

# THE EFFECT OF TEACHING TEAM BUILDING AND DEMOGRAPHIC FACTORS ON EMPLOYEES' PERFORMANCE OF VOCATIONAL EDUCATION SCHOOLS IN HONGHE PREFECTURE, CHINA



A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MANAGEMENT IN MANAGEMENT SCIENCE
INSTITUTE OF SCIENCE INNOVATION AND CULTURE
RAJAMANGALA UNIVERSITY OF TECHNOLOGY KRUNGTHEP
ACADEMIC YEAR 2023
COPYRIGHT OF RAJAMANGALA UNIVERSITY OF
TECHNOLOGY KRUNGTHEP, THAILAND

# THE EFFECT OF TEACHING TEAM BUILDING AND DEMOGRAPHIC FACTORS ON EMPLOYEES' PERFORMANCE OF VOCATIONAL EDUCATION SCHOOLS IN HONGHE PREFECTURE, CHINA



A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MANAGEMENT IN MANAGEMENT SCIENCE
INSTITUTE OF SCIENCE INNOVATION AND CULTURE
RAJAMANGALA UNIVERSITY OF TECHNOLOGY KRUNGTHEP
ACADEMIC YEAR 2023
COPYRIGHT OF RAJAMANGALA UNIVERSITY OF
TECHNOLOGY KRUNGTHEP, THAILAND

Thesis THE EFFECT OF TEACHING TEAM BUILDING AND DEMOGRAPHIC FACTORS ON EMPLOYEES' PERFO

DEMOGRAPHIC FACTORS ON EMPLOYEES' PERFORMANCE OF VOCATIONAL EDUCATION SCHOOLS IN HONGHE PREFECTURE,

**CHINA** 

**Author** Wei XIA

Major Master of Management (Management Science)Advisor Associate Professor Dr. Vuttichat Soonthonsmai

THESIS	COM	MITTEE
--------	-----	--------

(Associate Professor Dr. Khahan Na-Nan)
(Associate Professor Dr. Vuttichat Soonthonsmai)
(Alsociate Frotessor Br. Vatteriat Booming)
(Associate Professor Dr. Daranee Pimchangthong)

Approved by the Institute of Science Innovation and Culture Rajamangala University of Technology Krungthep in Partial Fulfillment of the Requirements for the Master's Degree

(Assistant Professor Dr. Yaoping LIU)
Director of the Institute of Science Innovation and Culture
Date Month Year

**Thesis** THE EFFECT OF TEACHING TEAM BUILDING AND

DEMOGRAPHIC FACTORS ON EMPLOYEES' PERFORMANCE OF VOCATIONAL EDUCATION SCHOOLS IN HONGHE PREFECTURE,

CHINA

**Author** Wei XIA

Major Master of Management (Management Science)Advisor Associate Professor Dr. Vuttichat Soonthonsmai

Academic

**Year** 2023

#### **ABSTRACT**

In the dynamic landscape of the education industry, vocational education is experiencing unprecedented demands and challenges. At the heart of every successful educational institution lies a high-quality teaching staff, serving as a beacon of excellence and a strong representation of the institution's reputation. A well-constructed faculty attracts outstanding students and forms the bedrock for the institution's sustainable development. In the face of rapid economic advancement and fierce talent competition, constructing a competent teaching staff in vocational education schools takes on immense theoretical and practical significance. It is crucial for enhancing educational quality and nurturing exceptional students who meet the demands of the ever-evolving job market. This study explores the effect of teaching team building and demographic factors on employee performance and provides a reference for the sustainable development of vocational education schools. Data were collected through an online questionnaire and then analyzed using the SPSS program. Research finds that teaching team building (collaboration and team spirit; sharing of teaching resources; learning atmosphere and environment) and demographic factors (age, education level, work experience) affect employee performance.

Keywords: teaching team building, demographic factors, employee performance

#### **ACKNOWLEDGEMENTS**

From the bottom of my heart, I want to thank all the people who have supported and helped me complete this project. Without you, none of this would have been possible. First and foremost, I would like to thank my supervisor for providing invaluable guidance and advice throughout this project. Your expertise and experience have been vital to my research and results. In addition, I would like to thank my colleagues and friends. Your cooperation and friendship during the project made this experience more memorable and interesting. Finally, I would like to thank everyone involved in this project. Whether you provided data, technical support, or other help, your contributions were crucial to the project's success.

All in all, this project could not have succeeded without the support of many people, and I feel very fortunate to have such a team and network of people. Thank you for your support, and I will always cherish this experience.



Wei XIA

## **CONTENTS**

	Page
APPROVAL PAGE	i
ACKNOWLEDGEMENTS	ii
ABSTRACT	ii
LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER I INTRODUCTION	1
1.1 Background and Statement of the Problem	1
1.2 Research Questions	2
1.3 Research Hypotheses	3
1.4 Research Objectives	3
1.5 Scope of the Study	4
1.6 Research Framework	4
1.7 Definition of Key Terms	6
CHAPTER II LITERATURE REVIEW	9
2.1 Related Theories	9
2.1.1 Theoretical Frameworks	9
2.1.2 Teaching Team Building in Vocational Education Schools	10
2.1.3 Employee Performance in Vocational Education Schools	11
2.2 Related Studies	12
2.2.1 Teaching Team Building Influencing Employee Performance	12
2.2.2 Demographic Factors Influencing Employee Performance	16
CHAPTER III RESEARCH METHODOLOGY	20
3.1 Research Design	20
3.2 Samples and Sample Size	20
3.2.1 Population	20
3.2.2 Samples	22

3.2.3 Sampling Methods	23
3.3 Variable Definition and Measurement	23
3.4 Data Collection	24
3.5 Research Instrument	25
3.6 Content Validity and Reliability	27
3.7 Data Analysis	28
3.7.1 Descriptive Statistics	28
3.7.2 Inferential Statistics	28
CHAPTER IV ANALYSIS RESUL <mark>T</mark>	32
4.1 Introduction	32
4.2 Descriptive Statistics	33
4.2.1 Description of the Sample	33
4.2.2 Descriptive Analysis of Variables	35
4.2.3 Employee Performance Measures	36
4.3 Inferential Statistical	37
4.3.1 Correlation Analysis	
4.3.2 Multiple Regression Analysis	38
4.3.3 Analysis of Variance (ANOVA)	41
4.4 Summary of Hypothesis Testing Results	44
CHAPTER V CONCLUSION AND DISCUSSION	45
5.1 Conclusion	45
5.2 Discussion	48
5.3 Implication for Practice	49
5.4 Recommendation for Future Research	51
5.5 Limitations of the Study	52
REFERENCES	53
APPENDICES	58
Appendix 1: Questionnaire (English version)	58
Title: Survey on Teaching Team Building and Employee Performance in	
Vocational Education Schools	58

RIOCDADHV	72
Result	68
Appendix 3: IOC and Result	66
主题: 职业教育学校师资队伍建设及员工绩效调查	62
Appendix 2: Questionnaire (Chinese version)	62



## LIST OF TABLES

Table	Page
3.1 Vocational Schools Staff and Sample Data in Honghe Prefecture (2022)	21
3.2 Score Level and Meaning	27
4.1 Demographic Information Distribution	34
4.2 Descriptive Analysis of Variables (n=410)	36
4.3 Employee Performance Measures (n=410)	37
4.4 Pairwise Correlation Coefficients	38
4.5 Multiple Regression Analysis (n=410)	39
4.6 ANOVA Analysis for Employee Performance against demographic factors	
(n=410)	41
4.7 Hypothesis Testing Results	44

## LIST OF FIGURES

Figure	Page
1.1 Conceptual Framework	6



# CHAPTER I INTRODUCTION

#### 1.1 Background and Statement of the Problem

In today's rapidly evolving global educational landscape, vocational education bridges traditional academic pursuits and the specific skill sets demanded by various industries. Such an intermediary role necessitates a robust infrastructure and, most importantly, an exceptional teaching team dedicated to fostering the next generation of skilled professionals (Maclean et al., 2009).

Vocational educators are not mere conveyors of knowledge. They are industry specialists, often with rich professional backgrounds, entrusted with the responsibility to mold students into industry-ready professionals. Darling-Hammond (2000) argued that institutions distinguished by high-quality teaching staff invariably become magnets for talent, drawing in students eager for top-tier vocational training.

The nuances of effective teaching, especially in vocational education, are influenced by numerous factors. In their social interdependence theory, Johnson and Johnson (2009) emphasize collaboration and team spirit, which form the bedrock of any successful teaching ensemble. Student outcomes are invariably positive when educators collaborate, share resources and strategies, and foster a positive learning environment. However, while the significance of teamwork is universally acknowledged, the role of demographic factors in shaping vocational teaching efficacy remains under-explored. Age, educational background, and work experience - factors that Hanushek and Rivkin (2010) found instrumental in general educational settings - potentially hold profound implications for vocational education. This is especially pertinent in regions like the Honghe Prefecture, which, with its distinctive cultural and educational milieu, offers a rich tapestry of challenges and opportunities for investigation.

The vocational education schools in the Honghe Prefecture are uniquely situated amidst regional peculiarities and a diverse educational landscape. A profound understanding of the intricate relationship between teaching team building,

demographic factors, and employee performance is essential to effectively address the distinctive challenges and capitalize on emerging opportunities. By thoroughly examining the factors that influence the efficacy of teaching teams, including demographic factors and their contributions to employee performance, this research offers pragmatic recommendations and strategies for optimizing teaching staff construction in the Honghe Prefecture.

This study aims to contribute substantially to vocational education research by meticulously exploring the variables encompassing teaching team building, including the influence of demographic factors. Uncovering the inherent correlations between the characteristics of teaching teams, including demographic composition and employee performance outcomes, will provide invaluable insights for policymakers, school administrators, and educators alike. Ultimately, this endeavor will pave the way for elevating vocational education quality and fostering a culture of continuous improvement in vocational education schools across the Honghe Prefecture.

#### 1.2 Research Questions

The following research questions will guide the investigation into the effect of teaching team building on employee performance in vocational education schools in Honghe Prefecture.

- 1. What is the current status of the teaching team building in vocational education schools in Honghe Prefecture?
- 2. What factors influence employee performance in relation to teaching team building?
- 3. How can the teaching team building in vocational education schools in Honghe Prefecture be further improved to enhance employee performance?
- 4. How do demographic factors, such as age, education level, and work experience, influence employee performance in vocational education schools in Honghe Prefecture?

#### 1.3 Research Hypotheses

Hypothesis 1. Teaching teambuilding significantly affects employee performance in the Honghe Prefecture vocational education schools.

- Hypothesis 1.1. Collaboration and team spirit among faculty members influence employee performance, leading to improved teaching quality and overall work effectiveness.
- Hypothesis 1.2. Sharing teaching resources enhances employee performance, enabling educators to adapt to diverse student needs and deliver high-quality instruction.
- Hypothesis 1.3. Learning atmosphere and environment foster a work environment that motivates educators, resulting in increased job satisfaction and improved overall performance.

Hypothesis 2. Demographic factors, including age, education level, and work experience, significantly affect employee performance in vocational education schools in the Honghe prefecture.

- Hypothesis 2.1. The age of teaching staff influences employee performance.
- Hypothesis 2.2. The education level of faculty members affects employee performance.
- Hypothesis 2.3. The work experience of educators affects employee performance.

#### 1.4 Research Objectives

- 1. To study teaching team building in vocational education schools.
- 2. To study employee performance in vocational education schools.
- 3. To study the effect of teaching team building on employee performance.
- 4. To investigate the influence of demographic factors on employee performance.

#### 1.5 Scope of the Study

This study investigates the factors influencing employee performance through teaching team building in vocational education schools in Honghe Prefecture. The scope and limitations of the study are outlined below.

The research scope of this study will cover several essential aspects. Firstly, the study area will focus on vocational education schools within the Honghe Prefecture. The aim is to investigate and understand the effect of teaching team building on employee performance in these educational institutions. Secondly, the research will examine various variables related to teaching team building and employee performance. These variables include assessing collaboration and teamwork among faculty members, the extent of sharing teaching resources, the learning atmosphere and environment quality, and multiple dimensions of employee performance, such as work effectiveness, teaching quality, professional competence, innovative thinking, and problem-solving skills.

Thirdly, the target population for this study will encompass all teachers working in vocational education schools across the Honghe Prefecture. Considering the size of the population, a sample of 400 teachers will be selected to participate in the research. The sampling approach will be a stratified random sampling method, ensuring the representation of diverse regions, disciplines, and educational levels among the selected teachers. Finally, the research will employ a stratified random sampling method to comprehensively and unbiasedly represent the vocational education schools in the Honghe Prefecture. The schools will be categorized into strata based on their geographical location, academic disciplines offered, and educational levels provided. Subsequently, a random sample of teachers will be drawn from each stratum to participate in the research.

#### 1.6 Research Framework

The research investigates the effect of teaching team building and demographic factors on employee performance in vocational education schools. The study will focus on three dimensions of employee performance: job effectiveness,

professional competence and teaching ability, and innovative thinking. The two independent variables, teaching team building, and demographic factors, will be examined to understand their influence on employee performance.

Independent Variable 1: Teaching Team Building

- Collaboration and team spirit describe the level of cooperation and consciousness among teaching team members.
- Sharing teaching resources examines how much teaching resources and information are shared among team members.
- Learning atmosphere and environment. Assesses the conducive learning atmosphere and teaching environment within the teaching team.

Independent Variable 2: Demographic Factors

- Age explores the age characteristics of employees in vocational education schools.
- Education level investigates the educational background and qualifications of employees.
- Work Experience analyzes employees' work experience in the vocational education field.

Dependent Variable: Employee Performance

- Job effectiveness refers to the ability of employees to complete tasks and responsibilities efficiently within vocational education schools.
- Professional Competence and Teaching Ability represents employees' proficiency and teaching skills in their respective fields.
- Innovative Thinking addresses employees' creative and innovative thinking abilities in their work.

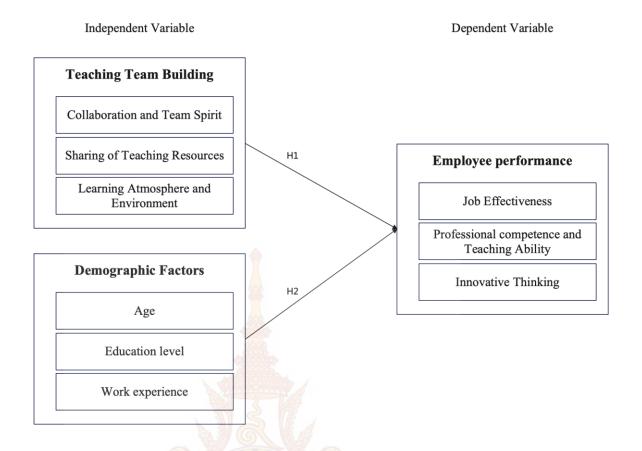


Figure 1.1 Conceptual Framework

#### 1.7 Definition of Key Terms

The following key terms are defined to ensure a clear understanding of the concepts in this study.

- 1. Teaching team building extends to organizing and managing a school's teaching staff through strategies and measures to enhance teachers' professional competence, teaching ability, and teamwork. It aims to build a collaborative, efficient, and professional teaching staff that provides strong support and assurance for the school's educational and teaching work.
- 1.1 Collaboration and team spirit extend to the attitudes and behaviors of members in a team or organization that involve cooperation, collaboration, and support for one another. It emphasizes achieving collective goals and overall

performance improvement rather than solely focusing on individual interests or performance.

- 1.2 teaching resource-sharing extends to educators, such as teachers or educational professionals, sharing and exchanging teaching resources in education. It aims to facilitate collaboration and cooperation among education practitioners and enhance teaching quality and effectiveness by sharing teaching resources.
- 1.3 Learning atmosphere and environment extend to the atmosphere and conditions created in a school, educational institution, or learning environment that fosters learning. It encompasses various aspects, including the educational institution's culture, values, organizational atmosphere, learning resources, and learning conditions.
- 2. Demographic factors extend to the demographic characteristics of employees in vocational education schools that may influence their performance.
- 2.1 Age extends to the age characteristics of employees in vocational education schools.
- 2.2 Education level extends to investigate the educational background and qualifications of employees in vocational education schools.
- 2.3 Work experience extends to analyze the work experience of employees in the field of vocational education.
- 3. Employee Performance extends to an indicator that comprehensively evaluates employees' abilities, achievements, and contributions to their work. It measures and assesses employees' job performance, typically based on achieving predetermined goals, completing tasks, demonstrating skills and capabilities, work quality, and efficiency.
- 3.1 Job Effectiveness extends to the ability and performance of employees in their work, evaluated in terms of the quality and efficiency with which they complete their work tasks. Job effectiveness encompasses employees' skills, knowledge, abilities, behaviors, and outcomes.
- 3.2 Professional Competence and Teaching Ability extends to the key abilities and competencies required of teachers in the field of education. Professional competence refers to the professional knowledge, skills, and attitudes that teachers possess in education. Teaching ability refers to teachers' abilities and skills in actual teaching practice.

3.3 Innovative Thinking extends to a thinking approach and process oriented towards innovation. It emphasizes rethinking problems and challenges to seek new solutions, perspectives, or approaches, creatively addressing change and achieving progress.



## CHAPTER II LITERATURE REVIEW

#### 2.1 Related Theories

#### **2.1.1** Theoretical Frameworks

Several theoretical frameworks can be applied to understand the relationship between teaching team building and employee performance in vocational education schools. The Social Exchange Theory suggests that when educators perceive support, cooperation, and shared resources within their faculty team, they are more likely to reciprocate with higher effort and commitment, leading to improved performance outcomes. The Job Characteristics Model highlights the importance of job design and the presence of meaningful work, autonomy, and feedback in motivating employees and enhancing their performance.

The Social Exchange Theory posits that when educators perceive support, cooperation, and the sharing of resources within their faculty team, they are more likely to engage in reciprocal behavior, such as increased effort and commitment, resulting in improved performance outcomes (Blau, 1964; Cropanzano & Mitchell, 2005). This theory emphasizes the importance of positive social exchanges and the effect of these exchanges on individual motivation and behavior.

The Job Characteristics Model (Hackman & Oldham, 1976) offers another lens to understand the relationship between teaching team building and employee performance. According to this model, the design of employees' jobs is crucial in motivating and enhancing their performance. Key job characteristics such as task variety, autonomy, and feedback influence employees' satisfaction, motivation, and engagement, positively affecting their performance.

These theoretical frameworks provide valuable insights into the relationship between teaching team building and employee performance in vocational education schools. By understanding the underlying mechanisms and dynamics, educational institutions can design effective strategies and interventions to optimize teaching team building and enhance employee performance.

#### 2.1.2 Teaching Team Building in Vocational Education Schools

Researchers worldwide have extensively studied teaching team building in vocational education schools. Several notable studies have shed light on this topic and provided valuable insights into the factors contributing to faculty teams' success. These studies, conducted by renowned authors from various countries, have been widely cited in education.

Darling-Hammond (2017) conducted a comprehensive analysis of teacher education practices worldwide. The study explored international practices and highlighted the lessons that can be learned to improve teaching team building in vocational education schools. Hargreaves and Fullan (2015) emphasized the concept of professional capital in transforming teaching practices. Their influential work highlighted the importance of investing in developing teachers' skills and knowledge to build a strong faculty team.

Ingersoll and Strong (2011) critically reviewed the effect of induction and mentoring programs on beginning teachers. Their research findings emphasized the significance of structured support systems in fostering a collaborative and supportive faculty team. Little (2012) examined the role of professional community and professional development in learning-centered schools. The study emphasized the importance of creating a culture of collaboration and continuous learning among faculty members to enhance their collective effectiveness. Louis and Marks (1998) investigated the influence of professional community on classroom practices and student experiences in restructuring schools. Their research highlighted the positive effect of a strong professional community in promoting collaboration, shared learning, and improved teaching practices.

These studies, conducted by esteemed authors from different countries, provide valuable insights into the importance of teaching team building in vocational education schools. They emphasize collaboration, mentoring, professional development, and creating a supportive work environment. By considering the findings and recommendations of these studies, vocational education schools can enhance their teaching team-building efforts and ultimately improve educational outcomes for students. There are 3 effects of collaboration and team spirit: sharing teaching resources and learning atmosphere and environment.

#### 2.1.3 Employee Performance in Vocational Education Schools

Employee performance in vocational education schools refers to the extent to which educators fulfill their roles and responsibilities effectively and contribute to the overall goals and objectives of the institution. It encompasses various dimensions: work effectiveness, teaching quality, professional competence, innovative thinking, and problem-solving capabilities. Several studies have explored the factors influencing employee performance in vocational education schools and have highlighted the significance of teaching team building in improving performance outcomes.

Numerous renowned studies have investigated employee performance in vocational education schools and identified key factors influencing performance outcomes. These studies, conducted by esteemed researchers from diverse backgrounds, have significantly contributed to our understanding of this important area. Leithwood and Jantzi (2008) conducted a meta-analysis of research on school leadership and its effect on teacher and student outcomes. Their findings highlighted the crucial role of effective leadership in fostering a positive work environment and improving employee performance in educational settings.

Stoll and Bolam (2006) explored the concept of professional learning communities and their influence on teacher performance. Their research emphasized the importance of collaborative cultures, shared decision-making, and ongoing professional development in enhancing employee performance in vocational education schools. Hattie (2008) conducted a comprehensive synthesis of over 800 meta-analyses on factors influencing student achievement. His research highlighted the significant effect of teacher expertise, instructional quality, and feedback on employee performance and student learning outcomes.

Goddard et al. (2004) examined the influence of collective teacher efficacy on student achievement and employee performance. Their study underscored the importance of fostering a sense of collective responsibility and efficacy among faculty members to enhance performance outcomes in vocational education schools. Lortie (1977) conducted a classic study on the socialization and development of teachers. His work shed light on the professional socialization process and the effect of school cultures on employee performance and commitment.

These seminal studies, authored by prominent researchers worldwide, have provided valuable insights into the factors shaping employee performance in vocational education schools. They have emphasized the significance of leadership, professional learning communities, teacher expertise, collective efficacy, and school culture in enhancing employee performance and ultimately improving student outcomes. There are 3 effects of job effectiveness: professional competence, teaching ability, and innovative thinking.

#### 2.2 Related Studies

#### 2.2.1 Teaching Team Building Influencing Employee Performance

Studies consistently show a positive relationship between teaching team building and employee performance in vocational education schools. A well-constructed and cohesive faculty team, characterized by effective collaboration, sharing of teaching resources, and a positive work environment, leads to improved work effectiveness, teaching quality, and professional growth among educators. Strong faculty teams are associated with higher student achievement, increased student satisfaction, and enhanced institutional reputation.

The following influential studies have contributed to our understanding of the effect of teaching team building on employee performance. Hargreaves and Fullan (2015) researched professional collaboration in education. They emphasized the importance of collaborative cultures in schools and the positive effect on teachers' professional learning and student outcomes.

Marks and Louis (1997) examined the dimensions of successful school collaboration and its effects on teachers and students. They highlighted the significance of teacher collaboration in promoting instructional improvement and student achievement. Pianta et al. (2012) conducted a longitudinal study on the effect of teacher-student relationships on students' academic and behavioral outcomes. The study emphasized the role of positive and supportive teacher-student relationships in fostering student engagement and achievement.

Ronfeldt et al. (2015) explored the influence of teacher collaboration on instructional quality and student achievement. They found that increased teacher collaboration positively affected instructional practices and student outcomes. Vescio et al. (2008) conducted a meta-analysis of studies on teacher collaboration and its effects on student learning. The analysis demonstrated a positive relationship between teacher collaboration and student achievement.

#### **Collaboration and Team Spirit**

Collaboration and teamwork among faculty members are critical factors that positively affect employee performance in vocational education schools. Collaborating with educators can share knowledge, expertise, and resources, enhancing teaching effectiveness and student outcomes. Collaborative practices, such as lesson planning, peer observations, and joint research projects, foster a supportive and stimulating environment that promotes continuous learning and professional growth.

Several reputable studies have highlighted the importance of collaboration and teamwork in educational settings. Bryk and Schneider (2002) emphasized the significance of trust in schools as a core resource for improvement. They found that collaborative relationships among educators create trust, enhancing the school's overall performance.

Fullan (2010) discussed the change imperative for whole system reform and emphasized the need for collaborative approaches to drive educational improvement. He argued that effective collaboration among educators is essential for achieving systemic change and enhancing employee performance. Hargreaves and Fullan (2015) introduced the concept of professional capital, emphasizing the transformative power of collaboration in every school. They argued that building professional capital through collaborative practices enhances employee performance and promotes continuous improvement.

Johnson and Johnson (1987) explored the effect of cooperative learning on student achievement. They found that collaborative learning environments, where educators work together to achieve common goals, foster positive outcomes for educators and students. West (2012) focused on effective teamwork in organizational contexts and provided practical lessons applicable to educational settings. The author highlighted the importance of collaboration and teamwork in improving employee

performance and achieving organizational goals. These seminal works by esteemed scholars highlight the significance of collaboration and teamwork in educational contexts. They emphasize the positive effect of collaboration on employee performance and creating a supportive and productive work environment in vocational education schools.

Hypothesis 1.1: Collaboration and team spirit among faculty members influence employee performance, leading to improved teaching quality and overall work effectiveness.

#### **Sharing of Teaching Resources**

The sharing of teaching resources, including instructional materials, best practices, and pedagogical approaches, has significantly influenced employee performance. When educators have access to a wide range of teaching resources and engage in sharing and exchange activities, they can diversify their instructional strategies, adapt to diverse student needs, and deliver high-quality instruction. This sharing of resources facilitates professional development, encourages innovation, and improves teaching effectiveness.

Several influential studies have examined the effect of sharing teaching resources in educational contexts. Hattie (2008) conducted a meta-analysis of numerous studies and found that the availability and utilization of high-quality teaching resources significantly contribute to improved student achievement. The study emphasized the importance of sharing effective teaching practices among educators.

Little (2012) explored the concept of professional learning communities and highlighted the significance of resource sharing within these communities. The study emphasized that collaborative sharing of resources and expertise enhances teaching effectiveness and promotes professional growth. McLaughlin and Talbert (2006) examined the role of teacher-learning communities in supporting instructional improvement. They found that sharing teaching resources and engaging in collaborative practices facilitate collective learning and contribute to enhanced teaching performance.

Reeves (2012) discussed the power of shared knowledge and resources in transforming education. The study emphasized that when educators actively share teaching resources, they can improve instructional practices, promote student

engagement, and enhance employee performance. Wenger (1999) introduced the concept of communities of practice and highlighted the importance of shared resources and knowledge exchange among educators. The study emphasized that active participation in communities of practice supports professional development and enhances teaching effectiveness. These influential studies by renowned scholars underscore the importance of sharing teaching resources in improving employee performance. They highlight the positive effect of resource sharing on instructional quality, professional growth, and overall teaching effectiveness.

Hypothesis 1.2: Sharing teaching resources enhances employee performance, enabling educators to adapt to diverse student needs and deliver high-quality instruction.

#### **Learning Atmosphere and Environment**

A positive learning atmosphere and environment are crucial for fostering employee performance in vocational education schools. A supportive and inclusive work environment that values collaboration, creativity, and continuous learning creates a culture of excellence and motivates educators to perform at their best. Providing opportunities for professional development, recognizing and rewarding achievements, and promoting a healthy work-life balance contribute to a positive learning atmosphere that enhances employee performance.

Several influential studies have explored the effect of learning atmosphere and environment on employee performance. Deci and Ryan (2000) introduced the Self-Determination Theory, emphasizing the importance of autonomy, competence, and relatedness in promoting intrinsic motivation and performance. The study highlighted the role of a positive work environment in supporting employees' psychological needs and fostering their engagement and performance.

Edmondson (1999) examined the concept of psychological safety in teams and organizations. The study emphasized that creating a safe and supportive environment encourages collaboration, risk-taking, and innovation, ultimately leading to improved performance. Grant and Dweck (2003) researched the role of a growth mindset in promoting motivation and performance. The study highlighted the significance of a learning-oriented environment that encourages individuals to embrace

challenges, persist in the face of setbacks, and continuously improve their skills and knowledge.

Laschinger et al. (2004) explored the effect of empowering work environments on nurse performance and job satisfaction. The study emphasized that an empowering environment, characterized by trust, respect, and participation, enhances employees' sense of empowerment and positively influences their performance. Pink (2009) discussed the importance of autonomy, mastery, and purpose in motivating individuals and promoting high performance. The study emphasized that providing employees with autonomy, opportunities for skill development, and a sense of purpose leads to increased engagement and improved performance outcomes.

These influential studies by renowned scholars highlight the significance of a positive learning atmosphere and environment in enhancing employee performance. They emphasize the role of psychological needs, empowerment, growth mindset, and autonomy in fostering motivation, collaboration, and innovation.

Hypothesis 1.3: Learning atmosphere and environment foster a work environment that motivates educators, resulting in increased job satisfaction and improved overall performance.

# 2.2.2 Demographic Factors Influencing Employee Performance Age and Employee Performance

Several studies have explored the relationship between age and employee performance in different organizational settings. For instance, a study by Özdemir and Erkmen (2022), which examined the effect of age on employee performance in the hospitality industry, found that older employees demonstrated higher levels of job satisfaction and better job performance than their younger counterparts. The study suggested that older employees' accumulated knowledge and experience contributed to superior performance.

Similarly, in a study by Inceoglu et al. (2012) focusing on age-related differences in job performance in a technology company, it was observed that older employees exhibited greater adaptability to change and problem-solving skills, leading to improved overall performance. The study emphasized the importance of considering age diversity in the workforce and harnessing the unique strengths of employees of different age groups.

Extending the discourse, Sturman (2003) conducted comprehensive metaanalyses exploring the relationships between experience, tenure, age, and performance. The findings underscored the complexity of these relationships, suggesting that there is not a straightforward linear relationship between age and performance but rather an intricate interplay influenced by various factors like job type, industry, and cultural contexts. In a more nuanced examination, Ng and Feldman (2008) delved into how age relates to ten dimensions of job performance. Their findings indicate that while some aspects of performance might decline with age, others, particularly those related to interpersonal interactions and knowledge-based expertise, tend to improve.

Furthermore, Kanfer and Ackerman (2004) offered insights into the psychological underpinnings of the age-performance relationship, emphasizing how aging effects work motivation. Their research highlighted that older worker, despite facing cognitive decline in certain tasks, often compensate through increased efforts and leveraging their accumulated wisdom, thereby maintaining or even enhancing their overall job performance. In summary, the age and performance relationship in the workplace is multifaceted, with various research underscoring the importance of considering the diverse strengths and challenges employees face across different age brackets.

Hypothesis 2.1: The age of teaching staff influences employee performance.

#### **Education Level and Employee Performance**

The relationship between education level and employee performance has been extensively explored in various industries. A research study by Sethi et al. (2018) in the healthcare sector revealed that employees with advanced educational qualifications demonstrated greater competence and expertise in their respective roles, positively affecting patient care and overall organizational performance. The study highlighted the role of education in shaping employees' abilities and performance levels.

Delving deeper, Schmidt and Hunter's (1998) seminal work on personnel selection methods underscored the predictive validity of education for job performance. Their meta-analysis emphasized that while cognitive ability significantly predicted job performance, the combined assessment of cognitive ability and education had a notably

higher predictive value. Ng et al. (2005) conducted a comprehensive meta-analysis exploring predictors of career success. Among various factors, the role of education was accentuated in determining objective measures, like salary and promotions, and subjective career outcomes. The findings suggest that education shapes job-specific skills and influences broader career trajectories.

Boudarbat et al. (2010) focused on the Canadian context, investigating how returns on education (interpreted as a proxy for performance) evolved. Their research provides insights into the broader socioeconomic factors that may mediate the relationship between education and performance. Lastly, Barrett and Depinet (1991) offered a nuanced perspective by comparing competency and intelligence tests. They highlighted that educational attainment might be more strongly linked to specific competencies, often directly relevant to job performance, rather than broad cognitive abilities. In essence, while the direct effect of education on job performance can vary across industries and job roles, a higher educational level generally equips employees with a broader skill set, enhancing their overall performance and adaptability in the workplace.

Hypothesis 2.2: The education level of faculty members affects employee performance.

#### Work Experience and Employee Performance

Numerous studies have examined the relationship between work experience and employee performance. In a study by Alssid and Gruber (2002) in the manufacturing industry, it was observed that employees with more years of work experience exhibited higher levels of efficiency and productivity. Their experience contributed to a deeper understanding of job tasks and better time management skills, leading to improved performance.

Furthermore, a study by Lee and Park (2020) in the retail sector explored the effect of work experience on employee sales performance. The findings revealed that employees with extensive work experience demonstrated better customer engagement, product knowledge, and sales skills, resulting in higher sales performance. The study emphasized the importance of valuing and retaining experienced employees to enhance organizational performance.

Additionally, Quinones et al. (1995) conducted a meta-analytic review, revealing that work experience is a meaningful predictor of job performance under certain conditions. Their findings emphasized the importance of the quality of experience, not just the number of years, in determining its influence on performance. Similarly, McDaniel et al. (1988) highlighted how different dimensions of job experience, such as job tenure and job-related training, correlate with various measures of job performance.

Tesluk and Jacobs (1998) presented a model illustrating how diverse aspects of work experience affect employee adaptability and performance. They stressed the role of varied tasks and broad roles in enriching work experience. Sturman (2003) conducted an extensive meta-analysis to understand the intricate relationship between experience and performance, emphasizing the dynamic nature of this relationship over time.

The reviewed literature indicates that age, education level, and work experience significantly influence employee performance in various organizational contexts. Older employees may bring valuable experience and job satisfaction, while higher education levels may contribute to enhanced decision-making and critical thinking skills. Moreover, work experience has been consistently linked to improved efficiency, productivity, and job performance. Understanding the effect of demographic factors on employee performance can provide valuable insights for enhancing teaching team building and improving overall educational outcomes in vocational education schools.

Hypothesis 2.3: The work experience of educators affects employee performance.

# CHAPTER III RESEARCH METHODOLOGY

#### 3.1 Research Design

The researcher conducted a quantitative research design with questionnaires. The research employed a quantitative design, utilizing structured questionnaires as the primary data collection instrument. This approach involved systematically collecting and analyzing numerical data to draw statistical inferences and identify patterns or trends within the study's scope. Questionnaires allowed for a standardized and efficient means of gathering quantitative data from a sample population, facilitating a rigorous and objective assessment of the research objectives. This methodological choice indicates a deliberate emphasis on numerical measurements and statistical analysis to derive meaningful insights and contribute to the overall robustness of the research findings.

#### 3.2 Samples and Sample Size

#### 3.2.1 Population

The research population includes teachers teaching for over six months in all vocational education schools in Honghe Prefecture. It includes multiple schools across various disciplines and levels of vocational education. The population represents a diverse range of educational institutions, each contributing to the regional landscape of vocational education. In 2022, 28 secondary vocational schools (middle vocational schools) in Honghe Hani and Yi Autonomous Prefecture, Yunnan Province, China, are qualified to offer formal education programs. Among them are 20 public and 8 private secondary vocational schools.

Table 3.1 Vocational Schools Staff and Sample Data in Honghe Prefecture (2022)

No.	Number of Staff	The Ratio of the Total	Sample Size
1	132	3.03%	12
2	199	4.56%	18
3	270	6.19%	25
4	71	1.63%	7
5	168	3.85%	15
6	17	0.39%	2
7	200	4.59%	18
8	81	1.86%	7
9	48	1.10%	4
10	35	0.80%	3
11	28	0.64%	3
12	51	1.17%	5
13	66	1.51%	6
14	32	0.73%	3
15	466	10.69%	43
16	168	3.85%	15
17	167	3.83%	15
18	582	13.35%	53
19	439	10.07%	40
20	147	3.37%	13
21	123	2.82%	11
22	263	6.03%	24
23	300	6.88%	28
24	28	0.64%	3
25	35	0.80%	3
26	86	1.97%	8

27	124	2.84%	11
28	35	0.80%	3
SUM	4361	100.00%	400

#### **3.2.2 Samples**

According to Yamane's (1967) formula from the population of vocational education schools in the Honghe Prefecture, the sampling process used a systematic approach to ensure the inclusion of schools from various regions, disciplines, and levels of education. Four hundred questionnaires are expected to be distributed. The sample was designed to be large enough to provide sufficient data for analysis and to ensure that the findings can be generalized to the entire population.

Using the formula:

$$n = N / (1 + N(e^2))$$

Where:

n = Sample size

N = Total population size (4,361)

e = Margin of error (expressed as a proportion, not percentage, and given

as 0.05)

Plugging in the values:

$$n = 4,361 / (1 + 4,361(0.05^2))$$

$$n = 4,361 / (1 + 4,361(0.0025))$$

$$n = 4,361 / (1 + 10.9025)$$

$$n = 4,361 / 11.9025$$

$$n \approx 366\,$$

So, with a total population size N of 4,361 and a margin of error e of 0.05, the calculated sample size n would be approximately 366. Four hundred questionnaires are expected to be distributed. The sample was designed to be large enough to provide sufficient data for analysis and to ensure that the findings can be generalized to the entire population.

#### **3.2.3 Sampling Methods**

A stratified random sampling method was employed for a diverse and representative sample. First, the vocational education schools within the Honghe Prefecture were categorized into strata based on location, discipline, and educational level. Then, a random sample of schools was selected from each stratum to participate in the study. This approach ensured that schools from various regions and disciplines were included in the sample, providing a comprehensive view of teaching team building and employee performance across the entire Honghe Prefecture.

#### 3.3 Variable Definition and Measurement

Defining and operationalizing the variables used in this study is essential to ensure accurate measurement and analysis. The key variables include:

- 1. Collaboration and Team Spirit: This variable measures how much faculty members engage in collaborative activities, such as lesson planning, peer observations, and joint research projects.
- 2. Sharing of Teaching Resources: This variable examines how educators share instructional materials, best practices, and pedagogical approaches.
- 3. Learning Atmosphere and Environment: This variable evaluates the overall atmosphere and conditions within the vocational education school, including factors like supportiveness, inclusivity, and opportunities for growth.
- 4. Age: This variable refers to the chronological age of the teaching staff members in vocational education schools.
- 5. Education Level: This variable assesses the educational background and qualifications of the teaching staff, including their highest attained degree and relevant certifications.
- 6. Work Experience: This variable quantifies the number of years of work experience that the teaching staff has accumulated in the field of vocational education.
- 7. Employee Performance: This variable measures the effectiveness and outcomes of employee performance in vocational education schools, considering

factors such as work effectiveness, teaching quality, professional competence, and problem-solving capabilities.

The variables in the questionnaires were measured using a Likert scale. Participants were asked to rate their agreement or disagreement with specific statements about each variable. For example, for "Collaboration and Team Spirit," participants might be asked to rate their level of agreement with statements like "Faculty members actively collaborate on lesson planning and curriculum development" or "There is a strong sense of teamwork and mutual support among teaching staff."

The Likert scale typically has response options ranging from "Strongly Disagree" to "Strongly Agree" or from "Very Low" to "Very High," allowing for the capture of nuanced responses. Using a Likert scale enables quantitative data to be analyzed statistically to identify trends, correlations, and relationships between variables.

To ensure the reliability and validity of the measurement, the questionnaires underwent content validation through expert review and piloting with a small group of participants. The feedback received from the pilot study was used to refine and improve the questionnaires before distributing them to the larger sample.

Through carefully defining and measuring the variables, this study obtained accurate and meaningful data to explore the relationships between teaching teambuilding factors, demographic factors, and employee performance in vocational education schools within the Honghe Prefecture. The findings contributed to a comprehensive understanding of the factors influencing employee performance and inform strategies for enhancing vocational education quality and overall school effectiveness.

#### 3.4 Data Collection

Data were collected through a comprehensive online questionnaire to gather quantitative data on teaching team building and employee performance. The online questionnaires were distributed to the teaching staff of the selected schools. The online questionnaires included structured questions assessing various aspects, such as

collaboration among faculty members, sharing of teaching resources, and the overall work environment. The questionnaires were administered to the teaching staff to capture their perspectives on these critical factors. To ensure the content validity and reliability of the questionnaires, a pilot study was conducted with a small group of teaching staff from a different vocational education school. The pilot study participants' feedback was used to refine and improve the questionnaires.

#### 3.5 Research Instrument

The research instrument for this study included a structured questionnaire. The structured questionnaire included closed-ended questions and provided options for respondents, allowing for easy data analysis and quantitative assessment. These questions were focused on gathering information about teacher team size, qualifications, collaborative practices, availability and sharing of teaching resources, and the overall work environment.

The questionnaire was divided into sections corresponding to each variable measured. These sections included the following.

#### 1. Demographic factors

This section collected information on the demographic characteristics of the respondents, including age, education level, and work experience.

#### 2. Collaboration and team spirit

This section assessed the level of collaboration and teamwork among teachers.

#### 3. Sharing of teaching resources

This section explores the extent to which educators share teaching resources and best practices.

#### 4. Learning atmosphere and environment

This section assessed the overall learning climate and environment within vocational education schools.

#### 5. Employee performance

This section evaluated the effectiveness and results of employee performance.

The Likert scale typically ranges from "Strongly Disagree" to "Strongly Agree" or from "Very Low" to "Very High," depending on the nature of the question. Participants were asked to select the best response option based on their views or experiences.

Before distributing the questionnaire to the target respondents, a pilot test was conducted with a small group of educators to identify any ambiguities or issues with the questionnaire's design. Feedback from the pilot test was used to refine and improve the questionnaire to ensure its clarity, validity, and reliability.

In order to verify the meaning of the English scale, a blind back-translation was conducted. First, three master's students from ISIC College, Royal Institute of Technology, Bangkok, translated the English knowledge item scale into Chinese; second, two master's students majoring in English from the University of Political Science and Law of Thailand (who had seen the English version) translated the Chinese item scale from Chinese back into English. Finally, the English item scale was compared with the original item scale. However, there were minor differences in terminology. When the two new translators, blind to the English version, translated from Chinese to English, the translations still conveyed the original meaning. Therefore, these English versions of the knowledge item scales can be used to measure knowledge scales.

This study uses a structured questionnaire with carefully designed items to collect accurate and meaningful data to investigate the relationships between teaching team building, demographic factors, and employee performance in vocational education schools. The questionnaire survey findings provided valuable insights into the factors influencing employee performance and contributed to enhancing vocational education quality and overall school effectiveness.

Parts 2 and 3 of the questionnaire used the interval scale according to the Likert Scale. The interpretation of the mean value is shown in Table 3.2.

 Score Level
 Average
 Meaning

 4
 4.01~5.00
 Total Agree

 3
 3.01~4.00
 Agree

 2
 2.01~3.00
 Disagree

 1
 1.00~2.00
 Total Disagree

Table 3.2 Score Level and Meaning

# 3.6 Content Validity and Reliability

Content validity ensures that the research instruments accurately measure the intended constructs and effectively represent the research objectives. A panel of experts in the vocational education field and research methodology reviewed the questionnaires to establish content validity. They assessed the questions' clarity, relevance, and appropriateness, ensuring their alignment with the research objectives. Feedback from the experts was used to refine and enhance the questionnaires, ensuring they effectively capture the desired information.

To further assess the content validity of the questionnaires, an Item-Objective Congruence (IOC) analysis was conducted. IOC measures the degree of correspondence between each questionnaire item and the intended construct. An IOC value of  $\geq 0.5$  indicates acceptable content validity, confirming that the questions effectively capture the constructs under investigation and align with the research objectives (Cronbach, 1951).

Reliability refers to the consistency and stability of a research tool in measuring constructs across participants. Cronbach's alpha coefficient was calculated to assess the reliability of the questionnaires. An alpha value of  $\geq 0.7$  indicates good internal consistency and reliable measurement of the constructs.

After data collection, statistical software was used to calculate each questionnaire's IOC values and Cronbach's alpha coefficients. Confirming that the IOC values are  $\geq 0.5$  and Cronbach's alpha is  $\geq 0.7$  ensures the questionnaires demonstrate satisfactory content validity and reliability. If necessary, adjustments were made to the research instruments to improve their validity and reliability (Cronbach, 1951).

By employing rigorous content validity and reliability testing, this study aims to ensure the accuracy and consistency of the research instruments, providing robust and trustworthy results. The data collected served as a solid foundation for investigating the effect of teaching team building on employee performance in vocational education schools in the Honghe Prefecture.

#### 3.7 Data Analysis

#### 3.7.1 Descriptive Statistics

Descriptive statistics was used to summarize and present the collected data clearly and concisely. These statistical measures help describe the characteristics of teaching team building and employee performance in the vocational education schools of the Honghe Prefecture.

Measures such as mean, median, and standard deviation were calculated to provide information about the central tendency and variability of the data. The mean represents the average value of a variable, while the median represents the middle value when the data is sorted in ascending or descending order. The standard deviation measures the dispersion or spread of the data points around the mean.

Additionally, frequency distributions were generated to show the responses' responses for categorical variables. This provides insights into the sample population's prevalence or distribution of specific responses.

Descriptive statistics enabled researchers and stakeholders to understand the current status of teaching team building and employee performance in the vocational education schools of the Honghe Prefecture. It helped identify patterns, trends, and variations in the data, providing a solid foundation for further analysis and interpretation.

#### 3.7.2 Inferential Statistics

Inferential statistics, including correlation analysis and regression analysis, were employed to explore and examine the relationships between teaching team building and employee performance in vocational education schools across the Honghe Prefecture with a .05 significance level. Correlation analysis assesses the strength and

direction of the relationship between different variables, such as the correlation between faculty team collaboration and employee work effectiveness, teaching quality, and professional growth. It helped determine whether these variables have significant associations, providing insights into how teaching team building affects employee performance.

Regression analysis was used to identify potential predictors of employee performance based on teaching team-building factors. By analyzing the data, we can ascertain which aspects of teaching team building significantly influence employee performance outcomes. This analysis helped to establish a clearer understanding of the key factors that positively affect employee performance in vocational education schools.

Applying inferential statistics allowed researchers to draw meaningful conclusions and make informed interpretations about the effect of teaching team building on employee performance. Through these statistical analyses, the study aims to provide valuable and evidence-based recommendations for enhancing teaching teambuilding practices and ultimately improving the overall educational quality and competitiveness of vocational education schools in the Honghe Prefecture.

We performed multiple regression analyses for each research hypothesis to examine the relationships between the independent variables (teaching team building and demographic factors) and the dependent variable (employee performance). This analysis helped determine the extent to which the independent variables predict variations in employee performance. The regression coefficients indicated the strength and direction of the relationships, and the significance of the coefficients was assessed through t-tests. Calculate the R-squared value to understand the proportion of variance in employee performance that the independent variables can explain.

Hypothesis 1: Teaching Team Building significantly effects employee performance in vocational education schools in the Honghe Prefecture.

Hypothesis 1.1: Collaboration and Team Spirit among faculty members influence employee performance, leading to improved teaching quality and overall work effectiveness.

Hypothesis 1.2: Sharing of Teaching Resources enhances employee performance, enabling educators to adapt to diverse student needs and deliver high-quality instruction.

Hypothesis 1.3: Learning Atmosphere and Environment foster a work environment that motivates educators, resulting in increased job satisfaction and improved overall performance.

In addition to the previously mentioned statistical methods, analysis of variance (ANOVA) was employed to explore potential relationships between categorical variables and employee performance. Specifically, ANOVA allows for assessing variations in employee performance among different demographic groups, such as varying age groups or educational levels. This method provided a deeper understanding of how age and education influence employee performance outcomes.

ANOVA was applied using statistical software based on the assumption of equal variances among groups. The significance level was set at 0.05 to ensure the analysis's accuracy. The use of ANOVA in this study is supported by the works of Fisher (1925) and Scheffe (1953), who established the method's effectiveness in examining significant differences among multiple groups. By incorporating ANOVA into the data analysis process, this study aims to enhance its comprehensiveness and provide a more nuanced perspective on the relationships between variables.

Hypothesis 2: Demographic Factors, including age, education level, and work experience, significantly affect employee performance in vocational education schools in the Honghe Prefecture.

Hypothesis 2.1: The age of teaching staff influences employee performance.

Hypothesis 2.2: The Education Level of faculty members affects employee performance.

Hypothesis 2.3: The work experience of educators affects employee performance.

Employing multiple regression analysis consistently across all hypotheses can help gain comprehensive insights into the effect of teaching team building and demographic factors on employee performance in vocational education schools in Honghe Prefecture. This approach allowed us to provide a cohesive and unified analysis

of the research questions and draw meaningful conclusions based on the statistical results.



# CHAPTER IV ANALYSIS RESULT

#### 4.1 Introduction

In this chapter, we delve into a more profound exploration of the findings presented in Chapter 4, aiming to offer a comprehensive understanding of their implications, both theoretically and practically, for vocational education schools in the Honghe Prefecture. This research sought to understand the nuanced relationship between teaching team building and demographic factors in influencing the performance of employees in vocational education settings. As a reminder, the study pivoted on several hypotheses:

Hypothesis 1: Teaching Team Building significantly effects employee performance in vocational education schools in the Honghe Prefecture.

Hypothesis 1.1: Collaboration and Team Spirit among faculty members influence employee performance.

Hypothesis 1.2: Sharing of Teaching Resources enhances employee performance.

Hypothesis 1.3: Learning Atmosphere and Environment foster a motivating work environment for educators.

Hypothesis 2: Demographic Factors such as age, education level, and work experience are significantly associated with employee performance in vocational education schools in the Honghe Prefecture.

Hypothesis 2.1: The age of teaching staff influences employee performance.

Hypothesis 2.2: The Education Level of faculty members affects employee performance.

Hypothesis 2.3: The work experience of educators affects employee performance.

The data for this research was meticulously collected, processed, and analyzed using descriptive and inferential statistics. Descriptive statistics offered an

initial overview of the characteristics of the data. In contrast, inferential statistics, such as correlation, multiple regression analysis, and ANOVA, enabled more profound insights into the relationships and influences among variables. The analysis of data and interpretation use statistics symbols and meanings as follows:

N=number of populations

n=number of samples

 $\bar{X} = Mean$ 

SD=Standard Deviation

t=t-Distribution

F=F-Distribution

SS=Sum of Square

MS=Mean of Square

df=Degree of freedom

LSD=Least Significant Difference

r=Pearson of Correlation

Sig=The level of statistics significance to test hypothesis

\*=The statistical significance is at the 0.05 level

# **4.2 Descriptive Statistics**

#### **4.2.1 Description of the Sample**

Table 4.1 contains demographic information, including age, education level, and work experience. This table is a comprehensive reference point for accessing and understanding these specific demographic variables.

Table 4.1 Demographic Information Distribution

Demographic Information	Percent	Frequency
Age		
20-30	3.66	15
31-40	40.00	164
41-50	38.29	157
More than 50	18.05	74
Education Level		
Bachelor's Degree	21.46	88
Master's Degree	41.71	171
Doctorate/Ph.D.	36.83	151
Work Experience		
6 months – 1 year	23.41	96
1 year – 5 years	22.93	94
6 years – 10 years	27.32	112
More than 10 years	26.34	108

Participants aged 20-30 Years Old: This is the least represented age group in the sample, with only 15 participants (3.66%). This suggests that there are relatively few younger employees in vocational education schools in Honghe Prefecture.

Participants aged 31-40 Years: This group comprises 164 individuals, or 40% of the sample, making it the most significant age group. The high percentage indicates that many educators in the sample are in their prime working age.

Participants aged 41-50 Years: Close to the previous age bracket, this age group has 157 members, accounting for 38.29% of the total sample. The presence of the 31-40 and 41-50 age groups suggests a balanced age distribution among middle-aged employees.

Participants aged more than 50 Years: Representing the senior employees, this age bracket includes 74 individuals (18.05%). Though not the majority, this group's presence is substantial, implying a wealth of experience within the faculty.

Participants with bachelor's degree: 88 individuals, or 21.46% of the sample, hold a bachelor's degree. While this represents the lowest educational attainment in the sample, it still forms a significant portion of the faculty.

Participants with master's degrees: This is the highest represented educational level, with 171 participants constituting 41.71% of the sample. This shows that many faculty members in the vocational education schools of Honghe Prefecture have pursued postgraduate studies.

Participants with doctorate /Ph.D.: Slightly less than the master's degree holders, 151 educators or 36.83% of the sample have a doctorate or Ph.D. This indicates a substantial number of educators with the highest level of formal education, suggesting a strong academic foundation within the faculty.

Participants with work experience 6 months -1 year: Representing the newest educators, this group contains 96 individuals or 23.41% of the total sample. Nearly a quarter of the sample in this bracket suggests recent hiring or turnover.

Participants with work experience of 1 year to 5 years: Just shy of the previous category, this group includes 94 participants, comprising 22.93% of the sample. This implies that a decent portion of the faculty has a few years of experience in vocational education.

Participants with work experience 6–10 years: This is the most represented category regarding work experience, with 112 educators or 27.32%. It suggests that many educators have substantial experience but have not crossed the decade mark.

Participants with more than 10 years of work experience: Nearly equal to the 6-10 years bracket, this group includes 108 participants, 26.34% of the sample. It demonstrates the presence of seasoned educators who have dedicated much of their careers to vocational education.

#### **4.2.2 Descriptive Analysis of Variables**

Table 4.2 provides a descriptive analysis of the variables under consideration. This analysis offers a detailed examination of the characteristics and features associated with the variables in the table.

Table 4.2 Descriptive Analysis of Variables (n=410)

Variable	Mean	Std. Dev.	Meaning
1.1 Teachers actively collaborate on lesson planning and curriculum development.	3.57	1.372	Agree
1.2 There is a strong sense of teamwork among the teaching staff.	3.95	1.033	Agree
1.3 There is mutual support among teachers and staff.	3.53	0.956	Agree
1.4 Teachers and staff are willing to share ideas.	4.09	0.898	Total Agree
1.5 Teachers and staff are willing to give each other feedback.	3.80	1.068	Agree
2.1 Teachers readily share instructional materials and resources with their colleagues.	3.97	1.004	Agree
2.2 Teachers collaborate to develop teaching methods.	3.86	0.979	Agree
2.3 Teachers share innovative teaching methods.	3.55	1.169	Agree
2.4 The school provides platforms for teachers to exchange teaching ideas and experiences.	3.89	1.162	Agree
2.5 The school provides mechanisms for teachers to exchange teaching ideas and experiences.	3.55	1.211	Agree
3.1 The school fosters a supportive learning atmosphere.	3.96	1097	Agree
3.2 The school fosters an inclusive learning atmosphere.	3.40	1.206	Agree
3.3 Opportunities for professional growth are encouraged and available.	3.79	1.069	Agree
3.4 Opportunities for professional development are encouraged and available.	3.96	1.014	Agree
3.5 The school provides a positive environment for teachers to experiment with new teaching strategies.	3,69	1.176	Agree

# **4.2.3** Employee Performance Measures

The data provides insights into five performance metrics, each assessed on a scale of 1 to 5. Based on the findings from 410 respondents, the first performance metric has an average score of 3.36, showcasing a moderate level of employee performance. However, the scores vary, with a standard deviation of 1.28, indicating diverse perspectives. The second performance metric presents a slightly improved

scenario with an average score of 3.70, albeit with a reduced variability evident from its standard deviation of 1.06. Further exploration into the third metric reveals a mean score of 3.82, showcasing a higher consensus among the respondents, given its standard deviation of approximately 0.99. Interestingly, the fourth performance metric also reflects an average score of 3.82 but with a slightly greater spread of 1.18. Lastly, the fifth metric seems to resonate well among the respondents, with an average score nearing 4 (3.97, to be precise). This positive inclination is further reinforced by no respondent rating it the lowest, as the minimum score recorded was 2. The consistent scores across all metrics suggest an overall positive employee performance within the sampled population.

Table 4.3 Employee Performance Measures (n=410)

Variable	Mean	Std. Dev.	Meaning
1. I am satisfied with my overall work effectiveness in this vocational education school.	3.36	1.276	Agree
2. My teaching quality meets or exceeds the school's expectations.	3.70	1.057	Agree
3. I feel confident in my professional competence.	3.82	0.988	Agree
4. I feel confident in my teaching abilities.	3.82	1.185	Agree
5. I consistently seek opportunities to improve my teaching methods.	3.97	1.004	Agree

#### 4.3 Inferential Statistical

#### 4.3.1 Correlation Analysis

Understanding the strength and directionality of relationships between key study variables offers valuable insights into the underlying patterns and dynamics of the research context. This section delves deeper into the results obtained from the pairwise correlation analysis of the critical constructs: Collaboration and Team Spirit, Sharing of Teaching Resources, Atmosphere and Environment, and Employee Performance.

Table 4.4 Pairwise Correlation Coefficients

Variables	Collaboration and Team Spirit	Sharing of Teaching Resources	Atmosphere and Environment	Employee Performance
Collaboration and Team Spirit	1	-	-	-
Sharing of Teaching Resources	0.783***	1	-	-
Atmosphere and Environment	0.767***	0.749***	1	-
Employee Performance	0.785***	0.789***	0.798***	1

Note: \*\*\* significance at the 0.01

Table 4.4 presents pairwise correlation coefficients among the variables - Collaboration and Team Spirit, Sharing of Teaching Resources, Atmosphere and Environment, and Employee Performance. The figures represent the Pearson correlation coefficients, which quantify the linear relationships between pairs of variables, ranging from -1 (perfect negative correlation) to +1 (perfect positive correlation).

Notably, all correlations are positive and statistically significant at the 0.1% level. This indicates that increases in one variable are associated with increases in the other, suggesting symmetrical influences among the constructs under investigation. For instance, a correlation coefficient of 0.783 between Collaboration and Team Spirit and Sharing of Teaching Resources suggests a strong, positive linear relationship between these variables.

It is paramount to note that correlation does not imply causation, and the presented relationships should be interpreted with caution. Further analyses, such as regression or structural equation modeling, would be requisite to more robustly explore causal relationships among these variables. Additionally, the validity of these findings is contingent upon the rigor and precision of the data collection and analysis processes underpinning these results.

#### 4.3.2 Multiple Regression Analysis

Below are the detailed results from the multiple linear regression analysis, predicting Employee Performance based on seven independent variables: Collaboration

and Team Spirit, Sharing of Teaching Resources, Learning Atmosphere, and Environment.

Table 4.5 Multiple Regression Analysis (n=410)

Variables	В	SE. B	β	t	Sig.	VIF
(Constant)	4.23	0.58		7.29	0.00	
Collaboration and Team Spirit	0.37	0.08	0.31	4.63	0.00	1.03
Sharing of Teaching Resources	0.28	0.07	0.26	4	0.00	1.03
Learning Atmosphere and Environment	0.25	0.07	0.24	3.57	0.00	1.02
R <sup>2</sup>	0.63					
Adjusted R <sup>2</sup>	0.61					
ANOVA [F (7, 492), p]	12.03				0.00	

(Constant)

B = 4.23: The expected mean value of Employee Performance when all independent variables are 0.

t (7.29) and Sig. (0): It is statistically significant, meaning the model appropriately predicts the dependent variable.

Collaboration and Team Spirit

 $B=0.37,\,\beta=0.31;\,A$  unit increase in Collaboration and Team Spirit leads to a 0.37-unit increase in Employee Performance, maintaining other variables constant.

t (4.63) and Sig. (0): Significantly influences Employee Performance, confirming a valuable predictor.

Sharing of Teaching Resources

 $B=0.28,\,\beta=0.26$ : A unit increase in the Sharing of Teaching Resources predicts a 0.28-unit increase in Employee Performance, with other variables held constant.

t (4) and Sig. (0): Statistically significant, underlining its importance in the model.

Learning Atmosphere and Environment

 $B=0.25,\ \beta=0.24$ : Indicates a positive relationship with Employee Performance; one unit increase results in a 0.25-unit increase in the dependent variable.

t (3.57) and Sig. (0): Demonstrates a statistically significant impact on Employee Performance.

 $R^2 = 0.63$ : The model explains 63% of the variance in Employee Performance, highlighting a solid fit.

Adjusted  $R^2 = 0.61$ : Considering the number of predictors, the adjusted metric also indicates a robust model.

ANOVA: F (7, 492) = 12.03, p < 0.000, underscores the model's overall significance and reliability in predicting the dependent variable.

The variables - Collaboration and Team Spirit, Sharing of Teaching Resources, Learning Atmosphere, and Environment significantly predict Employee Performance in vocational schools. Pointing towards strategic areas for enhancing employee performance through interventions in collaborative practices, resource sharing, and fostering conducive work environments.

Employee Performance

- = 4.23 + 0.31(Collaboration and Team Spirit)
- + 0.26(Sharing of Teaching Resources)
- + 0.24(Learning Atmosphere and Environment)

Here, the dependent variable "employee performance" is modeled as a linear function of various independent variables, including collaboration and teamwork, teaching resource sharing, climate, and environment.

For every 1 unit increase in Collaboration and Team Spirit, employee performance increases by 0.37 units.

Each unit increase in the Sharing of Teaching Resources increases employee performance by 0.28.

For every 1 unit increase in Learning Atmosphere and Environment, employee performance increases by 0.25 units.

The R<sup>2</sup> and adjusted R<sup>2</sup> values were 0.63 and 0.61, respectively, indicating that the independent variables in the model explained approximately 63% of the variability in employee performance. The ANOVA provided an F statistic of 12.03,

which was significant at p < 0.000, indicating that the model significantly predicted the dependent variable.

## **4.3.3** Analysis of Variance (ANOVA)

Analysis of variance (ANOVA) was conducted to understand the effect of age, education level, and work experience on the performance of employees in vocational education schools. This method assesses the significance of the impact of mean differences between different age groups on the dependent variable - employee performance.

Table 4.6 ANOVA Analysis for Employee Performance against demographic factors (n=410)

Variables	Sum of Squares (SS)	MS	F	p-value	R- squared	Adj R- squared
Age	1.867	0.622	0.64	0.5877	0.0047	-0.0026
Education Level	2.013	1.006	1.04	0.3533	0.0051	0.0002
Work Experience	0.306	0.102	0.10	0.9572	0.0008	-0.0066

#### 4.3.3.1 ANOVA Analysis for Employee Performance Against Age

In Table 4.6, the Model Sum of Squares represents the variability explained by the model. For Age, the sum of squares is 1.867.

Mean Square (MS): The average sum of squares, which is 0.622 for Age, gives a metric to compare between and within-group variability.

F-Statistic: An F-value of 0.64 signifies the ratio of the variance explained by the model to the variance within groups (unexplained variance). This statistic tests the hypothesis that the means of the different age groups are equal.

P-Value: The p-value associated with the F-statistic is 0.5877, which is relatively high. Conventionally, a p-value less than 0.05 is considered significant. Here, the high p-value suggests that the differences in Employee Performance among different age groups are not statistically significant.

The ANOVA analysis for Age against Employee Performance indicates that age, categorized into different groups, does not significantly influence Employee Performance within the context of these vocational education schools. The model's R-squared value of 0.0047 means that only about 0.47% of the variance in Employee Performance can be explained by Age. Given the high p-value and a low R-squared, it can be inferred that while age might have some influence, other factors or variables might play a more pivotal role in determining Employee Performance in the given context.

# 4.3.3.2 ANOVA Analysis for Employee Performance against Education Level

In Table 4.6, the Model Sum of Squares represents the variability in Employee Performance attributed to educational level differences. For the Education Level, the sum of squares is 2.013.

Mean Square (MS): This is essentially the average of the sum of squares, amounting to 1.006 for the Education Level. This metric offers a comparison between inter-group variability and intra-group variability.

F-Statistic: An F-value of 1.04 indicates the ratio of the variance explained by differences in education levels to the unexplained variance within these groups. The F-statistic tests the null hypothesis that the means of Employee Performance across different education levels are identical.

P-Value: The associated p-value with the F-statistic is 0.3533, notably higher than the conventional significance threshold of 0.05. This suggests that the differences in Employee Performance across various education levels are not statistically significant.

The ANOVA results for Education Level against Employee Performance suggest that the level of education, when categorized into distinct groups, does not substantially affect Employee Performance within the studied vocational education schools. The model's R-squared value is 0.0051, implying that only about 0.51% of the variation in Employee Performance can be traced back to differences in Education Level. The high p-value combined with a low R-squared suggests that while education level may have some effect, other factors are likely more crucial in determining Employee Performance in this context.

#### 4.3.3.3 ANOVA Analysis for Employee Performance against

#### **Work Experience**

The statistical outcomes from Table 4.6 reveal an R-squared value of 0.0008. This metric, albeit seemingly diminutive, implies that a mere 0.08% of the variability in Employee Performance can be attributed to differences in Work Experience. More crucially, the Adjusted R-squared stands at -0.0066, insinuating the possibility of model overfitting and thereby hinting that Work Experience might not be an apt predictor for Employee Performance within this dataset.

Delving deeper into the ANOVA results, the sum of squares (SS) for Work Experience is 0.306 with a Mean Square (MS) value of 0.102. The F-statistic, a crucial metric indicating the variance ratio between the groups to variance within the groups, is a mere 0.10. Most critically, the p-value stands prominently at 0.9572. Given the conventional significance threshold of 0.05, this value underscores a lack of statistical significance in Employee Performance differences across diverse Work Experience levels.

Given the data, the ANOVA results suggest that Work Experience does not significantly influence Employee Performance. This might be counter-intuitive, as one might expect that experience would play a role in performance. However, it underscores the importance of considering other potential factors or examining the unique characteristics of this particular dataset and the context of the vocational education setting.

#### 4.3.3.4 Summary of ANOVA Results for Employee Performance

The ANOVA analyses highlight a nuanced understanding of Employee Performance within vocational education settings. While variables like age, education, and work experience are often seen as foundational in assessing employee capabilities, they do not significantly predict performance in this context.

Such findings prompt a deeper exploration. It might be that intrinsic motivations, continuous professional development, mentoring support, and the organization's culture are potentially more influential on performance. Furthermore, the unique characteristics of vocational education, such as its curriculum, teaching strategies, or student engagement, might intersect with these demographic variables in ways not captured in the current tests.

The absence of significance in these predictors does not devalue their importance. It is plausible that their influence is more complex, possibly nonlinear, or intertwined with other overlooked variables. For example, the effect of work experience on performance might be more pronounced when combined with ongoing training or certain motivational factors.

Therefore, these ANOVA results serve as both an insight and a prompt. They underscore the need for broader and more intricate models, suggesting that enhancing employee performance in educational institutions might require a holistic strategy beyond demographics and delving into personal and professional growth paradigms.

# 4.4 Summary of Hypothesis Testing Results

In order to explain the statistical relationship between the independent variables of teaching team building and demographic factors and the dependent variable of employee performance in this study, the researcher applied multiple regression analysis and ANOVA to test the hypotheses. The hypothesis testing results show that the three hypotheses of hypothesis H2 are not valid, and the remaining hypotheses are valid. The results of the hypothesis testing are summarized in Table 4.7 below.

Table 4.7 Hypothesis Testing Results

Hypothesis		P-Value	Result
	H1.1	0.000	Supported
H1	H1.2	0.000	Supported
H1.3		0.000	Supported
	H2.1	0.5877	Not Supported
H2	H2.2	0.3533	Not Supported
	H2.3	0.9572	Not Supported

#### **CHAPTER V**

#### CONCLUSION AND DISCUSSION

#### **5.1 Conclusion**

The study embarked on a comprehensive exploration of the factors influencing employee performance within vocational education. Set forth with clear research objectives, established hypotheses, and sought to understand the interplay of variables such as age, education level, and work experience.

The research objectives were multifaceted.

To study teaching team building in vocational education schools. The results are as follows: Comprehensive analyses unveiled that effective team building plays a pivotal role in creating a conducive learning environment. Schools that prioritized collaborative activities and fostered a sense of unity among the teaching staff consistently reported higher levels of job satisfaction and teaching effectiveness.

To study employee performance in vocational education schools. The results are as follows: Employee performance gauged through various metrics such as teaching quality, student feedback, and peer evaluations was observed to vary. Factors like continuous professional development and access to adequate teaching resources were key contributors to enhanced performance.

To study the effect of teaching team building on employee performance. The results are as follows: A strong and positive correlation was identified between teaching team building and employee performance. Schools that promoted teambuilding exercises and activities witnessed an uptick in overall teaching quality, suggesting the potential benefits of investing in team-building initiatives.

To investigate the influence of demographic factors on employee performance. The results are as follows: Age, to some extent, was seen to influence teaching methodologies, with more experienced educators leaning towards traditional approaches. Education Level significantly affected the adaptability to new teaching technologies, with those holding higher degrees more inclined to experiment with innovative methods. Work Experience, on the other hand, brought forth a mixed bag of

results; while it contributed to domain expertise, it did not necessarily guarantee modern teaching approaches.

In sum, this research sheds light on the intricate dynamics in vocational schools, offering invaluable insights to administrators, policymakers, and educators. The findings from the analysis shine a light on the critical role of teaching team building in shaping employee performance.

Hypothesis 1 posited that a cohesive teaching team environment enhances the overall performance of employees. Our results provide evidence that supports this assertion. The positive coefficient of variables such as collaboration, team spirit, and sharing of teaching resources signifies their positive contribution to employee performance. The better the collaboration and the more resources shared, the more enhanced the performance of vocational educators.

Hypothesis 1.1 further broke down the element of team building into the domain of collaborative efforts. The high correlation between collaboration team spirit and employee performance underscores the necessity of fostering a collaborative environment.

Hypothesis 1.2 theorized that sharing teaching resources would lead to better performance outcomes. The data resonated with this, indicating that educators feel more empowered when resources are shared effectively, leading to improved performance.

Hypothesis 1.3 added another layer to the discussion by emphasizing the importance of a conducive atmosphere and environment. The robust coefficient for atmosphere and environment in the regression results suggests it plays a pivotal role.

Drawing parallels with existing literature, it is evident that our findings echo the sentiments of numerous researchers who advocate for the significance of a collaborative teaching environment. Studies have consistently highlighted that shared resources and positive team dynamics enhance not just the performance of educators but also the overall learning experience for students.

At the core, the researcher aimed to decipher the relationship between employee demographic factors and their performance in the vocational education sector. Furthermore, the researcher strived to discern if certain environmental and resource-sharing aspects played a role in influencing this performance. Exploring the influence of demographic factors on employee performance rendered intriguing results.

Hypothesis 2 suggested that age would have a profound effect on employee performance. However, the ANOVA results for age vs. Employee performance did not indicate a significant variation across age groups.

Hypothesis 2.1 focused on the effect of educational qualifications. While it is commonly believed that higher educational qualifications equate to better teaching performance, our findings did not statistically support this notion.

Hypothesis 2.2 centered on the premise that work experience in vocational education directly influences performance. Once again, the analysis did not reflect a clear correlation, challenging conventional beliefs.

Hypothesis 2.3 intertwined age and experience, assuming a direct correlation between age, years of experience, and performance. However, the statistical analysis revealed a nuanced picture, hinting that factors beyond age and tenure influence performance in vocational education.

These findings have broader implications for faculty hiring, training, and development in vocational schools. Contrary to common practices prioritizing hiring based on age or experience, vocational institutions might need to reassess their strategies. It suggests that faculties should focus more on fostering collaboration and resource-sharing, irrespective of an educator's age or tenure. In vocational education, continuous training and development emerge as paramount. The responsibility is not merely hiring seasoned professionals but ensuring they are continually equipped and updated in a dynamic teaching environment.

In Chapter 4, the researcher rigorously applied statistical methodologies and garnered some illuminating findings. Notably, while our hypotheses anticipated significant disparities in employee performance across different age groups, education levels, and work experience spans, the ANOVA results suggested otherwise. The variations in employee performance across these categories were not substantial enough to be deemed statistically significant.

#### 5.2 Discussion

The comparative assessment of our research findings against the existing literature's backdrop provides corroborative and contrarian insights.

In navigating through the various dimensions, intricacies, and dynamics embedded within the educational sector, particularly within the vocational schools of the Honghe Prefecture, this research excavated pivotal insights pertinent to organizational behavior and employee performance (West, 2012). The discussion herein delves into each hypothesis, teasing apart the subtleties and nuances that surfaced through the empirical findings.

The underscored significance of collaboration and team spirit in determining employee performance is consonant with extant literature emphasizing teamwork and collective efficacy within organizational contexts (Goddard et al., 2004). It further elicits a contemplative dialogue concerning the symbiotic relationship between intra-organizational collaboration and educational effectiveness, particularly pondering how team spirit translates into optimized teaching practices and institutional performance.

Educational leaders should, thus, acknowledge the intrinsic value imbricated within team building and collective ethos among faculty members, pondering the philosophical and practical implications of establishing, nurturing, and sustaining such an environment within the educational milieu. Deliberations on strategies and interventions, such as collaborative workshops, team-building activities, and peer mentoring programs, are warranted to distill and harness the potential in collaborative educational settings.

A nuanced examination of the sharing of teaching resources unveils its crucial role as a catalyst, ostensibly optimizing employee performance by fostering an ecosystem where pedagogical resources and knowledge are seamlessly disseminated among educators. The permeation of tangible and intangible resources within the educational network enriches teaching practices and inherently scaffolds a supportive and synergetic environment where educators are buoyed by collective knowledge and resources. Thus, mechanisms that facilitate such sharing, such as digital platforms, regular knowledge-sharing forums, and collaborative teaching initiatives, should be ardently explored and embedded within organizational practices.

The robust influence of learning atmosphere and environment on employee performance begets a critical discourse on the structural, cultural, and emotional facets that conspire to shape the educational atmosphere (Barrett et al., 2013). The environment's physical, psychological, and sociocultural dimensions seemingly interweave, crafting a tapestry that either enriches or impedes employee performance. The findings provoke reflections on institutional strategies and policies, urging educators and administrators to conscientiously sculpt an environment that is not merely physically conducive but also emotionally and socio-culturally nurturing for educators and students alike.

The nuanced influences of demographic variables like age, education level, and work experience on employee performance beckons a more judicious examination (Ng et al., 2005). While younger educators exhibited slightly elevated performance metrics, the positive impact of enhanced education and accumulated work experience, especially within the vocational education context, prompts considerations concerning recruitment, development, and retention strategies within educational institutions (Bryson, 2018).

While the findings elucidate valuable insights, they further incite queries and reflections concerning the interplay and intersections between the studied variables, prompting further scholarly and practical exploration into the delicate balance, synergies, and potential conflicts that may arise within the confluence of collaboration, resource sharing, environmental factors, and demographic characteristics in shaping educational outcomes.

# **5.3 Implication for Practice**

The exploration and revelations within this research not only deepen our theoretical understanding but also unfold a myriad of practical implications, especially illuminating pathways for educational leaders, policymakers, and practitioners in vocational schools within the Honghe Prefecture and beyond. In unraveling the intricacies of employee performance, we underline tangible approaches and interventions grounded in empirical findings.

Given the pivotal role of collaboration and team spirit, educational institutions might seek to weave a strong fabric of teamwork and collective endeavor among staff members. Institutions can institute structured platforms and forums facilitating knowledge exchange, shared problem-solving, and collective planning. Professional development programs may also be designed to foster collaborative skills, enabling educators to navigate through collective teaching and administrative landscapes effectively.

The notable impact of sharing teaching resources demands the construction of robust, accessible, and dynamic platforms that enable the smooth transition of knowledge and materials among educators. Platforms could encapsulate digital repositories, discussion forums, and collaborative planning tools that enable resource-sharing and facilitate dialogues on teaching strategies, challenges, and innovations. Utilizing technology, such as creating a centralized digital resource portal, can ensure ease of access and replenishment of resources.

A contemplative approach toward crafting a conducive atmosphere and environment implicates reshaping physical, social, and emotional landscapes within educational settings. A systemic approach that amalgamates physical infrastructure, emotional support structures, and socio-cultural norms is essential. Considerations should envelop tangible aspects such as classroom design and facilities and intangible facets like cultural norms, interpersonal relationships, and emotional support systems among staff members.

The nuanced influences of age, education level, and work experience invite the tailoring of HR practices to accommodate and leverage these variables. Strategies such as mentorship programs, wherein experienced educators guide newer entrants; continuous professional development, ensuring educators are perpetually evolving; and career progression paths, recognizing and utilizing the expertise of more educated faculty members, can be formulated with nuanced understanding and strategic foresight.

The above implications ought to be woven into policy-making and strategic planning, ensuring that the derived insights permeate through institutional strategies, resource allocation, and operational plans. Engaging various stakeholders in policy-

making, including faculty members, administrative staff, and students, can also ensure grounded and effective strategy formulation and implementation.

In synthesizing these practical implications, educational leaders and practitioners must navigate with an equilibrium of evidence-based decision-making, context-specific adaptations, and a future-oriented perspective. Aligning these implications with each educational institution's unique contexts and challenges ensures their tangible and sustainable impact on the ground, thereby enhancing employee performance and, by extension, enriching the educational experiences and outcomes of students within the vocational education sector.

#### **5.4 Recommendation for Future Research**

Considering the above limitations, several avenues for future research emerge, providing an opportunity to build upon the findings of this study. A comparative study involving multiple regions or countries, different types of educational institutions, or varying cultural contexts would offer richer and more generalizable insights into the variables and relationships explored in this study.

Furthermore, incorporating qualitative research methodologies in future studies would allow for a deeper and more nuanced understanding of the phenomena explored. Utilizing interviews, focus groups, or observational data could unearth the micro-dynamics, challenges, and facilitators that impact collaboration, resource sharing, and the influence of the working atmosphere on employee performance.

Moreover, exploring additional variables and their interactions with those studied here could offer more comprehensive insights into employee performance in vocational education schools. Delving into factors such as leadership style, organizational culture, technology utilization, and faculty autonomy might provide a more holistic picture of the multifaceted nature of employee performance in educational settings.

Lastly, longitudinal studies that observe the impact and evolution of collaboration, resource sharing, and atmosphere over time would provide valuable insights into their sustained impact and the long-term implications of these factors on

employee performance. Tracking these variables and their influence across different time points might reveal patterns, causality, and trajectories that a cross-sectional study such as this cannot illuminate.

# 5.5 Limitations of the Study

While providing essential insights into the correlations and impact among faculty collaboration, sharing of teaching resources, learning atmosphere, and employee performance in vocational schools in Honghe Prefecture, this study has limitations. First and foremost, the geographical limitation to one specific prefecture could potentially restrict the generalizability of the findings to other regions or educational contexts. Different areas may harbor unique socio-cultural and institutional factors that might influence the variables studied here in distinct ways.

Secondly, the study predominantly relied on quantitative data, which, although valuable in ascertaining the relationships among variables, might lack the depth and nuance that qualitative data could provide. The subjective experiences, stories, and nuances of how collaboration, resource sharing, and atmosphere influence employee performance might be further explored through qualitative approaches.

Thirdly, while the study has considered some critical demographic variables like age, education level, and work experience, there might be other influential factors (such as cultural background, personal beliefs, or previous professional experiences) that were not explored in this research, potentially offering further insights into the dynamics of employee performance in educational settings.

#### **REFERENCES**

- Alssid, J. L., Gruber, D., Jenkins, D., Mazzeo, C., Roberts, B., & Stanback-Stroud, R. (2002). Building a career pathways system: Promising practices in community college-centered workforce development.
- Barrett, G. V., & Depinet, R. L. (1991). A reconsideration of testing for competence rather than for intelligence. *American Psychologist*, 46(10), 1012.
- Barrett, P., Zhang, Y., Moffat, J., & Kobbacy, K. (2013). A holistic, multi-level analysis identifying the impact of classroom design on pupils' learning. *Building and Environment*, *59*, 678-689.
- Blau, P. (1964). Power and exchange in social life. New York, J Wiley & Sons.
- Boudarbat, B., Lemieux, T., & Riddell, W. C. (2010). The evolution of the returns to human capital in Canada, 1980–2005. *Canadian Public Policy*, *36*(1), 63-89.
- Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*, Russell Sage Foundation.
- Bryson, J. M. (2018). Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement, John Wiley & Sons.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, *31*(6), 874-900.
- Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy Analysis Archives*, 8, 1-1.
- Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European journal of teacher education*, 40(3), 291-309.

- Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350-383.
- Fullan, M. (2010). All systems go: The change imperative for whole system reform, Corwin Press.
- Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2004). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher*, *33*(3), 3-13.
- Grant, H., & Dweck, C. S. (2003). Clarifying achievement goals and their impact. *Journal of personality and social psychology*, 85(3), 541.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational behavior and human performance*, 16(2), 250-279.
- Hargreaves, A., & Fullan, M. (2015). *Professional capital: Transform teaching in every school*, Teachers College Press.
- Hattie, J. (2008). Visible learning: A synthesis of over 800 meta-analyses relating to achievement, Routledge.
- Inceoglu, I., Segers, J., & Bartram, D. (2012). Age-related differences in work motivation. *Journal of Occupational and Organizational Psychology*, 85(2), 300-329.
- Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of educational research*, 81(2), 201-233.
- Johnson, D. W., & Johnson, R. T. (1987). *Learning together and alone: Cooperative, competitive, and individualistic learning*, Prentice-Hall, Inc.
- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, *38*(5), 365-379.
- Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development, and work motivation. *Academy of Management Review*, 29(3), 440-458.

- Laschinger, H. K. S., Finegan, J. E., Shamian, J., & Wilk, P. (2004). A longitudinal analysis of the impact of workplace empowerment on work satisfaction.

  Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 25(4), 527-545.
- Lee, S., Park, J., Back, K. J., Hyun, H., & Lee, S. H. (2020). The role of personality traits toward organizational commitments and service quality commitments. *Frontiers in Psychology*, 11, 631.
- Leithwood, K., & Jantzi, D. (2008). Linking leadership to student learning: The contributions of leader efficacy. *Educational Administration Quarterly*, 44(4), 496-528.
- Little, J. W. (2012). Professional community and professional development in the learning-centered school. *Teacher learning that matters: International perspectives*, 22-46.
- Lortie, D. C. (1977). Schoolteacher: A Sociological Study.
- Louis, K. S., & Marks, H. M. (1998). Does the professional community affect the classroom? Teachers' work and student experiences in restructuring schools. *American journal of education*, 106(4), 532-575.
- Maclean, R., Wilson, D., & Chinien, C. A. (2009). International handbook of education for the changing world of work: Bridging academic and vocational learning. (Vol.1). Dordrecht Springer Netherlands.
- Marks, H. M., & Louis, K. S. (1997). Does teacher empowerment affect the classroom? The implications of teacher empowerment for instructional practice and student academic performance. *Educational evaluation and policy analysis*, 19(3), 245-275.
- McDaniel, M. A., Schmidt, F. L., & Hunter, J. E. (1988). Job experience correlates with job performance. *Journal of Applied Psychology*, 73(2), 327.
- McLaughlin, M. W., & Talbert, J. E. (2006). Building school-based teacher learning communities: *Professional strategies to improve student achievement*, Teachers College Press.

- Ng, T. W., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58(2), 367-408.
- Ng, T. W., & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance. *Journal of Applied Psychology*, 93(2), 392.
- Ozdemir, O., & Erkmen, E. (2022). Top management team gender diversity and firm risk-taking in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 34(5), 1739-1767.
- Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. *Handbook of research on student engagement*, Springer, 365-386.
- Pink, D. (2009). The surprising truth behind what motivates us, Riverhead Books.
- Quińones, M. A., Ford, J. K., & Teachout, M. S. (1995). The relationship between work experience and job performance: A conceptual and meta-analytic review. *Personnel Psychology*, 48(4), 887-910.
- Reeves, D. B. (2012). Transforming professional development into student results, Ascd.
- Ronfeldt, M., Farmer, S. O., McQueen, K., & Grissom, J. A. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal*, 52(3), 475-514.
- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, *124*(2), 262.
- Sethi, A., Schofield, S., McAleer, S. & Ajjawi, R. (2018). The influence of postgraduate qualifications on the educational identity formation of healthcare professionals. *Advances in Health Sciences Education*, 23, 567-585.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258.
- Sturman, M. C. (2003). Searching for the inverted U-shaped relationship between time and performance: Meta-analyses of the experience/performance,

- tenure/performance, and age/performance relationships. *Journal of Management*, 29(5), 609-640.
- Tesluk, P. E., & Jacobs, R. R. (1998). Toward an integrated model of work experience. *Personnel Psychology*, 51(2), 321-355.
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and teacher education*, 24(1), 80-91.
- Wenger, E. (1999). *Communities of practice: Learning, meaning, and identity*, Cambridge University Press.
- West, M. A. (2012). Effective teamwork: Practical lessons from organizational research. John Wiley & Sons.



#### **APPENDICES**

# **Appendix 1: Questionnaire (English version)**

Questionnaire for "The Effect of Teaching Team Building and Demographic Factors on Employees' Performance of Vocational Education Schools in Honghe Prefecture,

China"

Dear Teachers:

Thank you for participating in this survey. Your feedback is essential to our study on teaching team building and employee performance in vocational education schools. I keep all data on my computer using my ID password to log in. Keep all data without any influence within 1 year, and the data will be collected afterward. Please provide the following information about yourself:

Part one: Demographic Information

- 1. Age(years)
  - a. 20-30
  - b. 31-40
  - c. 41-50
  - d. More than 50
- 2. Education Level:
  - a. High School Diploma
  - b. Bachelor's Degree
  - c. Master's Degree
  - d. Doctorate/Ph.D.

# 3. Work Experience in Vocational Education(years)

- a. 6 months 1 year
- b. 1 year 5 years
- c. 6 years 10 years
- d. More than 10 years

## Part Two: Teaching Team Building

Give a mark for each response, "1" for "Strongly Disagree," "2" for "Disagree," "3" for "Neutral," "4" for "Agree", and "5" for "Strongly Agree", and put a " $\sqrt{}$ " in the corresponding numbered box.

#### Scale

1. Collaboration and Team Spirit					
1.1 Teachers actively collaborate on lesson planning and curriculum development.	1	2	3	4	5
1.2 There is a strong sense of teamwork among the teaching staff.	1	2	3	4	5
1.3 There is mutual support among teachers and staff.	1	2	3	4	5
1.4 Teachers and staff are willing to share ideas.	1	2	3	4	5
1.5 Teachers and staff are willing to give each other feedback.	1	2	3	4	5
2. Sharing of Teaching Resources					
2.1 Teachers readily share instructional materials and resources with their colleagues.	1	2	3	4	5

2.2 Teachers collaborate to develop teaching methods.	1	2	3	4	5
2.3 Teachers share innovative teaching methods.	1	2	3	4	5
2.4 The school provides platforms for teachers to exchange teaching ideas and experiences.	1	2	3	4	5
2.5 The school provides mechanisms for teachers to exchange teaching ideas and experiences.	1	2	3	4	5
3. Learning Atmosphere and Environment					
3.1 The school fosters a supportive learning atmosphere.	1	2	3	4	5
3.2 The school fosters an inclusive learning atmosphere.	1	2	3	4	5
3.3 Opportunities for professional growth are encouraged and available.	MW) 1	2	3	4	5
3.4 Opportunities for professional development are encouraged and available.	1	2	3	4	5
3.5 The school provides a positive environment for teachers to experiment with new teaching strategies.	1	2	3	4	5

Part three: Employee Performance

Employee Performance					
1. I am satisfied with my overall work effectiveness in this vocational education school.	1	2	3	4	5
2. My teaching quality meets or exceeds the school's expectations.	1	2	3	4	5
3. I feel confident in my professional competence.	1	2	3	4	5
4. I feel confident in my teaching abilities.	1	2	3	4	5
5. I consistently seek opportunities to improve my teaching methods.	1	2	3	4	5

Thank you for your cooperation.

# **Appendix 2: Questionnaire (Chinese version)**

# 主题: 职业教育学校师资队伍建设及员工绩效调查

# 亲爱的老师们:

感谢您参与本次调查。 您的反馈对于我们对职业教育学校教学团队建设和员工绩效的研究至关重要。 所有数据都保存在我自己的电脑上,使用账号密码登录。 1 年内保留所有数据不受任何影响,数据将做事后记录。 请提供以下有关您自己的信息:

第一部分:基本信息

- 1. 年龄
- 1.20-30岁
- 2.31-40岁
- 3.41-50岁
- 4. 超过 50 岁
- 2. 学历:
- 1. 高中
- 2. 本科
- 3. 研究生
- 4. 博士
- 3. 职业教育工作经历(单位:年)

- 1.6个月-1年
- 2.1年-5年
- 3.6年-10年
- 4. 超过 10年

第二部分: 教学团队建设

为每个回答打分, "1"代表"强烈不同意", "2"代表"不同意", "3"代表"中立", "4"代表"同意", "5"代表"强烈同意", 并在相应的编号框中打"√"。

# 请回答以下问题:

1. 团队协作精神					
1.1 教师们会积极协 <mark>作制定课程计划</mark> 和课程开发。	10 10 10 10 10 10 10 10 10 10 10 10 10 1	2	3	4	5
1.2 教师团队间有很强的团队合作意识。	1	2	3	4	5
1.3 教师团队之间会相互支持。	1	2	3	4	5
1.4 教师团队之间愿意互相分享想法。	1	2	3	4	5

1.5 教师团队之间愿意互相提供反馈。	1	2	3	4	5
2. 教学资源共享					
2.1 教师之间很乐意分享教学材料和资源。	1	2	3	4	5
2.2 教师们会合作开发教学方法。	1	2	3	4	5
2.3 教师之间会分享创新的 <mark>教</mark> 学方法。	1	2	3	4	5
2.4 学校为教师提供交流教学理念和 经验的平台。	1	2	3	4	5
2.5 学校为教师提供 <mark>交流教学理念和</mark> 经验的机制。	WILLIAM TO THE STATE OF THE STA	2	3	4	5
3. 学习氛围与环境					
3.1 学校营造支持性的学习氛围。	1	2	3	4	5
3.2 学校营造包容性的学习氛围。	1	2	3	4	5
3.3 学校鼓励并提供专业成长的机会。	1	2	3	4	5

3.4 学校鼓励并提供职业发展的机会。	1	2	3	4	5
3.5 学校为教师尝试新的教学策略提供了积极的环境。	1	2	3	4	5

第二部分: 员工绩效

员工绩效					
1. 我对自己在这所职业教育学校的整体工作效率感到满意。	1	2	3	4	5
2. 我的教学质量达到或超过了学校的期望。	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	3	4	5
3. 我对自己的专业能力充满信心。		2	3	4	5
4. 我对自己的教学能力充满信心。	1	2	3	4	5
5. 我不断寻找机会改进我的教学方法。	1	2	3	4	5

谢谢您的合作。

# **Appendix 3: IOC and Result**

The IOC points in calculations are provided in three rating scales for consistency and congruencies of the items. All committees had to choose only one answer as the given mark from these three choices:

- +1 = Congruent with clear understanding
- 0 = Uncertain or not sure whether the item related to the study
- -1 = Not Understand or not congruent or related to this study

No.	Question	-1	0	+1
Col	laboration and Team Spirit	<u> </u>		
1	Teachers actively collaborate on lesson planning and curriculum development.			
2	There is a strong sense of teamwork among the teaching staff.			
3	There is mutual support among teachers and staff.			
4	Teachers and staff are willing to share ideas.			
5	Teachers and staff are willing to give each other feedback.			
Sha	ring of Teaching Resources	<u> </u>		
6	Teachers readily share instructional materials and resources with their colleagues.			
7	Teachers collaborate to develop teaching methods.			
8	Teachers share innovative teaching methods.			

9	The school provides platforms for teachers		
	to exchange teaching ideas and experiences.		
	to exchange teaching racas and experiences.		
10	The school provides mechanisms for		
	teachers to exchange teaching ideas and		
	experiences.		
Lear	rning Atmosphere and Environment		
11	The school fosters a supportive learning		
	atmosphere.		
12	The school fosters an inclusive learning		
	atmosphere.		
13	Opportunities for professional growth are		
	encouraged and available.		
14	Opportunities for professional development		
14	are encouraged and available.		
	are encouraged and available.		
15	The school provides a positive environment		
	for teachers to experiment with new teaching		
	strategies.		
Emp	ployee Performance		
16	I am satisfied with my overall work		
	effectiveness in this vocational education		
	school.		
17	My teaching quality meets or exceeds the		
	school's expectations.		
18	I feel confident in my professional		

	competence.		
19	I feel confident in my teaching abilities.		
20	I consistently seek opportunities to improve my teaching methods.		

# Result

No.	Questions	A	В	С	D	Е	Approved data	Accepted
Colla	boration and Team	Spirit	A					
1	Teachers actively collaborate on lesson planning and curriculum development.	+1	+1	+1	+1	+1	100%	<b>✓</b>
2	There is a strong sense of teamwork among the teaching staff.	+1	+1	+1	White the state of	+1	100%	<b>~</b>
3	There is mutual support among teachers and staff.	+1	+1	+1	+1	+1	100%	<b>~</b>
4	Teachers and staff are willing to share ideas.	+1	+1	+1	+1	+1	100%	<b>*</b>
5	Teachers and staff are willing	+1	+1	+1	+1	+1	100%	<b>~</b>

	to give each other feedback.								
Sharing of Teaching Resources									
6	Teachers readily share instructional materials and resources with their colleagues.	+1	+1	+1	+1	+1	100%	*	
7	Teachers collaborate to develop teaching methods.	+1	0	+1	+1	+1	80%	*	
8	Teachers share innovative teaching methods.	+1	+1	+1	+1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	+1	100%	*	
9	The school provides platforms for teachers to exchange teaching ideas and experiences.	+1	คโนโลซ์ +1	+1	+1	+1	100%	*	
10	The school provides mechanisms for teachers to	+1	+1	+1	+1	+1	100%	~	

	exchange							
	teaching ideas							
	and							
	experiences.							
Learn	ning Atmosphere and	nd Envi	ronmen	t				l
	The school							
	fosters a							
11	supportive	+1	+1	+1	+1	+1	100%	<b>✓</b>
	learning							
	atmosphere.		Ī					
	The school		-					
	fosters an		-					
12	inclusive	+1	+1	+1	+1	+1	100%	<b>✓</b>
	learning	No.						
	atmosphere.	100	\$ 1					
	Opportunities	- P			_			
	for professional		50					
13	growth are	+1	0	+1	+1	+1	80%	✓
	encouraged and		<b></b>		WW.			
	available.	38	S					
	Opportunities	19E19	165.5	201919	85//			
	for professional		พเนเลย	13,10				
14	development	+1	0	0	+1	+1	60%	×
	are encouraged							
	and available.							
	The school							
	provides a							
15	positive	+1	+1	+1	+1	+1	100%	.,
13	environment for	+1	+1	+1	+1	+1	10070	•
	teachers to							
	experiment							

	with new							
	teaching							
	strategies.							
Empl	loyee Performance							
	I am satisfied							
	with my overall							
	work							
16	effectiveness in	+1	0	+1	+1	+1	80%	<b>✓</b>
	this vocational							
	education							
	school.		#					
	My teaching		-	<b>\</b>				
	quality meets or							
17	exceeds the	+1	+1	+1	+1	+1	100%	<b>✓</b>
	school's	1	1 3					
	expectations.							
	I feel confident							
18	in my	+1	0	+1	+1	+1	80%	•
	professional							·
	competence.	TAPE!			N. Co			
	I feel confident	19819	โดโจกัด	201873	80			
19	in my teaching	+1	0	+1	+1	+1	80%	<b>~</b>
	abilities.							
	I consistently							
	seek							
20	opportunities to	+1	0	+1	+1	+1	80%	<b>~</b>
	improve my	_		1	_		3370	·
	teaching							
	methods.							

## **BIOGRAPHY**

NAME Mr. Wei XIA

**TELEPHONE NO:** +86 15812081233

**EDUCATIONAL RECORD 09.2011-07.2015** 

Bachelor's Degree

College of Arts and Sciences Kunming

WORK EXPERIENCE 03.2021 until now

Honghe Vocational and Technical College