#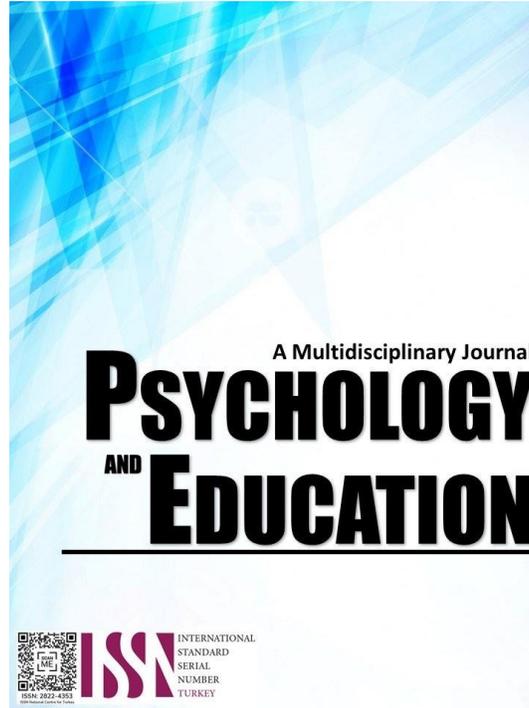 THE MEDIATING EFFECT OF PROFESSIONAL DEVELOPMENT ON THE RELATIONSHIP OF EPISTEMOLOGICAL BELIEFS AND WORK MOTIVATION AMONG PUBLIC ELEMENTARY SCHOOL TEACHERS

The Mediating Effect of Professional Development on the Relationship of Epistemological Beliefs and Work Motivation among Public Elementary School Teachers

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Abstract

This study aimed to determine the mediating effect of professional development on the relationship between epistemological beliefs and work motivation among public school teachers. Using quantitative non-experimental design via correlation technique, data were obtained from 206 elementary public school teachers from three districts: Polomolok 1, Polomolok 4, and Polomolok 5, under the Division of South Cotabato in the province of South Cotabato. The researcher utilized a stratified random sampling technique and an online survey mode of data collection. He used statistical tools such as mean, Pearson r, and path analysis. The study results found that there was a very high mean score for epistemological beliefs, a very high mean score for work motivation, and a very high mean score for professional development. Also, results revealed significant relationships between epistemological beliefs and work motivation, between epistemological beliefs and professional development, and between professional development and work motivation. Further, it showed a partial mediation effect of professional development on the relationship between epistemological beliefs and the work motivation of public elementary school teachers. Furthermore, designing professional development programs that focus on pedagogical skills and address teachers' epistemological beliefs are essential; moreover, this approach can lead to increased motivation.

Keywords: *educational management, professional development, epistemological beliefs, work motivation, mediating effect, Philippines*

Introduction

Work motivation is essential in determining teacher performance, happiness, and organizational success. In today's dynamic and competitive world, understanding the underlying issues associated with work motivation is critical for firms looking to increase productivity. Factors, including intrinsic and extrinsic motivators, workplace culture, and individual variances, can strongly influence employee motivation levels. Aside from teacher motivation, the work environment also influences teacher performance. Evidence suggests that highly motivated instructors are more committed to their students and professional development (Abós et al., 2019; Eirín-Nemiña et al., 2022; Richards et al., 2019).

In addition, comprehending the motivational factors of educators is essential for cultivating a constructive educational atmosphere. Intrinsic and extrinsic factors substantially impact instructors' job happiness and effectiveness, subsequently influencing student outcomes. A study indicated that intrinsic motivation cultivates a sense of autonomy and competence, augmenting instructors' commitment to their positions. This inherent motivation frequently results in novel pedagogical methods that enhance student learning outcomes. Furthermore, research highlighted that external variables can affect teachers' choices to continue or depart from the field (Keller, 2021; Smith & Lee, 2022).

A study indicated that teachers with advanced epistemological views, such as regarding knowledge as dynamic and created, have higher levels of intrinsic motivation. This intrinsic motivation, in turn, improves their teamwork and commitment to personal and professional development. Teachers with more simplistic epistemological assumptions, such as viewing knowledge as fixed, tend to be less motivated. This perspective might cause resistance to learning chances, resulting in a cycle of disengagement and low job satisfaction. Furthermore, the connection between epistemological beliefs and work motivation implies that developing a development mindset inside firms can dramatically boost employee motivation and performance outcomes (Chen & Wang, 2023; Chiu et al., 2020; Li et al., 2024; Ranjbar & Rezazadeh 2021).

In addition, recent research has highlighted the negative cycle that can occur when teachers maintain inflexible epistemological ideas, which results in a reluctance to embrace new learning opportunities. Given that these beliefs can impede professional progress, cultivating a more nuanced perspective of knowledge can allow more extraordinary professional advancement. The association between epistemological beliefs and professional development is evident, implying that activities focused on changing educators' epistemological viewpoints may be vital for effective professional development (Garcia et al., 2023b; Lee & Thompson, 2024b; Tana & Zhou, 2021).

Moreover, research indicates that teachers engaged in ongoing learning opportunities are more prone to exhibit elevated levels of intrinsic motivation. The results indicate that when educators perceive themselves as proficient and skilled due to their training, they are likelier to establish high goals and strive for greatness in their profession. Moreover, effective professional development enhances job performance while positively impacting teachers' job satisfaction and general motivation. Furthermore, institutions prioritizing professional development communicate to their educators that they are esteemed, resulting in heightened organizational commitment and motivation. Work motivation might be improved with professional development opportunities since educators may perceive their

Taladro & Bantulo

roles as stagnant. Consequently, firms must acknowledge the significance of offering professional development opportunities to improve employee motivation and overall organizational efficacy (Harris & Stone, 2023; Johnson & Lee, 2024; Lee et al., 2023; Turner & Miller, 2022).

Although current studies have explored the connection between epistemological views and work motivation among educators, more research is needed to investigate how professional development mediates this link within the setting of public elementary school teachers. Much of the literature concentrates on epistemological views or work motivation separately, neglecting the possible impact of professional development programs. The Philippines' Department of Education (DepEd) has consistently endeavored to enhance teacher development. To enhance professional standards and facilitate ongoing professional development within the nation. Moreover, the precise mechanisms by which professional advancement may augment or modify the influence of epistemological beliefs on work motivation still need to be investigated (Bacani & Briones, 2020; Hornstra et al., 2023).

Considering the above information, the researcher was interested in determining whether professional development would mediate the relationship between epistemological beliefs and teachers' work motivation. Given these factors, conducting this study was timely and critical for driving meaningful change in public elementary education. Immediate exploration of this topic was necessary to equip educators with the tools they need to thrive in their profession and to ensure that students receive the quality education they deserve. As a result, this study has the potential to generate new knowledge that could significantly contribute to the field of education.

Literature Review

This section includes a variety of techniques, points of view, theories, research and published findings, and significant insights from various authors on the study's related issues. Moreover, this section contains substantial evidence to support the research aims, which the study must be understood. The independent variable is epistemological beliefs by Hofer and Pintrich (1997), which include indicators such as the nature of knowing and the nature of knowledge. The dependent variable is work motivation (Herzberg, 1959), with extrinsic and intrinsic motivation indicators. The mediating variable is professional development (Desimone, 2009), with collective participation, coherence, and active learning indicators.

Epistemological Beliefs

Epistemological beliefs are what people believe about the nature of knowledge and the learning process, and which substantially impact their educational experiences and knowledge acquisition methodologies. These beliefs can be classified into three dimensions: certainty of knowledge, simplicity of knowledge, and source of knowledge. Research has shown that people with advanced epistemological views are more likely to participate in critical thinking and deep learning procedures because they see information as complicated and developing rather than static (Buehl & Alexander, 2020; Schommer-Aikins, 2019).

Moreover, research demonstrates that educators with sophisticated epistemological ideas enhance higher-order thinking in their pupils, fostering an environment that encourages inquiry and collaboration. In recent years, there has been a growing acknowledgment of the influence of epistemological ideas on both learning processes and the professional growth of educators. Furthermore, an investigation revealed that educators with progressive ideas about knowledge were more predisposed to participate in ongoing professional development, therefore improving their pedagogical methods and student performance. These findings underscore the need to comprehend and cultivate positive epistemic ideas to enhance educational quality and efficacy (Garcia et al., 2023a; Lee & Thompson, 2024a; Tana & Zhou, 2021).

In addition, a study examining the correlation between science teachers' pedagogical content knowledge of argumentation, epistemological beliefs, and classroom practices reveals that these teachers undergo favorable transformations in their pedagogical content knowledge of argumentation. A teacher possessing evaluative epistemological beliefs demonstrates superior pedagogical content knowledge of argumentation, evident in her teaching practices that conform to the standards of the Acquisition Driven Instruction Mode (De Sá Ibrahim, 2022; Sengul & Schwartz, 2020; Zembal-Saul, 2019).

Nature of Learning. It mirrors individuals' conceptions of the acquisition and construction of knowledge. Individuals who view learning as a dynamic, collaborative endeavor are likelier to engage deeply with knowledge and demonstrate adaptive learning processes, typically marked by critical thinking and reflection. Conversely, persons who perceive learning as just fact acquisition may depend on rote memory and superficial study, leading to a more superficial comprehension (Derting & McGowan, 2021; Jonassen, 2020).

Nature of Knowing. It is an essential component of epistemological beliefs since it includes people's perspectives on certainty, complexity, and the source of knowing. Those who see knowing as a fixed, absolute entity frequently have a simplified understanding of knowledge, which can impede critical thinking and adaptive learning. Individuals who regard knowledge as a complicated, developing construct tend to engage more fully with content, recognizing that understanding is impacted by context and perspective (Gao, 2019; Hofer & Pintrich, 2020).

Consequently, a group decided to concentrate on Perry's descriptions of the nature of knowledge, their perceived source of information, and how the Self interacts with knowledge and others. The outcome was a model via which women may progress from silence, in which no challenges were raised to an external authority, to the summit of constructed knowledge, in which knowledge and truth are

contextual. The individual perceives herself as a participant in the formation of knowledge, with her point of view being important. Received, subjective, and procedural knowledge are the levels that fall between these two extremes. These stages correlate to Perry's dualism, multiplicity, and relativism categories (Bidell, 2020; Hofer & Pintrich 1997; Winberg et al., 2019).

Work Motivation

Work motivation examines the elements that compel individuals to participate in academic and professional endeavors. It includes intrinsic and extrinsic motivators, such as personal interests, values, and external incentives. Intrinsic motivation, characterized by participation in an activity for its inherent gratification, has been demonstrated to promote creativity, perseverance, and improved learning results. In contrast, extrinsic motivation encompasses concrete incentives such as grades, acknowledgment, or professional progression, which might be successful yet may not foster enduring commitment (Deci & Ryan, 2020; Vansteenkiste et al., 2020).

Research suggests that a harmonious combination of both motivation types is crucial for good academic involvement. Teachers who recognize intrinsic and extrinsic motivators are more inclined to exhibit superior academic performance and happiness. Formulating successful motivational techniques, including goal setting and autonomy support, has been associated with enhanced academic outcomes. Thus, comprehending the dynamics of work motivation is essential for educators and institutions seeking to improve student engagement, encourage lifelong learning, and cultivate a pleasant academic atmosphere (Clem et al., 2021; Miller et al., 2024; Schunk et al., 2023).

Extrinsic motivation. According to the two-factor theory, hygiene factors are extrinsic motives such as supervision, relationships with supervisors, work circumstances, and interpersonal relationships. One of the studies highlighted the need for firms to pay attention to employee abilities, payback, punishments for discipline infractions, and tighter supervision in order to increase or enhance employee performance. Work discipline plays an essential role in increasing employee performance. Good work discipline from employees, such as appearing on time, carrying out work according to what has been set by the company, and observing company regulations, increased the performance of these employees such that company targets were met (Hizam et al., 2022; Marlapa & Mulyana, 2020; Sitopu, 2021).

Supervision. According to one study, supervision aims to help teachers and supervisors better serve parents and schools by familiarizing them with day-to-day school operations and developing a learning community. It has improved academic performance. The study asserted that supervision was a coaching exercise designed to help teachers and other school staff members do their jobs (Altun & Sarkaya, 2020; Bachkirova et al., 2020; Sergiovanni & Starrat, 2019).

In addition, a study highlights the interrelation of work ethics, time management, and professionalism in influencing teachers' professional development. By prioritizing time management in professional development programs, educational institutions can improve teachers' efficacy and foster a culture of professionalism that ultimately benefits educators and students. This research underscores the necessity of providing instructors with the skills to fulfill their obligations proficiently, enhancing the educational environment (Ricaplaza & Quines, 2022).

Working Conditions. The educational environment underscores the significance of school working conditions, which are crucial for teacher motivation, effectiveness, and job satisfaction and for enhancing student learning possibilities. It identified several essential variables that guarantee the quality of instructors' performance: sufficient resources, a manageable workload, collaborative cooperation, prospects for professional advancement, leadership endorsement, and decision-making chances (Ansley, 2019; Topchyan & Woehler, 2021; Toropova et al., 2021).

Also, a school is described as a social structure designed to fulfill social and individual requirements. The organization necessitates proficient members for its survival and growth. In this environment, the organizational leader played a crucial role in ensuring the efficiency of organizational members. One of the critical roles of organizational leaders is to enhance the work performance of their human resources and interpersonal relationships (Ibrahim et al., 2020; Ingsih et al., 2021; Mukhtar et al., 2020).

Interpersonal Relationship. Positive interpersonal relationships contribute significantly to teachers' motivation by fostering a sense of belonging, collaboration, and mutual support. The results show that teachers who experience solid collegial relationships are more likely to engage in cooperative practices and share resources, enhancing their professional efficacy and job satisfaction (Gonzalez et al., 2021; Miller & Brown, 2022).

Additionally, supportive relationships with students can enhance teachers' intrinsic motivation, as positive interactions foster a heightened feeling of purpose and commitment to their profession. Moreover, research has underscored the significance of professional development initiatives to augment teachers' interpersonal abilities, enhancing workplace morale and motivation. Fostering robust interpersonal interactions within the educational environment is essential for augmenting teachers' work motivation and, consequently, their dedication to student learning and professional development (Reddy et al., 2023; Smith et al., 2024).

Furthermore, a study highlights the essential function of collaboration in influencing work motivation and job satisfaction among educators. By cultivating a collaborative culture, educational institutions can improve teachers' work attitudes and overall job satisfaction, ultimately benefiting educators and students. This research underscores schools' need to allocate resources towards team-building initiatives within their professional development frameworks. Collaborative efforts among educators build a sense of community and support, thereby improving individual work attitudes. Educators who collaborate and share duties attain an enhanced

sense of belonging and collective purpose (Quines & Nino, 2023).

Intrinsic motivation. Herzberg's Motivation Theory refers to achievement, recognition, work, responsibility, and advancement. The study on the Motivation of Mathematics Teachers revealed that intrinsic motivational factors significantly impact the execution of ongoing professional development. Intrinsic motivation is essential for sustained effort in the workplace. When genuinely motivated, individuals perceive job tasks as an end in themselves, resulting in a convergence of the activity and its objective. The outcome was heightened interest and enjoyment in work tasks (Fishbach & Woolley, 2022; Van den Broeck et al., 2021).

Recognition. It is a motivating factor for teachers, providing a satisfying experience for exceptional educators and their students. Teacher recognition is grounded in established extrinsic and intrinsic motivational theories. It provides optimism for significant acknowledgment to the other educators striving to enhance student-learning results (Andrews, 2020; Hite & Milbourne, 2022; Ravago & Mapa, 2020).

In addition, peer and supervisor recognition cultivates a supportive environment that promotes collaboration and shared objectives, ultimately boosting overall job satisfaction. Conversely, insufficient recognition may result in emotions of undervaluation and exhaustion, adversely impacting teachers' motivation and efficacy. Consequently, establishing a culture of appreciation inside educational institutions is vital for maintaining instructors' intrinsic motivation and cultivating a positive learning atmosphere (Dyer & DeAngelis, 2024; Lee et al., 2024).

Work it Self. Another factor contributing to intrinsic motivation is the work itself, which empowers teachers to enhance their motivation by the nature of their tasks. The principals were advised to implement the instructional leadership strategy. By facilitating teacher collaboration, fostering collective leadership, and articulating a shared vision, administrators can enhance the development of a good and active school culture while acknowledging teachers' competencies and individuality (Liu et al., 2021; Zahed-Babelan et al., 2019).

Moreover, a study suggested that enhancing employee performance, as indicated by increased work motivation, necessitates fostering a sense of affiliation and support, bolstering competence through skill enhancement, and refining the career development system to provide opportunities for education and training (Hajiali et al., 2022; Nuriman, 2021; Parashakti et al., 2020)

Responsibility. Committed teachers feel obligated to their school and exert much effort for the institution's benefit. All of these components assist students' success in school by aiding them in attaining their objectives. It asserted that transformational leadership has a substantial positive correlation with both follower creativity and organizational innovation. A substantial positive correlation was identified between followers' creativity and organizational innovation (Harbi et al., 2019; Lin et al., 2020; Nguyen et al., 2022; Saeed et al., 2019)

Advancement. It serves as a crucial intrinsic incentive for teachers, directly influencing their professional development, fulfillment, and general involvement in their pedagogical activities. Opportunities for advancement enable instructors to augment their skills and knowledge while fostering a sense of purpose and fulfillment in their work. It suggests that when educators recognize a distinct trajectory for career advancement, they are more inclined to commit to their professional growth and feel inspired to adopt innovative teaching methodologies (Hernandez et al., 2022; Smith & Adams, 2021)

Moreover, career progression within educational institutions via promotions, leadership positions, or specialized training enables educators to embrace new challenges and responsibilities, cultivating a sense of accomplishment and proficiency. Furthermore, possibilities for promotion can enhance job satisfaction, enabling educators to harmonize their personal and professional goals, thereby augmenting their contributions to the learning environment. A deficiency in growth possibilities may result in stagnation and demotivation, negatively impacting teachers' efficacy and dedication to their positions (Davis & Wong, 2024; Khan et al., 2023; Nguyen & Miller, 2023).

Professional Development

Professional development is essential for teachers' growth; moreover, many educators need beneficial training for their advancement. Research indicated that good professional development fosters active learning, encourages collaboration, is sustained over time, aligns with teachers' contexts and curricula, and is cohesive with the school framework. The theoretical framework of constructivism was employed, emphasizing the learning theories of Dewey and Vygotsky. A problem-based learning approach to teacher education integrates the attributes of effective, research-informed professional development. The researcher employed a multi-case study design to investigate how Problem-based Learning as a pedagogical strategy might enhance effective professional development in elementary education. This study examined the relationship between teachers' epistemologies and their understanding of a Problem-based Learning professional development strategy (Jacobsen, 2019; Sheridan, 2023; Tighe, 2020).

At the same time, an increasing body of robust research demonstrates that well-structured professional development, when executed correctly, can result in beneficial modifications in teaching practices and student performance. These studies expand upon a substantial corpus of research that has documented favorable results from professional learning using teacher and student self-reports or observational methodologies. As states and districts endeavor to establish new frameworks and methods, It is beneficial to assess the findings of this research regarding the types of professional development that enhance instruction and student performance (Padillo et al., 2021; Pharis et al., 2019; Smith & Gillespie, 2023).

Taladro & Bantulo

Conclusively, the three core features of professional development were collective participation, coherence, and active learning. This paradigm was underpinned by empirical research and has been utilized in numerous professional development studies to analyze specific characteristics of effective professional growth. Collective participation, coherence, and active learning were identified as significant factors contributing to effective professional development practices in a study; however, the research was limited in scope and confined to educators in a specific career stage (Desimon, 2009; Willems & Van den Bossche, 2019).

A study supports coherence, active learning, and group engagement, highlighting the necessity for further research on the links outlined in the framework to enhance the design and implementation of future professional development opportunities. A study was conducted to investigate the elements of professional development and its impact on students' reading achievement, revealing that coherence was significant in professional development; however, the quality of the experience appeared to be more crucial than duration, active participation, or collective participation. The identified needs created the gap addressed in the present study (Desimone, 2009; Jonassen, 2020).

Collective participation. This transpires when cohorts of educators from identical grades, subjects, or institutions engage in collaborative professional development endeavors to foster a unified learning community. Research indicated that professional development was achieved through collaborative and cooperative practices among educators. The significance of teachers' involvement in the planning and start of their professional development (Admiraal et al., 2021; Hauge, 2019; Hennessy et al., 2022).

Coherence. It comprised two parts: aligning new teacher learning in professional development with their knowledge and beliefs. Another coherence issue was the applicability of school, district, or state changes and policies to professional development. Professional development should match teachers' previous professional development, learning beliefs, and school, district, and state mandates. A systematic review examined coherence. The study and synthesis indicate that professional development coherence is viewed differently, calling the consensus into doubt. Professional development should be coherent with external factors like standards and assessments, internally coherent like aligning activities within programs, and finally, coherent between predetermined or negotiated goals with teachers (Huang et al., 2022; Lindvall & Ryve, 2019).

Active learning. Aside from the above-listed, active learning denotes that all learners require opportunities for cognitive engagement in the learning process. Active learning refers to any instructional approach that involves the participant in the educational process. These strategies encompassed opportunities for substantive engaging in instructional endeavors and contemplating the educational process. Active learning encompasses group discussions, role-playing, problem-solving, analysis of student work, presentations, modeling by peers, and viewing and discussing classroom movies. A study demonstrated that active learning in professional development enhances participants' performance and retention rates. In engineering, educators obtain and refine various technical competencies under supervision (Arruda & Silva, 2021; Hernández-de-Menéndez, 2019).

Even more so, professional development and career advancement are crucial components of a fulfilling experience as a working professional. Student affairs professionals have several training and development techniques at their disposal. The field was progressing despite confronting the identical financial constraints encountered by all educational areas. This quantitative study examined the relationship between professional development and career advancement among student affairs practitioners in Louisiana, providing valuable insights into outcomes that may enhance job satisfaction, retention, and engagement in professional learning. Research revealed dominant themes concerning professional development and active learning for educators, offering insights on enhancing career advancement and improving professional learning (Nicholas, 2021; Shelton & Yao, 2019).

Methodology

The overall number of respondents for this research study were 206 teachers in the three District of Polomolok, Division of South Cotabato. This research study was carried out at public elementary schools of Polomolok 1, 4 and 5 Districts with 17 identified schools. To ensure that every respondent had an equal opportunity to be a part of the study, stratified random sampling was employed. Stratified random sampling was employed in the study such that all public elementary school teachers under the 17 identified schools had a chance to be selected and considered for inclusion in the final sample. Moreover, the idea was that the groupings were made so that the population units within the groups are similar. Specifically, with a total population of 425 teachers for the three districts the sample size was taken using the Slovin's formula ($n = N / (1+Ne^2)$). In this case the public elementary school teachers in three districts with 17 identified schools only were the groups to become respondents. In particular, included in this study as the respondents were the regular public elementary school teachers of the 17 identified schools within the three districts who were currently employed and whose plantilla numbers are in the Department of Education, as they are the ones who are in the position to provide useful information upon testing the hypothesis of the study.

The respondents were chosen accordingly to answer the questionnaire with confidentiality. Only permanent public elementary school teachers from the district were randomly chosen to participate in the survey. As a result, as mentioned in the study's exclusion criteria, substitute teachers, volunteer teachers, and school staff were excluded from the study. Thus, as stated in the withdrawal criteria in this study, the researcher considered teachers who, throughout the actual administration of the survey questionnaires, decided to withdraw or back out. Those who want to remove it will not be penalized.

Taladro & Bantulo

This study employed a non-experimental design utilizing the descriptive correlation technique to measure the association between epistemological beliefs and work motivation. In this study, the correlation method is the best strategy to achieve this study's goals and find out whether the hypothesis is accepted. If the significance value is more significant than .05, H0 is born, and Ha is accepted. The hypothesis testing determines if the correlations can be strong or weak (Creswell, 2012).

In addition, a common occurrence when using descriptive data is the emergence of certain patterns that makes it easy for researchers to understand and make sense of data. The statistical data can either be used for further research studies or as independent entity that can be used to make conclusions. Certain research situations involve use of only descriptive statistics because of large sample sizes and complexity of data. A study that involves the computation of mean, median and mode would require descriptive statistics (Fowler, 2013 & Yin, 2009).

Moreover, it is a survey that allows the researcher to investigate the traits, habits, and experiences of the people who participated in the study. This study is more descriptive than anything else since it assessed the levels of epistemological belief, work motivation, and professional development of teachers. This correlational study explored the relationship between qualities such as epistemological beliefs and work motivation and professional development. The survey questionnaire was used to acquire the primary data for this study. Investigating the connection between these two things is the primary goal of the study of epistemological beliefs and work motivation; the relationship between epistemological beliefs and professional development; the relationship between professional development and work motivation; and the mediating effect of professional development on the relationship between epistemological beliefs and work motivations of teachers. Path analysis will play a role in deciding how the mediation will go (Calmorin, 2007).

Furthermore, a systematic process was used to collect all of the pertinent information. Firstly, it sought the approval of the Evaluation Review Committee (ERC), a critical step that involved establishing the committee's role in overseeing and validating instruments. Once the ERC was secured, the next step involved drafting a formal letter to the Dean of the Graduate School. It sought the Dean's endorsement and guidance, facilitating institutional support for the study. Following the approval from the Dean, a letter was sent to the Schools Division Superintendent. This communication was essential for securing permission to conduct the study within the Division of South Cotabato. After receiving the superintendent's authorization, a letter was sent to the School Head of each participating school. This letter informed the School Head about the study and clarified their role in facilitating data collection. Following approval, survey questions were distributed to the public elementary school teachers in Polomolok 1, 4, and 5 District. The researcher created questionnaires using Google Forms.

Then, the researcher gathered the questionnaires one week after distributing the link to the Google forms to give the respondents enough time to answer the questions. The questionnaires distributed using Google Forms were successfully recovered in a manner equal to one hundred percent of the total. Automatic checks and tallies were performed on the results of the completed work. In the end, following the completion of the automatic tallying of all the results, these were examined and interpreted in light of the study's goals.

The statistical tests used to interpret and analyze the data more comprehensively were as follows: Mean was applied to establish the common epistemological beliefs, work motivation level, and professional development status in answer to research objectives 1, 2, and 3. Pearson r was carried out to ascertain whether there is a genuinely substantial connection between the epistemological beliefs and work motivation among teachers in answer to research objective 4. Path Analysis was carried out to prove the mediating effect of professional development on the relationship between epistemological beliefs and work motivation of public-school teachers to strengthen the obtained result in answer to research objective 5.

In the conduct of this study especially before the data was gathered, ethical issues and considerations will be dealt. The researcher followed the study protocol assessments and the standardized criteria set by the Ethics Research Committee of the Ramon Magsaysay Memorial School of General Santos City to conduct the study ethically. The respondents' involvement in the study was entirely voluntary, anonymous to safeguard their privacy, and information was provided wherever necessary before they made a decision to proceed or not. As a researcher, you are responsible for ensuring that all information obtained is kept private and used exclusively for research purposes. Every respondent who took part in the study gave their informed consent.

In conclusion, adhering to ethical norms was essential to safeguarding the rights, dignity, and well-being of individuals who participated in the research. An ethics committee had examined all research projects involving human subjects to ensure that relevant ethical standards were followed.

Results and Discussion

This part presents the analyzed and interpreted data acquired from the respondents on epistemological beliefs, work motivation, and professional development. The analysis and interpretation are based on the research objectives.

The common epistemological beliefs of teachers were analyzed based on the obtained and computed mean ratings of the following indicators: Nature of knowing and Nature of knowledge of teachers. It can be gleaned from Table 1 that the common epistemological beliefs in terms of the Nature of knowing, teachers strongly agreed that they accept information from textbooks and experts without critical evaluation, with a mean score of 4.31. This indicates a reliance on authority that may inhibit independent thinking. This parallels a study by Mollee and Van (2022), who showed that the form of knowledge influences perceptions about knowledge, which in turn

predicts educational practices.

Table 1. *Common Epistemological Beliefs*

Indicators	Mean	Description
Nature of Knowing	4.31	Strongly Agree
Nature of Knowledge	3.99	Agree
Overall	4.15	Agree

Culturally relevant education enhances student support by utilizing their cultures through three principles: academic achievement, cultural proficiency, and sociopolitical awareness. Also, the statistics showed common epistemological beliefs regarding the Nature of knowledge; teachers agreed that they are open to re-evaluating knowledge deemed absolute when confronted with new contexts, with a mean score of 3.99. This flexibility in thinking is essential for critical engagement and adaptation. This aligns with Hofer and Pintrich (1997), who stated that the perceived source of knowledge and how the self relates to knowledge and others. This is about the study of Nehls et al. (2020), which states that knowledge and belief have not consistently been formed independently. The results indicated that teachers' beliefs and instructional quality varied greatly regarding their epistemological perspectives and teaching and learning philosophies. Furthermore, the common epistemological beliefs garnered a total mean score of 4.15, which implies that teachers agreed with a predominantly positive attitude toward critical engagement with knowledge. However, there were also significant tendencies towards uncritical acceptance of expert opinion. At the same time, there is an appreciation for the construction of knowledge through personal experience and critical evaluation.

Table 2. *Level of Work Motivation*

Indicators	Mean	Descriptive Level
Extrinsic Motivation		
Supervision	4.37	Strongly Agree
Working Condition	4.34	Strongly Agree
Interpersonal Relationship	4.35	Strongly Agree
	4.35	Strongly Agree
Intrinsic Motivation		
Achievement	4.36	Strongly Agree
Recognition	4.22	Strongly Agree
Work Itself	4.21	Strongly Agree
Responsibility	4.26	Strongly Agree
Advancement	4.36	Strongly Agree
	4.28	Strongly Agree
Overall	4.32	Strongly Agree

The data presented in Table 2 offers a comprehensive view of the work motivation levels of Polomolok district public school teachers, divided into extrinsic and intrinsic motivation factors. The following sub-indicators of extrinsic motivation are as follows: Supervision, with a mean score of 4.37, implies that teachers strongly agreed that they feel generally satisfied with how their administrators manage staff. This satisfaction likely enhances trust and motivation within the organization. This assumption is similar to the findings of Altun and Sarkaya (2020) and Bachkirova et al. (2020) and Sergiovanni and Starrat (2019), who asserted that the objective of supervision is to assist educators and supervisors in enhancing their service to parents and schools, gaining familiarity with daily school operations, and fostering a learning community. Also, regarding working conditions, teachers strongly agreed that the physical location of the workplace contributes significantly to their satisfaction, with a mean score of 4.34, indicating that a supportive and comfortable work environment is essential for motivation. This is in line with Ansley et al. (2019) and Topchyan and Woehler (2021), and Toropova et al. (2021), who reaffirmed the significance of working circumstances in educational institutions, as they are crucial not only for teacher motivation, effectiveness, and job satisfaction for enhancing student learning possibilities. In addition, regarding interpersonal relationships, teachers strongly agreed that the supportive Nature of colleagues enhances workplace morale and camaraderie, with a mean score of 4.33; this implies highlighting the significance of strong social connections at work. This assumption was similar to the findings of Ibrahim et al. (2020), Mukhtar et al. (2020), and Ingsih et al. (2021), that a school is a social institution created to meet social and individual requirements. The business needs proficient members for survival and growth. In this setting, the organizational leader plays a crucial role in ensuring the efficiency of organizational members.

On the other hand, intrinsic motivation with a mean of 4.28, points out that teachers strongly agreed that internal factors such as personal achievement, recognition, and meaningful work play a significant role in motivating employees. This finding matches up with the ideas of Babatunde et al. (2021) and Hamid and Younus (2021) that intrinsic motivations benefit individuals and businesses, aiming to enhance work motivation and improve employee performance, ultimately resulting in effective work outcomes. Further, it was observed that achievement and advancement obtained a rating each accrued a mean of 4.36, indicating that teachers strongly agreed on intrinsic rewards as crucial for motivation and highlighting the importance of growth opportunities as a motivational factor. This was in accord with the assertion of (Andrews, 2020; and Hite and Milbourne, 2022; Ravago & Mapa, 2020) that such recognition constitutes a highly gratifying experience for an exemplary classroom teacher. Teacher recognition is founded on established intrinsic motivational ideas. It provides optimism for significant acknowledgment to the other educators striving to enhance student learning outcomes.

Furthermore, the overall high mean score of 4.32 across all indicators implies that teachers strongly agreed on a robust organizational motivation framework. A high level of motivation among teachers suggests that extrinsic and intrinsic factors effectively drive employee engagement and satisfaction. The close alignment between the means for extrinsic and intrinsic motivation indicates a balanced motivational landscape where both types of motivation are valued.

Table 3. *Status of Professional Development*

Indicators	Mean	Descriptive Level
Collective Participation	4.43	Strongly Agree
Coherence	4.32	Strongly Agree
Active Learning	4.53	Strongly Agree
Overall	4.43	Strongly Agree

The data presented in Table 3 reflects the status of professional development of public-school teachers of Polomolok District, highlighting three core features: collective participation, coherence, and active learning. The overall mean score of 4.43 indicates that teachers strongly agreed on a positive perception of professional development initiatives and their influence on pedagogy competence and confidence. Notably, the following indicators are: collective participation, with a mean score of 4.43, underscores those teachers strongly agreeing that participation in professional development is crucial for improving their teaching competence. Also, the statistics showed that, in terms of coherence, teachers strongly agreed on a solid belief that applying learning from professional development can improve student outcomes, demonstrating a direct connection between educator growth and student success, with a mean score of 4.32. Lindvall and Ryve (2019) stated that the content of professional development must align with the previous professional development experiences of the teachers. Professional development must align with external factors, such as standards and assessments; furthermore, it should exhibit internal coherence, ensuring that activities within professional development programs are aligned; finally, it should establish coherence between predetermined or collaboratively negotiated goals with educators. In addition, active learning has a mean score of 4.53, indicating that teachers strongly agreed that professional development programs effectively help them improve their teaching skills. This is in accord with Nicholas' assertion (2021) that prominent themes concerning professional development and active learning for educators are observed, offering insights into how career advancement might be augmented and professional learning refined. Further, the overall positive high mean score across all indicators indicates educators' strong endorsement of professional development initiatives. Furthermore, the data revealed that collective participation, coherence, and active learning are perceived as integral to enhancing teaching competence, confidence, and student outcomes.

Table 4. *Significance of the Relationship between Epistemological Beliefs and Work Motivation*

Variables	Df	rxy value n=206		Decision	Analysis
		Computed	Tabular		
Epistemological Beliefs vs. Work Motivation	204	0.87	0.134	Reject null hypothesis	There was a significant relationship.

Table 4 presents the significant relationship between epistemological belief and work motivation. Pearson's Product Moment Correlation Coefficient was used to analyze the gathered data. The correlation between variables indicates a substantial association between epistemological belief and work motivation. This implies that epistemological belief is associated with work motivation. When the epistemological belief and work motivation level were tested, the data were analyzed at an alpha level of .05 with a degree of freedom of 204. The table indicates that the computed Pearson's Product Moment Coefficient of Correlation value was 0.87. This was more significant than the tabular value of 0.134, which led to the rejection of the null hypothesis. The level of epistemological belief significantly influenced the level of work motivation. . The findings of this study avowed the study of various authors (Girdwichai & Sriviboon, 2020; Nuriman, 2021; Sugiarti, 2022) professional development will offer opportunities for educators to enhance their abilities and knowledge, facilitating their understanding and acquisition of essential skills. The established training program will enhance teachers' skills, insights, knowledge, and work motivation, improving departmental performance. Moreover, it has been proven that the exhibition of professional reasons and objectives in personal development is contingent upon individual traits (Osodlo et al., 2020; Smith & Gillespie, 2023).

Table 5. *Significance of the Relationship between Epistemological Beliefs and Professional Development*

Variables	df	rxy value n=206		Decision	Analysis
		Computed	Tabular		
Epistemological Beliefs vs. Professional Development	204	0.89	0.134	Reject null hypothesis	There was a significant relationship.

Table 5 presents the significant relationship between epistemological belief and professional development. The collected data was analyzed using Pearson's Product Moment Correlation Coefficient. The correlation between variables indicates a substantial association between epistemological belief and professional development. It implies that the level of epistemological belief is associated with the

level of professional development. When the epistemological belief and professional progress levels were assessed, the data were examined at an alpha level of 0.05 with 204 degrees of freedom. The table indicates that the calculated Pearson's Product Moment Coefficient of Correlation value was 0.89. This was more significant than the tabular value of 0.134, which led to the rejection of the null hypothesis. The level of epistemological belief significantly influenced the level of professional development. This implies that the Nature of public school teachers' enthusiasm is linked to professional development. It agrees with the study (Guilfoyle et al., 2020; Voss, 2022) that it is commonly recognized that the professional knowledge base of instructors must incorporate and utilize experience to cultivate what may be termed practical wisdom, phronesis, or craft knowledge. An individual's ideas regarding the essence of knowledge and the process of knowing function as filters when confronted with new information. Previous research has indicated that these ideas are crucial for studying science, fostering scientific literacy, and training to become an educator.

Table 6. *Significance of the Relationship between Professional Development and Work Motivation*

Variables	Df	rxy value n=206		Decision	Analysis
		Computed	Tabular		
Professional Development vs. Work Motivation	204	0.84	0.134	Reject null hypothesis	There was a significant relationship.

Table 6 presents the significant relationship between professional development and work motivation. The collected data was analyzed using Pearson's Product Moment Correlation Coefficient. The correlation between variables indicates a substantial association between professional development and work motivation. This implies that the level of professional development is associated with motivation for work. It was found that when the level of professional development and work motivation was tested, the data were analyzed at an alpha level of .05 with a degree of freedom of 204. The table indicates that the computed Pearson's Product Moment Coefficient of Correlation value was 0.84. It was more significant than the tabular value of 0.134. As a result, the null hypothesis was rejected. The level of professional development significantly influenced the level of work motivation. The finding supports the study of (Van den Brande, 2020; Worth & Zhang, 2022), who suggested that more support from school principals and heightened pressure experienced by teachers correlates with greater motivation for ongoing professional development. Conversely, instructors' motivation for ongoing professional growth diminishes as they perceive more significant peer support and experience increased emotional strain.

Table 7. *Mediating Effect: Path Analysis (Partial Mediation)*

PATH		ESTIMATES		SE	C.R.	P
		Unstandardized	Standardized			
PD	EB	.980	.879	.025	26.200	***
PD	WM	.094	.118	.039	2.399	.020
EB	WM	.760	712	.049	14.535	***

Table 7 shows the path analysis of the mediating effect of professional development on the relationship between epistemological beliefs and work motivation. The data revealed the partial effect of professional development and epistemological beliefs, professional development and work motivation, and epistemological beliefs and work motivation. Professional development and epistemological beliefs are the paths with an unstandardized regression coefficient of .980, standardized regression coefficient of .879, S.E. of .025, and a probability value below 0.05. A significance level below 0.05 indicates a substantial association between the two variables, whereas a low standard error signifies greater precision in the estimate. The effect size or the influence of efficiency is 98%, which is large enough to reject the null hypothesis. Moreover, the path b coefficient, which is professional development and work motivation, has an unstandardized regression coefficient of .094, a standardized regression coefficient of .118 S.E. of .239, and a p-value of .020, which is smaller than the significance alpha level of 0.05. Thus, the relationship between professional development and work motivation is significant. The effect size of professional development and work motivation is 6%. Finally, the path c coefficient indicates the magnitude of the influence of epistemological beliefs and work motivation. The data result has an unstandardized regression coefficient of .760, or 76% efficiency, a standardized regression coefficient of .712, a computed standard error of .049, and a p-value smaller than 0.05. This indicates that the two variables possessed a substantial correlation. Mathematically, this supports the assumption that epistemological beliefs are associated with work motivation. The findings of this study avow the study of various authors (Ghufron et al., 2020; Ismail et al., 2019; Sheehy et al., 2019) who demonstrated in educators and contrasted the answers of those employed in inclusive, particular, and mainstream schools concerning their epistemological and pedagogical convictions. The findings indicated that educators in inclusive schools demonstrated more robust social constructivist ideas than their counterparts in other institutions. The most significant indicators of teachers' opinions toward inclusive education were their epistemological beliefs rather than their type of school or level of experience.

Conclusions

Several recommendations were made based on the findings and conclusions. Firstly, teachers need to intervene like knowledge, which

was found to be the lowest indicator of epistemological beliefs. School administrators may implement workshops that explore various epistemological frameworks, emphasizing the importance of viewing knowledge as dynamic and context-dependent. These sessions may encourage critical discussions about how beliefs about knowledge influence teaching practices and student learning. Also, to foster collaborative learning communities among teachers where they can share experiences and reflect on their beliefs about knowledge. Regular meetings can facilitate discussions about instructional practices that align with a constructivist view of knowledge.

In addition, teachers must enhance their performance driven by intrinsic motivation. Provide specialized professional development emphasizing new pedagogical methods, curriculum creation, and techniques for enhancing student involvement. Equipping educators with resources and methodologies that stimulate their enthusiasm for teaching increases the likelihood of their experiencing joy and fulfillment in their profession.

Moreover, there is another issue for teachers to overcome regarding professional development questions: " I was able to address any problems that I have experienced during professional development activities." Perform comprehensive needs assessments before professional development sessions to ascertain the specific issues educators encounter. This information could customize the training curriculum to address these difficulties directly. Additionally, devise professional development initiatives that prioritize implementing acquired strategies practically. Integrating real-world scenarios and problem-solving activities enables educators to implement new skills proficiently. Furthermore, establish systems for educators to offer feedback on professional development initiatives. Comprehending their experiences and issues might assist organizers in enhancing future sessions and more effectively addressing teachers' requirements.

Furthermore, customized professional development activities must accommodate educators' varied epistemological ideas. Programs may include varied strategies that align with educators' comprehension of knowledge and learning, thereby improving engagement and motivation. Furthermore, it promotes the incorporation of reflective methods within professional development. Workshops and training sessions may provide opportunities for educators to contemplate their ideas and experiences, enhancing their comprehension of how these elements affect their teaching motivation.

This study unequivocally identified partial mediation of professional development in the link between epistemological beliefs and work motivation, which may benefit future research exploring additional mediating variables. Moreover, the research findings in this study can serve as a reliable reference for future researchers and educational administrative systems within the Department of Education (DepEd) when devising professional development activities and programs for educators.

The study's results culminated in the subsequent conclusions. As a result of the study's data, substantial evidence was present to refute the null hypothesis in the second study objective. Moreover, the respondent public school teachers strongly manifested common epistemological beliefs and professional development. The study's outcomes also demonstrated a significant association between epistemological beliefs and work motivation in the school. Similarly, there was a favorable relationship between epistemological beliefs and professional development. Further, there was a substantial relationship between professional development and work motivation. The findings concluded that the teachers who hold strong beliefs in the importance of continuous learning and the value of knowledge are more motivated to be engaged in professional development activities and strive for excellence in their pedagogical approaches.

Furthermore, the study indicated that professional development mediates the association between epistemological beliefs and job motivation. Corollary to this, the framework for this study was supplied by transformational learning theory (TLT), which was used to investigate how instructors see the fundamental aspects of effective professional development that contribute to their own learning experiences. For transformative learning to occur, educators must reflect on what they conduct, how it operates, and why it is significant.

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Taladro & Bantulo

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