educational attainment was rejected.

The above finding indicates that respondents differ in their assessment of the level of school heads' innovativeness when their highest educational attainment is considered.

The above finding runs counter the study of Kocarasac (2021) that innovative characteristics of the school heads do not differ in terms of education level.

Table 9. Significant Differences in the Level of School Heads' Innovativeness as Assessed by the Respondents When Classified According to Highest Educational Attainment

Variables	Sum of Squares	F-value	p-value	Remarks
Between Groups	10.769	9.325	.000	Significant
Within Groups	209.026			
Total	219.795			

p < .05, Significant

Differences in the Level of School Heads' Leadership Competence When Classified According to Age, Sex, Type of School and Length of Service

As reflected in Table 10, no significant differences existed in the level of school heads' leadership competence as assessed by the respondents when classified according to age, t = -1.650, p > .05; sex, t= -.046, p > .05; type of school, t = .789, p > .05; and length of service, t= .155, p > .05. Thus, the null hypothesis which states that there are no significant differences in the level of school heads' leadership competence as assessed by the respondents when classified according to age, sex, type of school and length of service was not rejected.

The above findings indicate that respondents have the same assessment of the level of school heads' leadership competence regardless of their age, sex type of school and length of service.

The study of Estrada and Gumban (2024) supports the above findings who found no significant difference in the school heads' competence when grouped according to age and sex.

Table 10. Significant Differences in the Level of School Heads' Leadership Competence as Assessed by the Respondents When Classified According to Age, Sex, Type of School and Length of Service

Variables	Mean	t-test value	p-value	Remarks
Age				
Young	4.23	-1.650	.100	Not Significant
Old	4.37			
Sex				
Male	4.30	-.046	.963	Not Significant

Female	4.31			
Type of School				
Central	4.44	.789	.430	Not Significant
Non-Central	4.30			
Length of Service				
Short	4.32	.155	.877	Not Significant
Long	4.31			

p > .05, Not Significant

Differences in the Level of School Heads' Leadership Competence as Assessed by the Respondents When Classified According to Highest Educational Attainment

Table 11 shows that significant differences existed in the level of school heads' leadership competence as assessed by the respondents when classified according to highest educational attainment, F = 9.484, p < .05. Results of post-hoc test revealed that the significant differences lie between bachelor's degree and master's degree with mean difference of 0.50. Thus, the null hypothesis which states that there are no significant differences in the level of school heads' leadership competence as assessed by the respondents when classified according to highest educational attainment was rejected.

The above finding indicates that respondents differ in their assessment of the level of school heads' leadership competence when their highest educational attainment is considered. Respondents who are bachelor's degree holders have better assessment of their school heads' leadership competence than respondents who are master's degree holders.

The study of Estrada and Gumban (2024) is inconsistent with the above finding who found no significant difference in the school heads' competence when grouped according to highest educational attainment

Table 11. Significant Differences in the Level of School Heads' Leadership Competence as Assessed by the Respondents When Classified According to Highest Educational Attainment

Variables	Sum of Squares	F-value	p-value	Remarks
Between Groups	12.634	9.484	.000	Significant
Within Groups	241.110			
Total	253.744			

p < .05, Significant

Differences in the Level of School Heads' Productivity When Classified According to Age, Sex, Type of School and Length of Service

As reflected in Table 12, no significant differences existed in the level of school heads' productivity as assessed by the respondents when classified according to age, t = 1.815, p > .05; sex, t= -.128, p > .05; type of school, t = .199, p > .05; and length of service, t = -.213, p > .05. Thus, the null hypothesis which states that there are no significant differences in the level of school heads' productivity as assessed by the respondents when classified according to age, sex, type of school and length of service was not rejected.

The above findings indicate that respondents have similar assessment of the level of school heads' productivity regardless of their age, sex, type of school and length of service is considered.

The study of Estrada and Gumban (2024) affirms the above findings who found no significant difference in the school heads' productivity when grouped according to age and sex.

Table 12. Significant Differences in the Level of School Heads' Productivity as Assessed by the Respondents When Classified According to Age, Sex, Type of School and Length of Service

Variables	Mean	t-test value	p-value	Remarks
Age				
Young	4.32	1.815	.070	Not Significant
Old	4.47			
Sex				
Male	4.39	-.128	.898	Not Significant
Female	4.41			
Type of School				
Central	4.44	.199	.842	Not Significant
Non-Central	4.40			

Length of Service				
Short	4.39	-.213	.832	Not Significant
Long	4.41			

p > .05, Not Significant

Differences in the Level of School Heads' Productivity as Assessed by the Respondents When Classified According to Highest Educational Attainment

Table 13 shows that significant differences existed in the level of school heads' productivity as assessed by the respondents when classified according to highest educational attainment, F = 9.916, p < .05. Results of post-hoc test revealed that the significant differences lie between bachelor's degree and master's degree with mean difference of .49. Thus, the null hypothesis which states that there are no significant differences in the level of school heads' productivity as assessed by the respondents when classified according to highest educational attainment was rejected.

The above finding indicates that respondents differ in their assessment of the level of school heads' productivity when their highest educational attainment is considered.

The study of Estrada and Gumban (2024) runs counter with the above finding who found no significant difference in the school heads' productivity when grouped according to highest educational attainment.

Table 13. Significant Differences in the Level of School Heads' Productivity as Assessed by the Respondents When Classified According to Highest Educational Attainment

Variables	Sum of Squares	F-value	p-value	Remarks
Between Groups	12.155	9.916	.000	Significant
Within Groups	221.870			
Total	234.025			

p < .05, Significant

Relationships Among School Heads' Innovativeness, Leadership Competence and Productivity

This study finally aimed to determine the significant relationships among school heads' innovativeness, leadership competence and productivity using Pearson's r correlation.

Results of Pearson r correlation show that significant relationship existed between school heads' innovativeness and productivity (r=.946, p < .05), school heads' innovativeness and leadership competence (r=.951, p < .05) and school heads' leadership competence and productivity (r=.978, p < .05). Thus, the null hypothesis which states that there are no significant relationships among school heads' innovativeness, leadership competence and productivity was rejected.

These findings indicate that productivity of school heads is dependent on their innovativeness and leadership competence. In short, the more innovative and competent in leading the school heads are, the more they become productive.

The findings of Hernandez et al. (2023) affirms the above finding who revealed that school heads' innovativeness was found positively related to their productivity.

Likewise, the present finding is supported by the study of Estrada and Gumban (2024) that there was a significant relationship between the school heads' leadership competence and productivity.

Table 14 presents the data.

Table 14. Significant Relationships Among School Heads' Innovativeness, Leadership Competence and Productivity

		Innovativeness	Leadership Competence	Productivity	Remarks
Innovativeness	Pearson Correlation	1	.951**	.946**	
	p-level		.000	.000	Significant
	N	365	365	365	
Leadership Competence	Pearson Correlation	.951**	1	.978**	
	p-level	.000		.000	Significant
	N	365	365	365	
Productivity	Pearson Correlation	.946**	.978**	1	
	p-level	.000	.000		Significant
	N	365	365	365	

p < .05, Significant

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the study, the conclusions drawn, and recommendations made.

Summary

This study aimed to determine the school heads' innovativeness, leadership competence and productivity among elementary schools in the School Division of Antique, Philippines for School Year 2023-2024.

This study was conducted in April to May, 2024. The respondents of the study were 365 randomly selected teachers of public elementary schools in the Schools Division of Antique. The Slovin's formula was employed to determine the sample size. Stratified proportionate random sampling was used by the researcher to draw the samples to participate in this study.

The descriptive-correlational research design was used by the researcher in this study. The dependent variables were school heads' innovativeness, leadership competence and productivity while the independent variables were age, sex, highest educational attainment, type of school and length of service.

The research instrument used in this study was a questionnaire on school heads' innovativeness adopted from Sarafidou, and Zafakos (2020), leadership competence adopted from Kadri et al. (2022) and productivity adopted from Ahmed and Patricia (2022) and validated by jury of experts.

Frequency, percentage, and mean were used as descriptive statistical tools while t- test, ANOVA, and Pearson's r as inferential statistical tools. Level of significance was set at .05 at two-tailed test.

All statistical computations were processed through the Statistical Package for the Social Sciences (SPSS) software.

Specifically, this study sought answers to the following questions:

1. What is the level of school heads' innovativeness as assessed by the respondents when taken as a whole and when classified according to age, sex, highest educational attainment, type of school, and length of service?
2. What is the level of school heads' leadership competence as assessed by the respondents when taken as a whole and when classified according to age, sex, highest educational attainment, type of school, and length of service?
3. What is the level of school heads' productivity as assessed by the respondents when taken as a whole and when classified according to age, sex, highest educational attainment, type of school, and length of service?
4. Are there significant differences in the level of school heads' innovativeness as assessed by the respondents when classified according to age, sex, highest educational attainment, type of school, and length of service?
5. Are there significant differences in the level of school heads' leadership competence as assessed by the respondents when classified according to age, sex, highest educational attainment, type of school, and length of service?
6. Are there significant differences in the level of school heads' productivity as assessed by the respondents when classified according to age, sex, highest educational attainment, type of school, and length of service?
7. Are there significant relationships among school heads' innovativeness, leadership competence and productivity?

Findings of the Study

1. The level of school heads' innovativeness was "Very High" as assessed by the respondents when taken as a whole and when classified according to age, sex, highest educational attainment, type of school, and length of service.
2. The level of school heads' leadership competence was "Very High" as assessed by the respondents when taken as a whole and when classified according to age, sex, highest educational attainment, type of school, and length of service.
3. The level of school heads' productivity was "Very High" as assessed by the respondents when taken as a whole and when classified according to age, sex, highest educational attainment, type of school, and length of service.
4. No significant differences existed in the level of school heads' innovativeness as assessed by the respondents when classified according to age, sex, type of school, and length of service while significant differences existed when classified according to highest educational attainment.
5. No significant differences existed in the level of school heads' leadership competence as assessed by the respondents when classified according to age, sex, type of school, and length of service while significant differences existed when classified according to highest educational attainment.
6. No significant differences existed in the level of school heads' productivity as assessed by the respondents when classified according to age, sex, type of school, and length of service while significant differences existed when classified according to highest educational attainment.

7. Significant relationships were found among school heads' innovativeness, leadership competence and productivity.

Conclusions

Based on the foregoing findings, these conclusions were drawn by the researcher:

1. The school heads have the ability to be creative, have new ideas and discover new ways of doing things. This is indicated by their approval for the implementation of various programs and projects of the school, looks for effective ways in performing their duties and responsibilities and mobilizes support for the implementation of MATATAG curriculum.
2. The school heads have the ability in leading their school towards successful attainment of educational goals.
3. The respondents believe that school heads are very efficient in performing their administrative tasks.
4. The respondents have similar assessment of the level of school heads' innovativeness regardless of their age, sex, type of school and length of service while they differ in their assessment when their highest educational attainment is considered.
5. Age, sex, type of school and length of service are factors that makes the assessment of the respondents on the level of school heads' leadership competence similar while their highest educational attainment makes their assessment vary or differ.
6. The respondents have similar assessment of the level of school heads' productivity regardless of their age, sex, type of school and length of service while they differ in their assessment when their highest educational attainment is considered.
7. The productivity of school heads is dependent on their innovativeness and leadership competence. The more innovative and competent the school heads in leading their schools, the higher their productivity.

Recommendations

Based on the findings and conclusions, the researcher recommends the following:

1. The higher officials of the Department of Education must continuously provide support to school heads in enhancing their innovativeness and leadership competence through implementation of various career development programs.
2. School heads must maintain their present level of innovativeness and leadership competence to better serve their stakeholders.
3. Schools heads must remain productive to provide better educational outcomes to their learners, teachers and the entire school community.
4. Schools heads must also encourage their teachers to become innovative in their teaching to contribute in the successful attainment of educational goals.
5. The teachers must strive to become productive to provide quality education to their learners.
6. Other stakeholders of the school must also help school heads in enhancing their innovativeness and leadership competence to ensure smooth operation of the school for the benefit of learners and school in general.
7. Researchers in other school divisions and regions may replicate the present study to validate the present findings.

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