

SWUICE 2024



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SRINAKHARINWIROT UNIVERSITY



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The 4th **SRINAKHARINWIROT UNIVERSITY** International Conference
on Education (ONLINE Conference)

"ADVANCING QUALITY EDUCATION FOR SUSTAINABLE DEVELOPMENT "



CONFERENCE PROCEEDINGS

THE 4th SRINAKHARINWIROT UNIVERSITY INTERNATIONAL CONFERENCE ON EDUCATION

JULY 4, 2024
FACULTY OF EDUCATION
SRINAKHARINWIROT UNIVERSITY, THAILAND

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MESSAGE FROM THE PRESIDENT



It is a pleasure for me to welcome you to the Fourth Srinakharinwirot University International Conference on Education or SWUICE 2024. I would like to congratulate the Faculty of Education, and express my thankfulness to the organizing partners, keynote speakers, presenters, and all the participants for making this conference possible.

Srinakharinwirot University is committed to supporting our community and country in meeting the sustainable development goals or SDG. In addition, our faculty of education gives priority to supporting the achievement of SDG 4, which is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Quality education is a highly important aspect of sustainable development as it lays the foundation for meeting all the goals, be those to eradicate poverty, promote environmental sustainability, or create a peaceful world. Thus, all educators and researchers in the field of education play crucial roles in the development of our world.

We are very much honored to be a part of the effort in bringing educators and researchers from international countries together. By taking part in this conference, all

of us have expressed our commitment to promote quality education through international exchanges and collaboration. The conference is a wonderful opportunity for us to share advanced knowledge in education, to learn from one another, and together we use our enhanced knowledge to sustainably develop our community, country, and our world.

I, therefore, would like to wish you a fruitful exchange during the conference and hope that we will have an opportunity to welcome you at Srinakharinwirot University in Bangkok, Thailand, in the near future.

S. Santi

Assoc. Prof. Dr. Somchai Santiwatanakul
President of Srinakharinwirot University

MESSAGE FROM THE DEAN



It is a great pleasure for me to welcome you all to the fourth Srinakharinwirot University International Conference on Education, or SWUICE 2024.

Our Faculty of Education, Srinakharinwirot University is taking on an active role in contributing to SDG 4: Ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. It is important that all children not only have access to education, but the education must be of high quality, being able to enable the children to be contributing members of society. As the world is continually changing, it is also important that education helps children to grow up having the ability to, by themselves, learn new knowledge and skills throughout their lives. Importantly, for sustainable development to be achieved, children need to be supported to have a global mindset, understanding that their actions can affect the community, the country, and the world. Therefore, teachers are the keys persons contributing to the achievement of the sustainable development goals in creating the world of

environmental sustainability, economic prosperity, and peace.

Thus, our faculty of education has made it a priority to produce quality teachers who will provide quality education for all students regardless of gender, race, socio-economic status, and ability. We are also committed to producing quality research in order to advance knowledge in education. It is also our mission to facilitate the sharing of knowledge locally and internationally. We are especially thankful to be supported by you all in organizing SWUICE 2024 with the aim of exchanging advanced knowledge in education. I, therefore, wish you a fruitful conference, so that we can bring back what we learn to help promote quality education for our children.

I would like to thank all our organizing partners, keynote speakers, presenters, and all the participants for making SWUICE 2024 possible. Most important of all, I would like to thank all the organizing committee members for their hard work and their commitment in making SWUICE 2024 a platform for international exchange and networking. Hopefully, we all will meet again for the fifth Srinakharinwirot University International Conference on Education.

Rungtiwa Yamrung

Assistant Professor Dr. Rungtiwa Yamrung

Dean, Faculty of Education

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ORAL PRESENTATION SCHEDULE

Thursday, July 4, 2024

Presenters meet for Preparation at 14.00 pm (ICT, Thailand time)

Presentation Starts at 14.15 pm (ICT, Thailand time)

Via Zoom Meeting

Room 4:

Chairperson: 1. Assistant Professor Dr.Ornuma Charoensuk
2. Assistant Professor Dr.Taviga Tungprapa

No	Authors	University	Research Topic
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2	Arvie Joy T. Villegas	San Pedro College, Philippines	SOCIOECONOMIC LIFESTYLE AND THE PERFORMANCE OF SENIOR HIGH SCHOOL TEACHERS AMIDST PANDEMIC
3	Zohaib Hassan Sain	Superior University, Pakistan	EXPLORING THE CHATGPT ERA: FINDING EQUILIBRIUM BETWEEN INNOVATION AND TRADITION IN EDUCATION

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Full Papers

THE RELATIONSHIP BETWEEN ADAPTIVE TEACHER SUPPORT AND STUDENT ENGAGEMENT IN SCHOOL: A BASES FOR LEARNING AND DEVELOPMENT PROGRAM IN THE LIANGA DISTRICT, SURIGAO DEL SUR DIVISION

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ABSTRACT

This research explores the relationship between adaptive teacher support and student engagement within basic education in the Lianga District, Surigao del Sur Division. Utilizing stratified random sampling, the study recruited 353 participants to assess various dimensions of teacher support and student engagement, including adaptive and non-adaptive support with different levels of regulation and affective, behavioral, and cognitive engagement in school activities. The study's methodology encompassed a pilot-tested questionnaire for data collection, followed by descriptive and inferential statistical analyses to examine the hypothesized relationships. Findings indicate a significant influence of adaptive teacher support on student engagement, especially in fostering students' interest in education. Specifically, adaptive support with much regulation and non-adaptive support with little regulation were found to have a positive impact on students' educational interests. These insights underscore the importance of tailored teacher support strategies in enhancing student engagement and suggest potential for educational policy and practice refinement in the District. This research contributes to the broader discourse on effective teaching practices, offering evidence-based recommendations for educators and policymakers aiming to improve student outcomes through adaptive support mechanisms.

Keywords: adaptive teacher support, student engagement, educational interest, stratified random sampling

Introduction and Rationale

The issue of student engagement in the Lianga District of Surigao del Sur Division, Philippines, is multifaceted and influenced by various factors, including socio-economic challenges. Out-of-school youth particularly struggle to access opportunities for civic engagement (Castillo et al., 2023). Compounding this issue is the lack of consensus on the definition of student engagement, reliable measures, and validation studies (Appleton et al., 2008). Relationships with teachers and peers play a crucial role in fostering student engagement (Gonzales et al., 2015). Additionally, involving students in understanding and addressing their engagement can be especially effective in low-income communities (Callingham, 2016). These insights highlight the need for a comprehensive approach encompassing institutional support, reliable assessment tools, and the cultivation of positive relationships to tackle student engagement in the district.

Examining student engagement in the Lianga District is vital for several reasons. Villaluz et al. (2018) stress the importance of community engagement in enhancing learning outcomes and faculty development, which could benefit the district's educational system. Enerio (2021) identifies key factors influencing student engagement, such as competence, autonomy, and supportive relationships, highlighting the role of support services and faculty training. Collectively, these studies illustrate the significance of investigating student engagement in Lianga District to improve educational performance, address social issues, and enhance civic and political involvement.

Research consistently shows a positive correlation between teacher support and student engagement in basic education. Fitriyani and Gusripanto (2021) found that teacher support significantly boosts student engagement. Ansong et al. (2017) highlighted the role of classmates and parental support in enhancing engagement. Ampomah (2021) underscored community support's importance in overcoming challenges and promoting access to education. Archambault et al. (2020) noted that teacher involvement and autonomy support are particularly beneficial in low-income schools. These findings collectively suggest

that adaptive teacher support, encompassing involvement, autonomy, and structured guidance, can greatly enhance student engagement in the Lianga District.

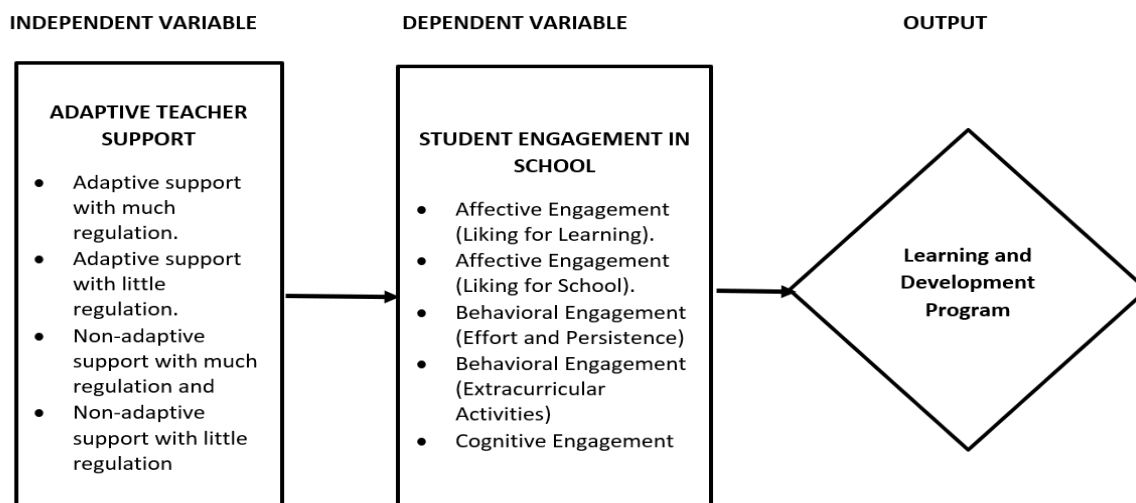


Figure 1 Conceptual Framework

The conceptual framework of this study in Figure 1 explores the relationship between adaptive teacher support and student engagement, aiming to develop an effective learning and development program. Adaptive teacher support, measured using the Questionnaire on Teacher Support Adaptivity (QTSA) from Van De Pol et al. (2022), includes various types of support ranging from high to low regulation. Student engagement, defined by Hart et al. (2011) through the Student Engagement in Schools Questionnaire (SESQ), encompasses affective, behavioral, and cognitive dimensions. Clearly defining each variable ensures precise measurement, facilitating the development of programs that enhance student engagement through appropriate teacher support.

Existing literature underscores the crucial role of teacher support in fostering student engagement and adaptive competencies (Chong et al., 2018). However, further research is needed in specific contexts, such as the Lianga District in Surigao Del Sur Division, to understand its unique dynamics. The potential of teacher support to improve academic performance and the need for personalized learning environments underscore this urgency (Klem & Connell, 2004). Community engagement also plays a significant role in developing adaptive capabilities among student teachers (Hlalele & Tsotetsi, 2016). Studying the relationship between adaptive teacher support and student engagement in this district has global and social implications, contributing to effective learning programs and informing teacher training initiatives (Zidán & Clavera, 2016).

Research Objectives:

The study investigates the relationship between adaptive teacher support and student engagement in school, focusing on assessing the levels of adaptive and non-adaptive teacher support with varying degrees of regulation, as well as different aspects of student engagement, including affective engagement (liking for learning and school), behavioral engagement (effort, persistence, and extracurricular activities), and cognitive engagement. It aims to determine the significant relationship between adaptive teacher support and students' interest in education and the influence of adaptive teacher support indicators on this interest. Conducted as a basis for a learning and development program in the Lianga District, Surigao del Sur Division, the study tests the hypotheses that there is no significant relationship or influence of adaptive teacher support on students' engagement and interest in education.

Scope and Limitation

The study, conducted in the Lianga District, Surigao del Sur Division, involved 353 elementary and secondary learners selected through stratified random sampling. It included all learners within the district and excluded those not enrolled at these levels, with participants free to withdraw anytime. The rural, educationally underdeveloped setting of Lianga was chosen for its representative challenges in student engagement and adaptive teacher support. The study focused on the relationship between these

variables, excluding other factors like home environment and social influences. The findings, specific to the Lianga District, aimed to provide insights and recommendations for local school leaders and policymakers to enhance educational quality through targeted programs.

Research Methodology

Sampling

The researchers employed stratified random sampling to select participants from elementary and secondary learners in Lianga District, Surigao del Sur Division. The population was divided into two strata, elementary and secondary learners, with sample sizes determined using Slovin's formula. Participants were randomly selected from each stratum based on grade level proportions, with close collaboration with school administrators and teachers to ensure representativeness. Inclusion criteria specified enrollment in the district, elementary or secondary level, and absence of diagnosed learning disabilities or mental health conditions. The study aimed for 353 participants, split between elementary (176) and secondary (177) levels. Findings provided valuable insights for educational policy-making in the district.

Research Tools

In this study, the researchers adapted Hart's (2011) Student Engagement in Schools Questionnaire (SEQ) for the dependent variable, comprising 5 indicators and 33 items, with internal consistency estimates ranging from .65 to .95, indicating good reliability. For the independent variable, they used the Questionnaire on Teacher Support Adaptivity (QTSA) by Van De Pol et al. (2022), which included 4 indicators and 21 items. The QTSA demonstrated high reliability for adaptive support with much and little regulation ($>.80$), acceptable reliability for non-adaptive support with little regulation ($>.70$), and inadequate reliability for non-adaptive support with much regulation ($<.70$). Both questionnaires were measured on a 5-point scale from 1 (totally disagree) to 5 (totally agree).

Data Collection

To ensure data validity and reliability, a pilot test of the questionnaire was conducted with 30 participants randomly selected from both elementary and secondary levels in other district in Surigao del Sur Division. The questionnaire demonstrated excellent reliability (Cronbach's $\alpha = 0.9$). Following the pilot test, researchers obtained permission from the school administration, explaining the study's purpose, procedures, and expected outcomes. Questionnaires were then distributed in classrooms, with ample time given for completion and researchers available for any inquiries. This procedure upheld data reliability and validity while ensuring participants' awareness and consent.

Ethical Issues

The study addressed several ethical considerations. Firstly, informed consent was obtained from participants or their legal guardians, explaining the study's purpose, methods, risks, benefits, and the right to withdraw. Secondly, privacy and confidentiality were ensured. Thirdly, fairness and equity were maintained in participant selection, data collection, and analysis to prevent bias. Additionally, the study underwent district research review for ethical compliance. Approval from the relevant ethics committee was obtained before commencement. Finally, researchers committed to using data solely for research purposes, conducting honest analysis, and disclosing any conflicts of interest.

Data Analysis

Data collection, guided by a district statistician, involved administering questionnaires, followed by tallying, scoring, and categorizing the gathered data. Descriptive analysis computed statistics for adaptive teacher support and student engagement indicators, facilitating evaluation across Lianga District schools. Hypothesis testing, including Pearson's correlation, assessed the relationship between adaptive teacher support and students' educational interest. Regression analysis determined the impact of adaptive teacher support indicators on students' interest in education, constructing a model with students' interest as the dependent variable and adaptive teacher support indicators as independent variables. Findings were analyzed against hypotheses to identify significant relationships, informing a tailored learning and development program for the Lianga District, Surigao del Sur Division.

Discussion of Results and Recommendations

This section discusses the results, conclusion, and recommendations, analyzing how different levels of adaptive teacher support impact student engagement. The study shows varying effects of adaptive support on affective, behavioral, and cognitive engagement, highlighting a significant relationship between adaptive teacher support and student interest in education. These insights form the basis for recommendations to enhance educational practices, aiming to create a supportive and engaging learning environment tailored to diverse student needs in the Lianga District.

Results

Level of Adaptive teacher support

Table 1

Level of Adaptive Teacher Support in Lianga District

	Std. Deviation	Mean	Descriptive Level
Adaptive support with much regulation	0.62	4.35	Very High
Adaptive support with little regulation	0.69	3.97	High
non-adaptive support with much regulation	0.81	4.08	High
non-adaptive support with little regulation	0.89	4.06	High
Overall	0.58	4.11	High

Table 1 illustrates adaptive teacher support levels in the Lianga District, emphasizing varying degrees of regulation. The data show a strong preference for adaptive teaching strategies, particularly those with considerable regulation, followed by strategies with minimal regulation. Non-adaptive support, regardless of regulation, receives slightly lower but notable levels of support. Despite some variability, consistent application of adaptive support is evident throughout the District. The preference for highly regulated adaptive support may be attributed to its perceived effectiveness in improving student performance.

Level of Student Engagement in Schools Lianga District

Table 2 presents an overview of student engagement in the schools of Lianga District, assessing it across affective, behavioral, and cognitive dimensions. The findings highlight a predominantly high engagement level among students, with behavioral engagement—marked by students' effort and persistence—standing out as particularly strong. This result indicates a profound commitment to their studies. In contrast, the affective dimension, which gauges students' enjoyment of learning, showed lower levels of engagement, though it still scored well on the engagement scale. Despite some variations in engagement levels across different sectors, the data uniformly suggests strong student engagement throughout the District, signaling a generally positive attitude towards education. The results imply that a blend of extracurricular activities, relational learning, and supportive teaching practices can significantly enhance student engagement in public education.

Table 2

Level of Student Engagement in Schools Lianga District

	Std. Deviation	Mean	Descriptive Level
Affective: Liking for Learning	0.94	3.61	High
Behavioral Engagement (Effort & Persistence)	1.19	4.09	High
Behavioral Engagement (Effort and Persistence)	1.02	3.64	High
Behavioral Engagement (Extracurricular Activities)	1.21	3.73	High
Cognitive	1.12	3.76	High
Overall	0.93	3.77	High

The significant relationship between adaptive teacher support and students' engagement in students' interest in education in Lianga District.

Table 3 presents correlations between adaptive teacher support and student engagement in various dimensions in Lianga District. Significance levels (*indicating strength) reveal a significant relationship, with most correlations rejecting the null hypothesis. Notably, correlations vary across engagement dimensions, with some (like cognitive engagement) showing stronger significance. This underscores the pivotal role of tailored support in fostering positive student outcomes.

Table 3

Significant Relationship Between Adaptive Teacher Support and Students' Engagement in Students' Interest in Education in Lianga District

Adaptive teacher support	Student Engagement					Overall
	Affective: Liking for Learning	Behavioral Engagement (Effort & Persistence)	Behavioral Engagement (Effort and Persistence)	Behavioral Engagement (Extracurricular Activities)	Cognitive	
Adaptive support with much regulation	.163*	0.133	0.121	.177*	0.141	.173*
Adaptive support with little regulation	0.027	0.071	0.101	0.016	0.056	0.019
Non-adaptive support with much regulation	0.102	0.066	0.061	.156*	0.107	0.117
Non-adaptive support with little regulation	0.167	0.371	0.407	0.034	0.15	0.114
Overall	0.026	.166*	0.063	.192**	0.056	0.124
	0.726	0.024	0.396	0.009	0.448	0.093
	0.03	.218**	.155*	.248**	0.122	.189*
	0.687	0.003	0.035	0.001	0.099	0.01
	0.093	.195**	0.131	.254**	0.134	.195**
	0.209	0.008	0.077	0.001	0.07	0.008

Significant influence of adaptive teacher support indicators on students' interest in education in Lianga District

Table 4 presents results from regression analysis testing the impact of adaptive teacher support on student interest in education in Lianga District. The overall model is statistically significant ($F = 2.989$, $p = 0.02$), rejecting the null hypothesis. Specifically, support with much regulation and non-adaptive support with little regulation significantly influence student interest ($B = 0.25$, $Beta = 0.165$, $p = 0.047$; $B = 0.303$, $Beta = 0.287$, $p = 0.035$, respectively). These findings emphasize the importance of tailored support approaches in shaping educational outcomes.

Table 4

Significant Influence of Adaptive Teacher Support Indicators on Students' Interest in Education in Lianga District

Adaptive teacher support indicators	Students' interest in education in Lianga District			
	B	Beta	t	Sig.
(Constant)	2.247		4.076	0.000
Adaptive support with much regulation	0.25	0.165	1.996	0.047
adaptive support with little regulation	-0.047	-0.034	-0.361	0.718
Non-adaptive support with much regulation	-0.151	-0.13	-0.949	0.344
Non-adaptive support with little regulation	0.303	0.287	2.127	0.035

R	0.25
R Square	0.063
Adjusted R Square	0.042
F	2.989
Sig.	0.02

Discussions

The findings on the level of adaptive teacher support in the Lianga District revealed that adaptive support, whether with much or little regulation, was more effective than non-variable support. This is consistent with Walker and Koedinger (2011), who suggest that tailored teacher support is more effective than non-variable support. Similarly, Gaudioso and Hernandez-del-Olmo (2012) highlighted the success of predictive models in adaptive educational systems, and Kommers et al. (2008) found greater learning achievements with adaptive support systems compared to non-adaptive ones.

Regarding student engagement in schools in the Lianga District, the study's outcomes aligned with various research findings emphasizing the multifaceted nature of student engagement in public education. Johnson (2008) highlighted the crucial role of extracurricular activities and relational learning in fostering engagement. Upadyaya and Salmela-Aro (2013) pointed out the strong correlation between high engagement levels and academic achievement, as well as the influence of contextual factors like parental support and teacher encouragement. Lam et al. (2012) also contributed by identifying the importance of motivational teaching methods and social-emotional backing in promoting student engagement.

The study found a significant relationship between adaptive teacher support and students' engagement and interest in education in the Lianga District. These findings are consistent with previous research underscoring the critical role of teacher support and adaptability in elevating student engagement and interest in learning. Studies indicate that teachers who employ motivational and autonomy-supportive teaching methods significantly impact student engagement. Creating a personalized learning environment facilitated by teacher support has been linked to enhanced student engagement and achievement (Klem & Connell, 2004). Furthermore, schools that prioritize relational learning and collaborative efforts are more successful in meeting students' motivational needs, thereby boosting engagement levels (Johnson, 2008).

Additionally, the study identified a significant influence of adaptive teacher support indicators on students' interest in education. This aligns with existing research indicating that both adaptive and non-adaptive forms of support positively affect student interest, especially when adaptive support is effectively combined with considerable regulation (Kommers et al., 2008). Moreover, the effectiveness of these support strategies can vary based on their application intensity and the time allocated to them (Clarebout et al., 2010). The impact of adaptive support might also depend on additional factors, such as the certainty of responses (Mory, 1994) and individual variances, including giftedness (Zeidner & Shani-Zinovich, 2011). These insights suggest that a strategic mix of adaptive support with substantial regulation and non-adaptive support with less regulation could be particularly effective in elevating students' interest in education.

Conclusions

Based on the comprehensive analysis presented in Tables 1 through 4, it was evident that adaptive teacher support significantly influenced student engagement and interest in education within the Lianga District. The data showcased a prevalent preference for adaptive teaching strategies among educators, as indicated by the high levels of adaptive teacher support observed across various categories. Robust student engagement across affective, behavioral, and cognitive dimensions highlighted active involvement in the learning process. A significant relationship between adaptive teacher support and student engagement, particularly in cognitive engagement, underscored the pivotal role of adaptive support in fostering positive student outcomes. The regression analysis reaffirmed the importance of adaptive teacher support, showing statistically significant positive influences on students' interest in education. These findings advocate for

tailored support strategies to enhance educational outcomes and encourage further research into the mechanisms driving the influence of adaptive teacher support on student outcomes within the District.

Recommendations

Drawing insights from Tables 1 to 4, several recommendations for future research and educational strategies in Lianga I District emerge. The notable presence of adaptive teacher support necessitates deeper exploration of contributing methods and strategies. Qualitative research, such as interviews or focus groups with educators, is crucial for understanding successful approaches and areas for enhancement in adaptive teaching practices (Xerri, 2018). The correlation between adaptive teacher support and student engagement highlights the need for interventions to improve support and its longitudinal effect on engagement, considering factors like student demographics and classroom dynamics (Siddiqi, 2018). Regression analyses reveal varying impacts of adaptive support strategies on student interest, emphasizing tailored interventions sensitive to individual needs (Johnson et al., 2014). Prioritizing professional development for teachers to provide adaptive support efficiently is imperative. Additionally, the diversity in student engagement levels prompts further exploration into underlying causes within Lianga I District to inform strategies that boost student motivation and participation. Overall, these studies highlight the pivotal role of adaptive teacher support in enhancing student engagement and interest, fostering a supportive and stimulating learning environment in Lianga I District and beyond.

Learning and Development Program

A comprehensive Learning and Development Program is proposed for the Lianga District, leveraging adaptive teacher support, student engagement, and interest in education for positive outcomes. Initiatives target critical educational goals with distinct objectives, stakeholders, and success indicators. Program 1, "Adaptive Teaching Excellence," aims to improve teacher support strategies to enhance student interest. Program 2, "Student Engagement Enhancement," collaborates with stakeholders to boost engagement and promote student-centered learning. Program 3, "Monitoring and Evaluation Framework," establishes ongoing monitoring and feedback mechanisms to ensure effectiveness. Program 4, the "Lifelong Love for Learning Initiative," aims to cultivate a positive learning environment and intrinsic motivation among students. Collectively, these programs aim to enhance educational outcomes and foster a positive learning culture in the Lianga District.

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LEARNING MANAGEMENT TO ENHANCE THE 21ST CENTURY SKILLS OF AIRLINE BUSINESS STUDENTS

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Abstract

This research aimed to investigate learning management and skills enhancement in the 21st century for students majoring in Airline business. It also aimed to study the problems, suggestions, and learning management strategies for skills enhancement in the 21st century. The target group for this research consisted of 21 students majoring in Airline business from year 1 to year 3, using purposive sampling. The research tools included questionnaires, interviews, and focus group discussions. The statistical analysis includes percentages, means, standard deviations (S.D.), and content analysis from closed-ended questionnaires and interviews.

The research findings revealed that 15 female respondents accounted for 71.43%, with an average age of 19 years, representing 47.62%. Moreover, 85.62% had a grade point average of 3.00 or higher. Most of them were studying in the first-year level, focusing on 21st-century skills, including learning and innovation skills. The development of learning and innovation skills was guided by transforming the role of teachers from instructors to coaches, promoting students to explore the world of knowledge (Teach Less Learn More), and seeking new knowledge. Instructors must manage learning appropriately and keep up with ICT skills in information, media, and technology. Practical training was diverse, relying on knowledge in information, media, and technology, using information communication sensibly, accurately, and with maximum benefit. Life and career skills emphasized real-world practice.

Keywords: Learning management, 21st century skills, Airline business students.

Introduction

The world of constant change is filled with challenging transformations. Moreover, these changes occur rapidly. The world is moving towards a "knowledge-based society." The essential skills in a knowledge-based society are critical thinking skills, analytical skills in selecting and processing vast amounts of information and data. It is no longer about memorization skills. However, in the current situation, teachers still teach through lectures, focusing on content from textbooks rather than adhering to learning standards/indicators according to the curriculum. Teaching is about delivering content, not emphasizing processes that lead to low learning outcomes compared to many other countries. Therefore, in managing teaching and learning in this era, the focus should be on fostering students to develop new future skills, so that students have the knowledge, skills, and basic characteristics to live in the modern economic society. Using the concept of "21st Century Skills," organizations have developed a framework to cultivate skills for the 21st century. This framework consists of three key skills, namely:

1. Focus on developing skills in learning and innovation, emphasizing the ability to think critically and solve communication problems, fostering collaboration, creativity, and innovation.

2. Emphasize skills in information, media, and technology, aiming to access information and media appropriately, manage, connect, evaluate, and create information, as well as apply ethics and laws in using information technology.

3. Focus on life and career skills, aiming to be flexible and adaptable, have life goals and determination, understand society and accept cultural differences, have potential for production, accept feedback, be a leader, and take responsibility.

4. Therefore, the skills of the 21st century are important tools for enhancing collaborative learning among educational administrators, teachers, and students based on the concepts of "learning process is more important than knowledge" and "process of finding answers is more important than answers". Using the foundation of "21st century skills" to support the challenges and changes that will occur in Thailand in the 21st century, with the urgent task of entering the ASEAN Community in 2015 as the first goal to test the potential of the aforementioned concepts and strategies for using 21st century

skills. This is to elevate the effectiveness of education and promote the production of individuals with the ability to compete on the global economic stage in the 21st century, while maintaining the Thai identity and the principles of sufficiency economy philosophy in order to understand the essence of self. Innovation and development are crucial for the increasing economic growth. Significant progress is happening in current work methods, as well as opportunities to connect and collaborate with individuals globally, and the ability to perform multiple tasks automatically. Improving work processes, 21st-century skills, and life and career skills are key to growth in the new era. Aligning with Walailak Kongprachan (2019) when the digital world is rapidly evolving, humans have little choice but to "adapt to change" to survive and keep pace with the digital world by learning "21st-century skills." Learning management to enhance skills in the 21st century is essential for students majoring in Airline business.

Purpose of the research:

1. To investigate the skills of students majoring in Airline business in the 21st century.
2. To study the development strategies of skills in the 21st century for students majoring in Airline business.

Research Scope

Population and Sample Groups

The target population was 15 students majoring in Airline business. They were the specific target group. The instructor had organized activities to develop students' characteristics and learning skills in the 21st century. The students had been developed with skills of the 21st century according to the 3Rs x 8Cs learning skills. The instructor had organized activities to develop students' characteristics and learning skills in the 21st century for Airline business students. This included organizing learning exchange platforms and disseminating learning management techniques that align with the skills of the 21st century. The research process and research methodology were as follows:

Step 1: Research Project Preparation involved studying documents, textbooks, articles, various statistical data, the situation of problems in developing student activities, obstacles, as well as reports from various organizations both domestically and internationally related to the development of skills in the 21st century for students in leading schools to reduce study time, increase knowledge time, and organize a research framework.

Step 2 : Research Implementation was the process of creating tools for data collection, developing and verifying the content validity and reliability of the tools, then collecting data from actual sample groups. The collected data was then checked for completeness, statistically analyzed, and results discussed.

Research and quality assurance tools

The tools used for this study included questionnaires, interviews, and individual behavior recording forms. The questionnaires were created to ensure accuracy and clarity of content, and are reviewed by experts. They were also evaluated and revised to make them comprehensive tools for data collection and analysis.

Data collection

In order to ensure the completeness and accuracy of the collected data, as well as to address the research questions in line with the set objectives, there were two methods for data collection as follows:

1. The first method was collecting data from primary sources. In this research, the data obtained from the field included questionnaires, interviews, behavior recordings, and other forms of data collection. These data were recorded and analyzed statistically.
2. The second method is collecting data from secondary sources. These sources include information gathered from books, research articles, academic papers, and other research works.

Data analysis

The statistical method used for data analysis is known as Descriptive Statistics, which is used to describe various variables, including percentages.

Research findings

A study on the skills of 21st-century Airline business students at Suan Dusit University's Lampang Education Center found that students majoring in Airline Business at Suan Dusit University, Lampang Education Center, the target group consisted of 15 female students, accounting for 71.43 percent, with an average age of 19 years, accounting for 47.62 percent. The majority had a GPA of 3.00 and above, accounting for 85.62 percent, with most of them studying in the first year.

The skills of the 21st century include learning and innovation skills, as well as life and career skills that focus on practical training in Airline business knowledge and expertise. They promote theoretical learning alongside practical application and the ability to use knowledge to solve real problems. They are flexible and adaptable, creative thinkers, possess social and cross-cultural skills, and actively engage in activities with society and communities that align with the critique by Panit (2012, pp. 16-21).

1. Learning and innovation skills are crucial for students to enter the increasingly complex world of work. These skills include creativity and innovation, critical thinking and problem-solving, as well as communication and collaboration. The main activity conducted by the curriculum is the "Preparing for Phetchaburi Dusit" project. This project aimed to prepare students for their professional careers in the Airline industry by providing practical training in using various signal gestures, similar to those used by aircraft marshals, to give instructions to pilots while the aircraft is landing at the airport. In the topic of airport services in the aircraft parking area, there was an activity called "English for Inflight Service" in the course "Preparing for a Career in the Airline Business". This activity focused on managing passenger services and was divided into various scenarios such as boarding passengers, making welcome announcements, conducting emergency equipment demonstrations, solving problems, providing drink and meal services, assisting sick passengers, and dealing with passengers who had forgotten duty-free items. Asst.Prof.Dr.Mike Mcdannald and his family were invited to participate in this activity as native English speakers to simulate real-life situations and engage in interactive discussions. The activity aimed to train students in handling specific challenges and providing excellent service on board the aircraft. The activity was called "Be our family @Airline Business SDULP: Siblings meet siblings".

2. Information, media, and technology skills are essential in today's world where information is widely disseminated through various media and technologies. Students need to demonstrate critical thinking skills and adaptability in their work, drawing on knowledge in areas such as information literacy, media literacy, and technology literacy. The main activity conducted by the curriculum is a seminar on the topic "Turning COVID into an opportunity: A fresh perspective on domestic airline services." During this activity, students developed skills in research and the research process, as well as seminar management to gather decision-making information for the organization. Additionally, students majoring in Airline business presented their academic activities at the national academic conference organized by the Japan-Thailand Education Association.

3. Life and career skills are necessary for students to succeed in both their personal and professional lives in the current era. Important life skills include adaptability and resilience, as well as creativity and innovation. Hence, the relevant and beneficial activities organized for students are: English skills development projects, such as Test of English for International Communication (TOEIC), English for Fun and Sip & Talk conversational-related activities, which focused on developing students' listening-speaking skills. Moreover, First Aid project and Recovery, personality development activities, which focused on training for first-year students regarding grooming and appearance as well as mock interview activities to enhance interview skills for the students in terms of preparations (personal grooming) and preparation of documents for job applications (professional resume). Other workplace preparation and people/human skills trainings include self-introduction, problem solving, communication in Thai English and Chinese, and essentially, internship at Thai Airways PLC's ground passenger services section and the ground office of Bangkok Airways at Suvarnabhumi International Airport to gain real work experiences. Apart from the mentioned, the students were participated in social community service functions, e.g., checked dam's constructions to store/conserved forests water.

Guidelines for developing skills in the 21st century for students majoring in Airline business

Developing learning management guidelines in the 21st century that focus on professional competencies to enhance future skills in the 21st century for students majoring in Airline business adhere to the framework of the learning support system in the 21st century as follows.

1. Develop a standardized learning system in the 21st century by utilizing real data from the observation process. Formulate questions from learning sources to connect to subject-specific learning objectives, knowledge integration, and content redundancy. Foster inquiry skills, gather knowledge to create understanding that is deeper than surface-level, and cultivate expertise based on students' interests and abilities. Utilize high-quality assessment principles for evaluation.

2. Establish a skills assessment system in the 21st century by creating a balance in quality assessment (knowledge, vocational skills, work attitudes, and career perspectives) to leverage the benefits of reflective outcomes from students' practices for improving tasks (assessment tools based on real-world practices, attitudes, and knowledge). Incorporate technology.

3. Create a curriculum and teaching system for the 21st century. Teaching and learning will be organized to create learning skills in the 21st century with an interdisciplinary focus. (Knowledge gained from many disciplines combined). Creating opportunities to apply integrated skills across content areas. and create a competency-based learning system. Creating innovations and integrated learning methods supported by technology as well as inquiry-based learning, and how to learn from using problems as a basis learning resources from the community and integrated into educational institutions according to the learning process.

4. Create a professional development system for the 21st century by training in integrated skills, knowledge, and abilities. Dimensions of teaching are used with a variety of teaching techniques. Encourage the practice of in-depth knowledge and ability in problem solving and critical thinking. Teachers must be able to analyze students in terms of their learning styles, intelligence, weaknesses, and strengths and be able to conduct qualitative research that focuses on the quality of the students, including developing higher abilities to use in formulating strategies and organizing learning experiences that are appropriate to the learning context. There is continuous assessment of learners to build skills and develop learning. Share knowledge between learning communities by using various channels to communicate.

5. Create a learning environment system in the 21st century, creating learning practices, receiving support from personnel and supportive physical environment to help teaching and learning achievement; provide professional support to the community in terms of education, participation, sharing best practices with each other and integrating various skills into classroom practice. In doing so, students learn from doing practical things according to the context, especially project-based learning. Create opportunities to access quality media, technology, tools or learning resources.

Teachers' roles: Teachers are encouraged to promote 8 essential characteristics for learners in the Gen Net/Tweenies era:

1) Promote responsibility and self-reliance in learning... meaning the ability of learners to plan their own learning. Set your learning goals, know how to reach that goal flexibly. As well as being disciplined in one's own learning. without having to be forced by anyone. Also, include having maturity within oneself. This first skill It is considered to be of utmost importance and is to be cultivated not only by teachers within the education system or the society, but the cultivation and instilling from the family are important.

2) Promote thinking skills (Thinking Skills). It means that learners can develop or receive training concerning thinking skills systematically. Resulting in being able to think efficiently. Training in thinking skills consists of thinking in many ways. However, what is very important for Gen Net/Tweenies learners is the development of creative thinking skills, analytical thinking contemplation as well as skills in problems solving.

3) Promote skills in working effectively with others, meaning that learners have the ability to coordinate well with others. Have leadership skills including being a good follower; able to communicate with others to carry out various tasks, such as assigning work, transfer of knowledge and experiences, goals sharing so as being a good listener and collaborator. Moreover, Gen Net/Tweenies learners should be trained to have participatory learning skills. The skills that need to be focused on include basic communication skills.

4) Promote inquiry/research skills, meaning that learners have the characteristics of being good explorers, like to research various things/topics to prove/validate their assumptions by observing and comparing the similarities and differences, such traits cover skills in selecting/screening for appropriate information accurately, quickly, and efficiently.

5) Promote enthusiasm, meaning that learners must be proactive. That is, not just being a good (passive) listener in class or online learning. A proactive learner means that the learner must be good at self-learning. For learning from experts, it is advisable that they pay attention to learning, study the content, know how to ask/answer questions in a context that facilitates meaningful learning, and practice expressing opinions circumstantially, appropriately, and correctly.

6) Promote basic ICT skills, meaning the ability to use computer and related technology and telecommunications to help learning effectively. Such skills include search skills, skills in using ICT communication tools, and/or skills in selecting appropriate software, etc.

7) Promote skills in using international languages, meaning developing students to have skills, knowledge, and ability to use a second language effectively. It is a language that is not the mother tongue or main language spoken in the region. The international language that is the most important is English because it is considered an international language that has been widely used globally and in the internet world.

8) Promote interest in culture and being aware of things: It means cultivating students to be the people who care about and see the value in their own culture and to make oneself aware, one's own "roots" or history and the society in which one lives to be able to compare similarities or different in society/the world around oneself, especially in the era of globalization.

C-Teachers, which Petchara Budseetha (2017) has synthesized and summarized the necessary skills of teacher. To elaborate, they are teachers who have various skills which are necessary for learning. Such teachers consist of 8 essential skills:

1. C-Content: Teachers must be experts in the content they are responsible for teaching. It is considered an extremely necessary and indispensable characteristic for teachers. Even though the teacher has all the other C-skills but if he/she lacks expertise in their teaching content, it is impossible for students to learn from activities created by teachers who lack of in-depth knowledge.

2. C-Computer (ICT) Integration: Teachers have the skills to use computers to integrate with classroom teaching, especially for designing learning activities suitable for learners (If learning activities are designed effectively, they can also promote the thinking process skills of students very well)

3. C-Constructionist: This means that the teacher is a creator. Constructionism which focuses on learning can occur as an internal matter within the individual from engaging in any activity to create new knowledge that is linked to previous experiences or knowledge that was within the individual prior. An instructor who is a creator not only uses this skill to develop new knowledge through being hands-on, by ways of producing various pieces/objects, such as artwork, computer programming, etc.

4. C-Connectivity means that teachers have the skills to organize activities that connect students. Teacher friends both in the same educational institution and in different educational institutions or connect educational institutions, homes, and/or communities into Part of the learner's learning environment Because of the idea that learning will happen well. When what is learned has a direct relationship or related to interests. Learners' experiences, beliefs, society, and culture the ability for teachers to connect what students learn in class with their peers. The more home and social environment the learner are a part of, the more connections the learner can make between what he or she learns and direct experiences.

5. C-Collaboration means that the teacher can learn collaboratively with students effectively, that is, the teacher must have skills in the role of a coach or a good advisor for learning (mostly in the form of self-learning) of the students Including being a learner yourself sometimes. Important skills of being a good coach or consultant include creating a learning base for learners at appropriate intervals, facilitating learners to create a learning base that can further their participatory learning. However, learning will be limited for students if they do not have an appropriate learning base from the teacher.

6. C-Communication means that teachers have the skills to communicate effectively with students. This is not only about developing skills in good communication techniques such as verbal explanations, texts, examples, etc., but also includes the use of a variety of media that allows teachers

to transmit the content they want to convey. offer or create an environment that allows learners to learn on their own appropriately.

7. C-Creativity means that the teacher is a creative person. Because the role of teachers in the next era does not focus on being the one who directly feeds/passes on knowledge to students. If we focus on the role of creativity, design a learning environment that encourages learners to learn on their own. Teachers are expected to be able to create new activities that promote student learning.

8. C-Caring means that teachers must have love, desire, and sincere concern for students. In all the skills mentioned above, such skill is considered the most important skill. This is because the teacher has love, good wishes, and concern for the students, which will make the students trust the teacher.

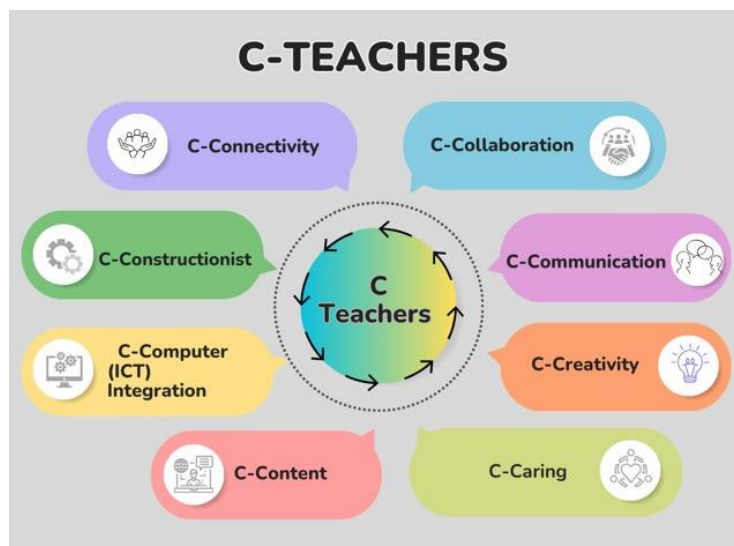


Figure 1 C-TEACHER
Petchara Budseetha (2017)

The results and key points stated in the mentioned learning environment can make learners alert and relaxed, which is considered the most viable element for the brain to learn effectively. Other key and urgent factors include preparation of teachers, related educational personnel and learners, review of the curriculum used for teaching, principles, theories, models, teaching and learning methods currently in use and those that will be implemented in the future.

Results of Discussion

From the results of the analysis of learning management to enhance 21st century skills of Airline business students, the discussion can be stated below:

For improvement, teaching and learning towards a collaborative learning for both teachers and students that focuses on the learning process being more important than just applying knowledge. As well, the process of finding answer using the base of strategic/systematic/analytical thinking. For learning and innovation skills, it was found that learners were able to work together with others as they adapted well and fully cooperated in working to achieve common goals driven/fostered by project-based learning process skills. In addition, organizing and applying the concept of Teach Less, Learn More (Moderate Class More Knowledge), it provided students the ability to create knowledge and seek knowledge by themselves (learning independently). This is in line with Supreeya Siripattanakulhajorn (2005), who studied the subject related to the development of a virtual classroom model with simulation simulations and practice exercises on television production. It stated that changing the way of learning and changing the way of thinking is consistent and balanced with the changes in the world that are changing more drastically day by day, but this change in the way of learning and changing the way of thinking is considered matters that must exist together and must support each other and cannot be separated. The teacher should promote thinking skills meaning think creatively, think analytically, including communicating and working well with others. This is consistent with Vicharn Panich (2013) who studied the subject.... methods for creating learning for students in the 21st century.

For media and technology: It was found that students were able to use technology as a tool for researching knowledge creatively driven from applied processes and methods by teachers with emphasis on communication and quick access to information as well as be able to effective and evaluate information critically according to the standards competency. This is consistent with the results of a study by Vicharn Panich (2013) which he said...the ability to use technology is the ability to select and use various types of technology and have technological processing skills for personal and social development in terms of learning, communication, working, creative problem solving, correctness, appropriateness, and morality, corresponded to ICT literacy. This is in line with Prensky's study on Digital Natives, Digital Immigrants, which clearly indicates that today's learners have changed a lot from the past. become a unique characteristic Due to the rapid rise of digital technology (Digital Technology) For life and career skills Learners can work appropriately with others. and effective Learners have good human relations with friends and teachers. and learners demonstrate a willingness to have a continuous learning process. The reason for this is because Teachers develop students to be flexible in adapting. to receive change by adjusting according to their roles and responsibilities Responsibility that you have received. can be a leader Lead lifelong learning and be effective. Be a leader who creates positive results in your work. and cause creative change along with having skills in living and living together This is consistent with Vichan Panich (2012) who studied learning methods for students said that... the ability to work does not depend on knowing a lot or knowing a little, but it depends on learning skills...ready to learn, eager to learn, learn at any time from any location; have good life skills; able to adapt every time when encountering obstacles and problems in life, and have the ability to use information technology from new phenomena of the 21st century. In addition, Ken K. (2011) wrote...today's world is changing due to advancements in information technology from an industrial economy to a service economy driven by information, knowledge, and a variety of innovations. Those who can adapt and create benefits for the organization by using communication, problem solving, and critical thinking skills will have successful career.

Guidelines for developing skills in the 21st century

- Empowerment: Encourage learners to have freedom in their perception and action. Students need to be allowed to think and act indecently with teachers as a coaches/a trainer; provide learning guidance in the form of a mentor.
- Apply information technology to teaching and learning so that students can access to information unlimited, foster creativity and innovation as well as be open-minded, being ready to accept new ideas or situations/circumstances that arise by thinking logically.
- Information skills: Learners need to be train to equip oneself with IT literacy ability, be able to form own's practical judgement based on facts and figures. Consequently, using knowledge gained as a tool for fact findings and research work.
- Flexibility and adaptability: Flexibility allows students to build positive creativity in various tasks and also creates knowledge and understanding in creating balance, equality in work environment. The traits help transition them to become team persons and help cultivate a good conscience to view and accept his/her differences from other people and time management ability is also important for their success.

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FACTORS AFFECTING ENGLISH SELF-EFFICACY IN ENGLISH LEARNING OF HIGH SCHOOL STUDENT IN CHINA

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ABSTRACT

This research aimed to investigate factors related to and affecting the English self-efficacy among students in Hengzhou Senior High School. 333 students of the school were randomly selected to participate in the questionnaire survey in 2024. The correlation analysis and multiple linear regression analysis were implied, showing the following results: 1) There was a significantly positive correlation between language proficiency, English learning motivation, peer influence, teacher-student interaction, parental educational involvement and the students' English self-efficacy; a significantly negative correlation between foreign language anxiety and English self-efficacy. 2) There were five factors affected the student's English self-efficacy, with three of them $p < 0.001$: language proficiency, foreign language anxiety, and English learning motivation; with two other factors $p < 0.05$: teacher-student interaction and parental educational involvement. 3) Peer influence and cultural attitude showed no significant effect on English self-efficacy. 4) The unstandardized regression equation of the study was as: $\hat{Y} = 1.393 - 0.371X_2 + 0.201X_3 + 0.111X_5 + 0.100X_6 + 0.007X_1$. 5) The standardized regression equation was as: $Z = -0.380X_2 + 0.195X_3 + 0.112X_5 + 0.109X_6 + 0.313X_1$. Suggestions were proposed to enhance students' English self-efficacy as reducing foreign language anxiety, increasing English learning motivation, developing language proficiency among the students, improving teacher-student interaction, and enhancing parental educational involvement.

Keywords: English self-efficacy, high school students, English learning

Introduction

Self-efficacy, first introduced by Albert Bandura in 1997, can be defined as a learner's self-assessment or faith in his ability to successfully complete a particular task or achieve specific performance levels (Pajares & Schunk, 2001), while English self-efficacy can be thus understood as an individual's confidence on various English communication, comprehension on English conversation, engagement and proficiency in English writing (Wang et al., 2017). High self-efficacy leads to a more effective self-regulated learning, efficient goal-setting, and mitigates language learning anxiety, promoting one's class engagement, and it often correlates with better language performance. Studies reveal strong links between self-efficacy and specific English skills. High self-efficacy in listening, speaking, reading, and writing positively accordingly influence one's performance on these areas (e.g., Shehzad et al., 2019; Sun et al., 2021).

The significance of English learning in China lies in its role in helping to promote outstanding Chinese culture and a better international image of the country, enabling individuals to enhance their language and logic abilities, thus providing them with more opportunities and competitiveness for their future development (Huang & Wang, 2019). However, low English self-efficacy is still a common issue among Chinese English learners. The lack of practical English using chances in real life, has led to most Chinese people's English speaking in confidence and other English learning difficulties (Amoah & Yeboah, 2021). Let alone Chinese students in rural areas, who are furthermore confronted with the problem of English educational resource shortage.

Benefiting both academic achievement and the adoption of effective learning strategies, English self-efficacy critically determines one's English learning success. In this case, given the strong link between English self-efficacy and English learning outcomes, factors that affect English self-efficacy are worth further verifying and exploring. Most importantly, the high school students in this research are about to face the most crucial English examination in their lives - the National College Entrance English Examination. However, as these students residing in an area with relatively scarce English educational resources, it has become an essential and non-negligible educational psychological task, beyond

imparting knowledge, for educators to guide the students in perceiving and strengthening their English self-efficacy.

Research Objectives

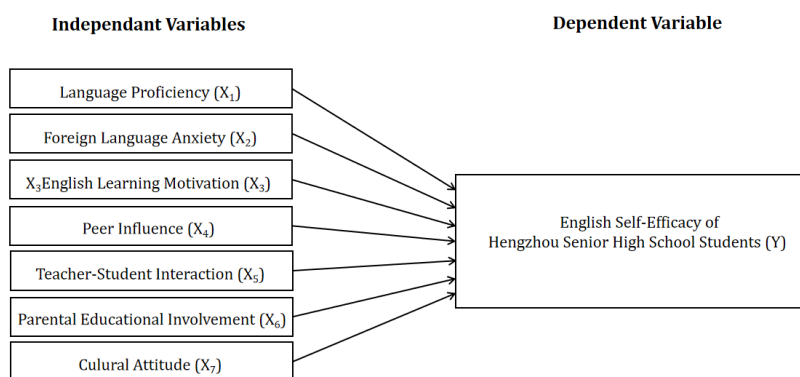
1) To investigate the relationship between language proficiency, foreign language anxiety, English learning motivation, peer influence, teacher-student interaction, parental educational involvement, cultural attitude, and English self-efficacy.

2) To investigate the factors that affecting English self-efficacy of Hengzhou Senior High School students.

Conceptual Framework for Research

Figure 1

Conceptual Framework of the the Research



Research Hypothesis

1) Language proficiency, foreign language anxiety, English learning motivation, peer influence, teacher-student interaction, parental educational involvement, and cultural attitude were the factors related to the English self-efficacy of Hengzhou Senior High School students in China.

2) The effect of language proficiency, foreign language anxiety, English learning motivation, peer influence, teacher-student interaction, parental educational involvement, and cultural attitude were the factors contributed to the English self-efficacy of Hengzhou Senior High School students in China.

Research Methods

A quantitative research method was adopted to explore the determinants impacting the English self-efficacy of students enrolled in the senior high school in China. Base on the data from a questionnaire survey that clarified various students' English learning conditions in certain educational settings, the students' perception of English self-efficacy and the influencing factors were quantified and assessed.

Population and Sample

According to Krejcie and Morgan's table (1970), 333 high school students was selected as the participants through simple random sampling approach out of the 1,260 population base as the research sample. This research had received consent and support from the relevant institutions, all sampling students were willing to participate in the questionnaire survey. All the sample data provided for the study were meticulously collected and verified for accuracy and reliability.

Research Variable

The independent variables of the research are 1) language proficiency, 2) foreign language anxiety, 3) English learning motivation, 4) peer influence, 5) teacher-student interaction, 6) parental educational involvement, and 7) cultural attitude. While the dependent variable is English self-efficacy.

Data Collection Method

An offline questionnaire survey was conducted, and a total of 360 paper questionnaires were sent out to the students to fill out and all the completed questionnaires were retrieved. Upon careful review, 333 valid questionnaires were selected for further analysis. These valid questionnaires then were

meticulously transcribed to the Chinese online questionnaire platform "SoJump" by the researcher, and the data was exported for further analysis.

Research tool

The present research developed a Likert 4-point scale questionnaire, namely English self-efficacy and factors affecting English self-efficacy questionnaire (ESEAFQ), with eight sections, and a total of 79 items. Drawing upon mature scales, the design of the items within each section were tailored to the actual English learning situations of Chinese high school students. The content validity was evaluated using the Index of Item-Objective Congruence (IOC) and reviewed by three educational psychology experts. Items with IOC scores of 0.5 or higher were retained. After expert review, the questionnaire was revised and underwent two pilot tests, demonstrating high reliability. Detailed results are as follows. English self-efficacy (20 items): IOC = 1, Cronbach's Alpha = 0.961, CICT = 0.388 to 0.869. Language proficiency: Assessed by final exam scores designed to match the National College Entrance Examination (NCEE) standards. Foreign language anxiety (10 items): IOC = 1, Cronbach's Alpha = 0.906, CICT = 0.311 to 0.798. English learning motivation (8 items): IOC = 1, Cronbach's Alpha = 0.774, CICT = 0.286 to 0.585. Peer influence (10 items): IOC = 0.67 to 1, Cronbach's Alpha = 0.872, CICT = 0.397 to 0.712. Teacher-Student Interaction (10 items): IOC = 1, Cronbach's Alpha = 0.950, CICT = 0.591 to 0.906. Parental educational involvement (10 items): IOC = 0.67 to 1, Cronbach's Alpha = 0.963, CICT = 0.634 to 0.928. Cultural attitude (8 items): IOC = 1, Cronbach's Alpha = 0.759, CICT = 0.370 to 0.663. The overall Cronbach's Alpha for the questionnaire was 0.816, indicating high reliability.

Data analysis

1) Correlation Analysis: The relationship between the the research dependent variables: language proficiency, foreign language anxiety, English learning motivation, peer influence, teacher-student interaction, parental educational involvement, cultural attitude and the independent variable English self-efficacy will be examined. The correlation coefficient's sign and magnitude will be used to determine the strength and direction of the relationship between each factor and self-efficacy.

2) Multiple Linear Regression Analysis: The impact of dependent variables: language proficiency, foreign language anxiety, English learning motivation, peer influence, teacher-student interaction, parental educational involvement, and cultural attitude on the independent variable English self-efficacy will be examined.

Research Result

Base on the analysis of the available data and the variables, the researchers identified the key issues that have the most significant impact on the English self-efficacy of students at Hengzhou Senior High School.

Table 1

Correlation Coefficient between the Factors Affecting English Self-Efficacy

	Y	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇
Y	1	0.522**	-0.503**	0.415**	0.194**	0.328**	0.216**	0.178**
X ₁		1	-0.388**	0.256**	0.097	0.135*	0.047	0.144**
X ₂			1	-0.046	0.155**	-0.157**	0.003	-0.141*
X ₃				1	0.553**	0.402**	0.288**	0.214**

X ₄	1	0.134*	0.216**	0.037
X ₅		1	0.198**	0.246**
X ₆			1	-0.090
X ₇				1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Pearson correlation analysis was employed to examine the correlation between the seven influencing factors and English self-efficacy. In Table 1, the degree of correlation between two variables is represented by the correlation coefficient, which ranged from -0.503 to 0.522. A negative correlation coefficient indicates a negative relationship between the two variables, and the larger the absolute value of the correlation coefficient, the stronger the correlation between the two variables. Among the seven factors, "Foreign Language Anxiety (X₂)" exhibits a negative correlation with "English Self-Efficacy (Y)," with a correlation coefficient of -0.503. The other remaining factors (X₁, X₃ to X₇) are positively correlated with "English Self-Efficacy (Y)". The correlation coefficients between all seven factors and "English Self-Efficacy" exhibit significance at the 0.01 level.

Table 2

Analysis of Variance of the English Self-Efficacy of Hengzhou Senior High School Students

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.717 ^a	0.513	0.503	0.32617

X₁ to X₇, as independent variables, and Y as the dependent variable, were implied to establish a multiple linear regression model. As shown in Table 2, the overall R value of the regression model is 0.717, indicating a moderate to moderately high degree of correlation between all independent variables (X₁ to X₇) and the dependent variable (Y). The coefficient of determination, R², performs 0.513, suggesting that all independent variables (X₁ to X₇) in the model can explain 51.3% of the variance in the dependent variable (Y). The adjusted R², which is a more accurate evaluation metric compared to R², performing 0.503.

Table 3

Predictive Factor Analysis of Hengzhou Senior High School Students' English Self-Efficacy

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.393	0.237		5.874	0.000***
	Language Proficiency (X ₁)	0.007	0.001	0.313	7.356	0.000***
	Foreign Language Anxiety (X ₂)	-0.371	0.042	-0.380	-8.922	0.000***

English Learning Motivation (X ₃)	0.201	0.055	0.195	3.683	0.000***
Peer Influence (X ₄)	0.091	0.058	0.075	1.556	0.121
Teacher-Student Interaction (X ₅)	0.111	0.043	0.112	2.557	0.011**
Parental Educational Involvement (X ₆)	0.100	0.038	0.109	2.644	0.009**
Cultural Attitude (X ₇)	0.022	0.053	0.017	0.405	0.686

*** p<.001

Table 3 presents the significance test of the regression coefficients of the model's independent variables. From the results, it was observed that there are 5 factors with p values corresponding to the t values of the regression coefficients that were less than the significance level of 0.05. These 5 factors, rank from most to least influential, are as following: Foreign Language Anxiety (X₂), English Learning Motivation (X₃), Teacher-Student Interaction (X₅), Parental Educational Involvement (X₆), Language Proficiency (X₁). Based on these results, the unstandardized regression equation is formulated as:

$$\hat{Y} = 1.393 - 0.371X_2 + 0.201X_3 + 0.111X_5 + 0.100X_6 + 0.007X_1$$

The standardized regression equation is as follows:

$$Z = -0.380X_2 + 0.195X_3 + 0.112X_5 + 0.109X_6 + 0.313X_1$$

Conclusion

1. The correlation analysis revealed that all seven influencing factors pertaining to the English self-efficacy of students at Hengzhou Senior High School are significantly associated at the 0.01 level. These factors includes 1) language proficiency, 2) English learning motivation, 3) peer influence, 4) teacher-student interaction, 5) parental educational involvement, 6) cultural attitude, and 7) foreign language anxiety.

1.1 Language proficiency positively correlates with English self-efficacy, with a coefficient of 0.522, confirming prior research from Chen and Lin (2009). Skilled learners tend to have high self-efficacy in language tasks. Language proficiency assesses speaking, listening, reading, and writing, evaluated through testing (Spolsky, 1989). Proficient learners have successful experiences, like good exam scores, can boost their confidence in the coming similar tasks, exhibiting higher English self-efficacy. Those with lower proficiency may worry about completing current and future challenges, exhibiting lower English self-efficacy (Bandura, 1977).

1.2 English learning motivation positively correlates with English self-efficacy, with a correlation coefficient of 0.415. This aligns with the previous study by Roshandel et al. (2018). English learning motivation has both intrinsic and extrinsic sides. The intrinsic motivation comes from personal curiosity or a desire for English proficiency, while the extrinsic motivation is linked to rewards or recognition related to English from external sources. Those with stronger English learning motivation are more likely to take on challenging English tasks, develop a deeper interest in them, and recover quickly from difficulties encountered in English learning, demonstrating higher English self-efficacy. Conversely, students lack of motivation for English learning tend to be less proactive in the learning process and may even have negative evaluations and a sense of boredom towards English learning itself, showing as poor learning outcomes and a lower sense of English self-efficacy.

1.3 Peer influence positively correlates with English self-efficacy, with a correlation coefficient of 0.194. This dual-faceted influence can be either encouraging or discouraging in an English learning context. Positive peer influence stems from role models and encouragement from learning partners, while negative influence includes a lack of enthusiasm for English or cheating during exams. Students under positive peer influence observing peers' success can enhance their belief of similar success and motivate them to challenge, demonstrating higher English self-efficacy. Conversely, students under

negative peer influence seeing others fail or perform dishonesty may undermine their confidence and discourage attempts, demonstrating lower English self-efficacy (Crosnoe & Johnson, 2011).

1.4 Teacher-student interaction positively correlates with English self-efficacy with a correlation coefficient of 0.328, which was also shown by Li and Yang (2021). High-quality interaction is characterized by enjoyable teaching style, effective methods, inclusive atmosphere, student engagement, and harmonious relationships (Sun et al., 2018). Positive and effective teacher-student interaction fosters frequent and friendly communication between the two groups, enhancing students' English self-efficacy. Students who experience one-way and ineffective teacher-student interaction are less likely to seek help from teachers when they encounter difficulties in English learning, showing a negative attitude towards the subject and lower English self-efficacy.

1.5 Parental educational involvement positively correlates with children's English self-efficacy with a correlation coefficient of 0.216, supported by Cross et al. (2019). Parental educational involvement involves active participation in learning stages and activities, like assisting, expressing concern, encouragement, and providing necessary English learning resources. Greater parental educational involvement, positively influence their children's perception of social expectations and either practical or emotional support during English learning, contributing to children's higher English self-efficacy. However, the lack of parental educational involvement, or inappropriate involvement such as overly interfering, setting unrealistic expectations, or neglecting emotional needs, lower the children's English self-efficacy (Bandura, 1977).

1.6 Cultural attitude positively correlates with English self-efficacy with a correlation coefficient of 0.178. Cultural attitudes distinguish groups through learned patterns of perception, cognition, and behavior (Hofstede, 1980). In English learning, cultural attitude relates to confidence in one's native culture and willingness to accept foreign elements. Learners with a favorable target culture attitude acquire the language more effectively (Gardner, 1985), in which helps to strengthen their English self-efficacy. Whereas students lack of such a positive attitude can lead to lower motivation and engagement in the learning process, hinder effective language acquisition, showing lower English self-efficacy.

1.7 Foreign language anxiety negatively correlates with English self-efficacy, with a coefficient of -0.503, aligning with Zhou et al. (2022). Students with higher anxiety rate their self-efficacy lower. Foreign language anxiety relates to emotions in linguistic speaking, writing, reading, listening, exams, and fear of negative evaluation (Wu & Lin, 2017). This anxiety can cause excessive stress, hindering emotion regulation and leading to a negative physical state, reducing confidence and patience in English learning. English Learners with moderate to lower levels of foreign language anxiety maintain positive emotions and learning attitude, showing higher English self-efficacy (Bandura, 1982).

2. The regression analysis revealed that five factors influenced the English self-efficacy of Hengzhou Senior High School students, with three of them: 1) language proficiency, 2) foreign language anxiety, and 3) English learning motivation, exhibiting statistical significance at the 0.001 level; with two other factors: 4) Teacher-student interaction and 5) parental educational involvement maintained significance at the level less than 0.05.

2.1 Foreign language anxiety significantly impacts the English self-efficacy of Hengzhou Senior High School students, with a beta value of -0.371 ($p < 0.001$). The National College Entrance Exam in China has created a high-pressure education system that leads to consistent English exam anxiety and even learned helplessness if they aren't able to perform academically as well as expected, eroding students' confidence and persistence in learning. Staffing and resource constraints hinder teachers from providing differentiated instruction, while the rigorous student schedule exacerbates stress. This anxiety reduces students' academic performance and motivation, negatively affecting their self-perception and willingness to engage in English activities. Effective instructional methods to mitigate anxiety should be prioritized (Zhou et al., 2022).

2.2 English learning motivation significantly impacts the self-efficacy of Hengzhou Senior High School students, with a beta value of 0.201 ($p < 0.001$). Over half of the surveyed students reported intrinsic motivation, such as interest in English, persistence, and recognition of its importance for future development. This intrinsic motivation leads to greater effort and better language skills, enhancing self-efficacy. Whereas extrinsic English learning motivation, driven by external rewards or recognition, can

also lead students to short-term success but may undermine the joy of learning itself, decrease their self-drive and self-efficacy in the long run. A balanced approach, combining intrinsic and extrinsic motivation, is crucial for sustained success in English learning, as English learning motivation plays a pivotal role in promoting English self-efficacy (Roshandel, Ghonsooly, & Ghanizadeh, 2018).

2.3 Teacher-student interaction significantly affects the English self-efficacy of Hengzhou Senior High School students, with a beta value of 0.111 ($p < 0.05$). In the current survey, despite general satisfaction, 65% of students felt disengaged, 40% found the classes insufficiently instructive, and 35% were unwilling to seek help from their teachers. These deficiencies in teacher-student interaction have led to some students developing rejection and fear towards English learning, resulting in low English self-efficacy. Improving interaction by fostering a dynamic, personalized environment where students feel valued and respected can their boost self-esteem, confidence, and engagement. Effective communication, instructive feedback, and trust-building are crucial for reducing anxiety and enhancing students' self-efficacy (Mercer & Dörnyei, 2020). Li and Yang (2021) also confirmed that personalized teacher-student interactions emphasizing the importance of student voice and agency, positively contribute to students' self-efficacy.

2.4 Parental involvement significantly affects the English self-efficacy of Hengzhou Senior High School students, with a beta value of 0.111 ($p < 0.05$). Many surveyed students reported minimal parental expectations, assistance, or emotional support in their English learning. This lack of involvement can lead to students feeling unsupported and undervaluing the importance of English, resulting in decreased confidence and determination in English learning. Furthermore, without active parental participation in English learning activities or discussions, students may lose interest in the language within such family education environment. Despite adolescents' growing independence, parental roles remain crucial in shaping children's self-efficacy. Studies indicate that parental educational involvement predicts children's English self-efficacy, with high expectations fostering increased children's confidence, motivation, and determination in learning. Additionally, parental emotional support in the involvement enhances children's engagement and interest in learning, collectively contributing to higher English self-efficacy among children (Lv et al., 2018; Yi & Ko, 2023).

2.5 Language proficiency significantly predicts the English self-efficacy of Hengzhou Senior High School students, with a beta value of 0.007 ($p < 0.001$). Students with excellent language proficiency reported that they feel confident in handling English tasks, which is vital for their continuous English learning. English Proficiency fosters personal linguistic skill growth and confidence, enabling individuals to express themselves effectively in scenarios for learning and using English. Proficient English learners tend to excel academically and have greater confidence in their language abilities, leading to more active engagement in learning and practice, resulting in a high demonstration of English self-efficacy. Thus, English proficiency is a strong predictor for a student's English self-efficacy (Bandura, 1986; Chen & Lin, 2009).

Recommendation

1. General Advice

1.1 Reducing students' foreign language anxiety can improve their English self-efficacy. For Chinese high school students preparing for the Gaokao, teachers can divide learning content into essential knowledge for passing, key knowledge of varying difficulty, and advanced knowledge for higher scores. Segmenting teaching progress allows students to master content in stages, prevents students from feeling overwhelmed and reduces anxiety about unattainable goals. Teachers should design age-appropriate, engaging class activities to enhance participation and reduce students' boredom towards English learning. Assigning test question reviews to students, where they act as instructors and teachers as supplementary explainers, making classes more relatable and engaging, shifting the focus from teacher-centered to student-centered learning. English teachers should also engage with students outside class, providing targeted assistance and encouraging students to focus on their own progress rather than comparing themselves with peers. By promptly addressing students' English learning difficulties and emotional issues, teachers can offer practical help and psychological support, alleviating students' foreign language anxiety and enhancing English self-efficacy.

1.2 Improving students' English learning motivation enhances students' English self-efficacy. Teachers should help students set clear, achievable goals and establish reward systems. Rewards can be immediate, such as verbal praise or positive comments on assignments, or long-term, like personalized English reading materials or English movie tickets earned through sustained effort. Aligning rewards with students' needs boosts extrinsic motivation effectively. To stimulate intrinsic motivation, teachers can integrate English learning with students' interests and real-life experiences, making the learning content more meaningful. Incorporating English teaching topics like popular movies, music, or social issues students care about can engage them. Educating students on the importance of English for further education and career development, such as university requirements, job opportunities, and beneficial policies, highlights the practical significance and benefits of learning English. Combining internal and external motivators effectively stimulates students' English learning motivation. Success stories from peers or alumni can also be highly inspiring, as students resonate more deeply. Encouraging collaborative learning and successful experience sharing harnesses the positive influence of role models, boosting students' motivation and self-efficacy in English learning.

1.3 Enhancing teacher-student interaction can boost students' English self-efficacy. Traditional lecturing often leaves students passive, hindering interaction. Teachers should create a comfortable classroom environment that encourages students to express themselves, ask questions, and engage in discussions, breaking the one-way interaction. Given limited class time, teacher-student interaction should also extend beyond the classroom. Teachers should track students' progress, offer specific feedback, and provide guidance to enhance their self-efficacy. For introverted students, teachers should proactively connect, offering encouragement and support to rebuild their confidence.

1.4 Enhancing parental educational involvement can positively impacts students' English self-efficacy. In less developed regions of China, parents may lack the education or awareness to support their children's English learning. Schools should promote communication between parents and teachers through meetings or on-line group chats, and inform parents about upcoming English assessments and activities. Providing parents with resources, such as language learning Apps, and guidance on supporting English learning at home. It's also important for parents enhancing educational involvement to boost children's English self-efficacy by encouraging children a positive English learning attitude, recognizing children's effort and progress, celebrating their achievements, and maintaining realistic expectations to them.

1.5 Language proficiency serves as the cornerstone for students' English self-efficacy. Schools should ensure students enhance their English skills through effective instruction and practice. Encouraging students' participation in activities and competitions enhances students' listening, speaking, reading, and writing skills, diversifying assessment of English proficiency. In schools with a large student population, such as the current surveyed school, teachers adept at using technology can effectively manage students' academic performance. Monitoring students' language proficiency allows for timely feedback, motivating students to improve and enhancing their English self-efficacy.

2. Suggestions for Further Research

To enhance future studies on English self-efficacy, several considerations should be prioritized. Firstly, future studies should aim to include a diverse sample of students from various regions, schools, and grade levels to enhance the generalizability of findings. Secondly, considering gender as a variable in research would help understand its influence on English self-efficacy. Thirdly, combining quantitative methods, such as surveys, with qualitative approaches like interviews or focus groups, can provide a more comprehensive understanding by exploring students' perceptions and experiences. Fourthly, employing advanced statistical techniques such as structural equation modeling (SEM) would facilitate the examination of how different factors interact. Fifthly, enhancing the sensitivity of measurement tools to capture subtle influences on English self-efficacy is crucial. Lastly, investigating additional factors such as students' educational beliefs, access to resources, language exposure, and curriculum design would offer a broader perspective on the determinants of English self-efficacy from individual, social, and cultural viewpoints.

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THE DEVELOPMENT OF MAKING MANGA PROCESS FOR PROMOTING CRITICAL THINKING IN LATE CHILDHOOD HOMESCHOOL

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ABSTRACT

The aim of this study is to develop a Making Manga Process for promoting critical thinking skills in late childhood, particularly among homeschool students. The program focuses on cultivating critical thinking skills based on the four components of the Cornell Critical Thinking Test Level X. It consists of a total of 10 activities, each lasting 2 hours, designed to promote critical thinking skills. Upon completion of the Making Manga Process, participating students each have their own manga story. After a thorough literature review, the researcher submitted the program to three qualified reviewers, including two developmental psychology experts and one scriptwriting expert. The tool's quality index of congruence (IOC) was found to be 0.97. Subsequently, the researcher refined the program based on the reviewers' suggestions and tested it with a sample group of 15 homeschool students aged 10-12 years in a tryout. The students followed the Making Manga Process for 10 sessions. After completion, it was found that each student could create one manga story according to the program's specifications. The objectives, process, duration, and students' critical thinking scores improved after participating in the program. This research demonstrates that the Making Manga Process contributes to the development of critical thinking skills and introduces new media formats for enhancing critical thinking skills among late childhood through the manga creation process.

Keywords: Critical Thinking, Manga, Homeschool Students, Late Childhood.

Introduction

The developmental stages of late childhood, as elucidated by Piaget (1952), describe cognition as an ongoing brain function known as the Stage of Development, which involves continuous sequential changes. Human brain development begins at birth and continues until around the age of 16, encompassing four stages. Late childhood falls within the Cognitive and Formal Operations stages, characterized by abstract and hypothetical thinking. Therefore, this period is crucial for students to receive comprehensive development in all aspects, particularly in critical thinking skills.

Critical thinking is a skill that children should be encouraged to develop, as highlighted by current educational scholars in Thailand, stating that students still lack learning skills in the 21st century, especially in critical and analytical thinking. This is evident from the low levels of critical thinking observed in school assessments (Wachira, 2011). Due to the inadequacy of teaching methods to promote and develop thinking skills within schools, there has been an emergence of alternative education approaches, such as homeschooling. Homeschooling involves parents or guardians taking responsibility for their children's education or utilizing project-based learning, a teaching method aimed at fostering students' ability to connect real-life events to learning, explore, experiment, problem-solve, decide, and critically analyze systematically. It emphasizes interdisciplinary learning by integrating various academic disciplines into each project (Akas, 2022).

Critical thinking is a goal-oriented thinking process aimed at finding logical conclusions by considering evidence, analyzing, synthesizing, evaluating, and making judgments about information or situations. It relies on one's knowledge, thoughts, and experiences to form reasoned opinions. Teachers play a

crucial role in promoting critical thinking skills through various teaching methods. Learning through simulations is a suitable approach as it places students in role-playing situations with rules that reflect reality and involve interactions with similar data to real-world scenarios. Decision-making in simulations has consequences similar to those in real-life situations, allowing students to transfer learning effectively and apply problem-solving skills in real-life situations (Titsana, 2001). Therefore, incorporating simulation-based learning is another suitable option for promoting critical thinking skills by linking real-life events to learning, enabling students to explore, experiment, practice, and systematically analyze information.

Manga comics are a form of literature in Japan characterized by easily understandable and relatable content. Communication through manga requires the storyteller to possess narrative skills that resonate with young readers, enabling them to learn values and meanings according to the author's imagination. Manga comics facilitate joyful learning experiences through entertainment and enjoyment. Japanese manga excels in fostering imagination and creativity, making manga media popular to this day. The process of creating manga comics requires critical thinking and questioning at every stage. Each step must be meticulously detailed and involve multidimensional thinking (Sato, 2022). Given the significance of promoting critical thinking and learning skills, researchers aim to develop a distinctive program to study and enhance critical thinking abilities in late childhood. This developmental stage is characterized by intellectual readiness, cognitive development, learning capabilities, and the ability to apply knowledge for future benefits. Conducting this research in a homeschooling format ensures that students have appropriate foundational thinking skills for fostering critical thinking. Through promoting critical thinking skills via the manga creation process, researchers anticipate that the outcomes will guide the promotion and development of students' critical thinking abilities to achieve goals and advance in the 21st century. This will equip late childhood students with the ability to adapt to rapidly changing situations, develop thinking processes, and apply understanding, application, analysis, synthesis, and self-assessment effectively. Additionally, it serves as a good starting point for revolutionizing the Thai education system to be on par with international standards.

Research Objectives

To develop a program aimed at fostering critical thinking skills through the creation of manga comics, in accordance with the components of the ENNIS model.

Samplings/Participants

The population and sample group for this research will consist of children in the late childhood stage, aged 10-12 years old, who are enrolled in homeschooling. The sample size will be 15 children who have obtained parental consent and are willing to voluntarily participate in the research from start to finish. These children will have a keen interest in manga writing

Research Tools/Instruments

1. Making Manga Process Program
2. Translated Thai Version of the Cornell Critical Thinking Level X

Procedure

In this study, the research procedure is divided into two parts:

1. Development of Making Manga Process Program
 - 1.1. Study of theoretical concepts and research documents related to critical thinking and the process of creating manga, to be utilized in designing the program.
 - 1.2. Development of the manga creation program based on the components of critical thinking by Ennis, which include preliminary agreement, inference, deduction, and evaluation of the credibility of information and observations.
 - 1.3. The researcher will construct the manga creation program to enhance critical thinking skills. Each activity will include steps in carrying out manga creation aligned with Ennis's components of critical thinking. These activities will span over 5 weeks, with sessions twice a week. Each session will last for 2 hours, totaling 10 sessions.
 - 1.4. Three qualified individuals, comprising two developmental psychologists and one scriptwriter, will assess the quality and suitability of the program.

1.5. Adjustments to the program will be made based on the recommendations of the qualified individuals before it is tested in the research.

This research procedure outlines the systematic approach to developing and evaluating the manga creation program aimed at fostering critical thinking skills among children.

2. Experimental Use of Making Manga Process Program to Promote Critical Thinking among Late childhood in Homeschool

The manga creation program, deemed appropriate by qualified individuals, will be implemented with a group of 15 late-stage school children in homeschooling. The implementation process will commence with the announcement and recruitment of interested participants who meet the specified criteria. The activities will then proceed until completion of 10 sessions. Sample activities include:

Activity Name	Description
1 Manga Introduction	The researcher will introduce participants to manga comics, explaining what manga is and its process or steps, using examples from well-known manga comics familiar to the participants.
2 Identification of Assumptions and Story Structure	Participants in the experiment will Identification of Assumptions by outlining the story structure of their own manga comics.
3 Induction and Creating Timelines (Theory)	The researcher engages students in discussions about induction through the timelines of manga that students are familiar with. This involves analyzing and explaining the storyline of the manga as events unfold
4 Induction and Creating Timelines (Practice)	Participants will be tasked with writing the timelines of their manga comics from the beginning to the end of the story structure they have drafted, practicing theorizing.
5 Deduction and Character Design (Theory)	The researcher engages students in discussions about Induction through the Character Design of manga that students are familiar with. This involves analyzing and explaining the Personality Traits of the manga character as events unfold
6 Deduction and Character Design (Practice)	Participants will be tasked with writing the Personality Traits of the manga character
7 Credibility in Storyboard	Verification credibility of Manga story through writing storyboard
8 Drawing Manga on manuscript	Drawing Manga on manuscript 6-8 pages
9 Drawing Manga on manuscript	Drawing Manga on manuscript 6-8 pages
10 Summarizing the Learning Process	Summarizing the Learning Process of drawing manga from Beginning to End of the Process

After completing the activity, the researcher identified some issues and made adjustments to the program as follows:

1. Reduced the number of manga comic pages that students need to write from 8-10 pages to just 6-8 pages, allowing participants to complete their work within 10 sessions.
2. Added more familiar manga comics or movies to the list for students.
3. Introduced new storylines related to misunderstanding or miscommunication issues that lead to the creation of new comic storylines. This adjustment aims to simplify the experiment for sessions 7-10 regarding the identification of the credibility of sources while still requiring students to create their own storylines for the beginning and end as before.

Data Analyses

The data analysis comparing the results of critical thinking before and after participating in the program revealed that the average scores of critical thinking skills of the students after participating in the manga-making process were higher than before joining the program. This indicates that the program has played a role in improving students' abilities in critical thinking.

Results

Drawing from the literature, theories, and related documents, the aim was to develop a comprehensive manga creation program, incorporating feedback from qualified experts, and then implement it with 15 homeschool students aged 10-12 years. The results of the experiment revealed that participating students were able to produce one manga story within the specified timeframe. Furthermore, the critical thinking abilities of the participants showed a tendency to increase, as the manga creation activities in each stage stimulated analytical thinking throughout.

The manga creation process necessitates analytical thinking and questioning at every step to ensure logical coherence. This aligns with the findings of previous research by Sato (2022) and Chanathip Phra Koon (2542), which suggest that critical thinking is a trainable skill that develops with age and is crucial for problem-solving and decision-making. Therefore, it is essential to promote continuous critical thinking from adolescence, which corresponds to the method of promoting critical thinking through manga creation employed in this study.

Moreover, the manga creation process aligns with Ennis' (2005) framework of critical thinking, which comprises four components. Participants were able to develop their critical thinking skills without realizing it. Additionally, the project-based learning approach used in the research provides opportunities for students to integrate various academic disciplines into their projects, fostering both basic and advanced thinking skills.

Furthermore, open discussions and deliberations on the manga creation process at each stage, along with the provision of sample manga, facilitated effective learning experiences and problem-solving skills application in real-life situations.

Learning through simulated scenarios is a suitable alternative for enhancing critical thinking skills in educational management, fostering efficient and effective critical thinking. Thus, participants in the research understand and grasp the manga creation process to promote critical thinking effectively.

Aspect of Critical Thinking

Identification of Assumptions: Derived from assessing the credibility of manga, through researcher-led questioning at every stage. Inference Students created timelines of the storyline, dividing

Induction: Derived from creating a storyline timeline by dividing it into events, each event is linked to the preliminary conclusions that students have formulated.

Deduction: Derived from character design, considering the creation of character personalities that link to the storyline.

Credibility: Derived from outlining the initial storyline - from beginning to end - that students set as preliminary guidelines.

Discussion

In this experiment, the researcher found that the program promoting critical thinking through the process of creating manga can be effectively applied to Late Childhood Homeschool student studying at home. The key aspect of this program, which the researcher utilized to develop critical thinking, is the storytelling process in the format of manga. Therefore, it can be adapted for use in the process of creating characters, narratives, and stories, whether the final product is a comic book, a novel,

or a script. The process of storytelling and character design remains similar, only the presentation format varies according to the preferences of the instructor. This approach can be applied to students of all genders and ages who are interested in practicing critical thinking skills.

Conclusion

Suggestions for implementation:

1. In each step of the manga creation process, there should be questions regarding suitability, and students should be encouraged to speculate about the possibilities of each step. This will keep students stimulated to engage in continuous thinking.

2. Participants should be encouraged to discuss and debate the steps of manga creation at each stage. Additionally, providing familiar manga examples will help participants understand and stimulate their thoughts about the writing process in each step.

Suggestions for future research:

1. Future research should investigate other sample groups, such as students in regular schools, to verify the level of critical thinking in different sample groups.

2. Future research should explore similar activities, such as writing scripts, composing stories, or creating novels, to attract the interest of potential participants.

3. Future research should expand on the methods of measuring critical thinking in various formats, such as evaluating the outcomes of each experiment participation.

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PROMOTING ACADEMIC SKILLS TO CREATE ACADEMIC LEADERS IN THE NEXT NORMAL

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ABSTRACT

The purpose of this research was to promoting academic skills in creating teacher leaders in the Next Normal. The sample group consisted of administrators and teachers in Lampang Kanlayanee School. There was a total of 163 demographical participants in the academic year 2024, by using purposive sampling. The research was designed in form of research and development. The experimental design was accessed by academic expertise before testing and applying the teachers' academic skills process and model, questionnaires, observation forms, interview forms. The data were statistically analyzed by using percentages and content analysis was close-ended questions and interview questions. The results showed Lampang Kanlayanee School succeeded to promote leadership development by using the Principles of Academic Leaders Model of Lampang Kanlayanee. It was found that the percentage of 55% and 23% ($f=90$, $m=38$) of teachers are able to create higher academic skills. Interestingly issue, that was 46% and 14% ($f=75$, $m=22$) female participants seemed to be more motivated and empowered their academic skill leadership more than the male percipients. In suggestion, to develop academic leaders effectively, training courses and seminar sessions for academic leadership should be generalized for demographic diversity.

Keywords: Academic skills, Academic Leaders, The Next Normal

Introduction

The COVID-19 pandemic has served as a significant wake-up call on a global scale, prompting us to reconsider our paradigms and perspectives. The pandemic has not only changed our understanding of what is considered normal, but also our way of life. The concept of normalcy has evolved into various forms such as normal, new normal, and next normal. It was crucial to acknowledge that what may be a new normal for one person could be the standard normal for another, or what was once normal for someone may now be a new normal for others. These different interpretations of normalcy indicate that it was currently in an unprecedented era characterized by substantial shifts in various aspects of life, including education. The ongoing discussions and debates surrounding the future of education reflect the uncertainty of what lies ahead. This uncertainty emphasizes the importance of reflecting on the past, assessing the present, and contemplating the future.

National Education Act B.E. 1999, amended (issue 2) B.E. 2002 and (issue 3) B.E. 2010 defined Educational Management Guidelines in Chapter 4, Section 24 (5), said that encouraging teachers to apply research as part of the learning process, meanwhile, teachers and students enabled to learn together from various types of teaching media and resources. Moreover, that was the following in Section 30 of National Education Act B.E. 199, stated that the educational institutions should develop teaching and learning processes effectively, including encouraging teachers to conduct research to improve students' learning at each level of education (Office of the National Education Commission, 2010: 9-1, which was in line with the Educational Development Plan of the Ministry of Education. (Office of the Higher Education Commission, 2012).

Accordingly, the plan stated that supporting teachers and learners in educational institutions should be trained to conduct classroom researches, originate knowledge, innovative technology and innovation, included transferring knowledge was particularly necessary for all teachers. (Office of the Higher Education Commission, 2012: 22-23). Similarly, The Office of the Basic Education Commission designed phases to drive the focus on improving the quality of learners towards the implementation of the education reform policy in the second decade. (2009-2018) with the goal, all students have abilities, skills, and characteristics according to the focus of each age group. To drive the

focus towards developing student quality, that were development plans as following 5 phases; phase 1: start searching and analyzing, phase 2: cultivating experience, phase 3: continuing knowledge, phase 4: leading to the quality path, and phase 5: creating a new learning culture and networking to develop teachers to be professional academic leaders.

Teachers required leadership skills and learning community which empowered teacher leaders by allowing to participate in a research community and transfer new practices to teaching community. By examining the concepts of border crossing and communities of practice, a study covered the mechanisms through which teacher leaders gain empowerment and bridge the gap between research and teaching. It identified four key mechanisms: shared boundary objects, professional vision coordination, experimentation with different identities, and expansion of professional networks. Furthermore, that was how engagement in a research community fosters validation, legitimacy, and a sense of belonging among teacher leaders, especially, academic classroom research skills and research knowledge.

However, the development of teachers in the past experiences still has not been achieved. With this reason, most teacher development methods are not consistent with teachers' lifestyles and actual work needs. Additionally, teachers still faced academic several problems in classroom research, such as a lack of knowledge, understanding and skills in conducting research in the classroom, a lack of supervision and assistance and also a lack of motivation to work, because they had a lot of responsibilities, especially, a lack of documents and textbooks to study for knowledge. Because of this, classroom research was particularly necessary for all teachers, in accordance with Guidelines for the reform of education which emphasizing the role of teachers in conducting research, together with teaching and learning in the next normal. (Joshua et al.,2022).

As for Lampang Kanlayanee School of Lampang Province realized the importance of increasing the level of academic achievement, so that teachers could understand teaching and learning problems in the classroom, and promote effective teaching in order to increase the level of academic achievement of academic leaders. Therefore, the researcher studied and created an academic leader development model for promoting academic skills by using the principles of Academic Leaders Model. There were skills and knowledge and the ability to create inspiration in students (S: Skill) and know how to manage knowledge, including promote and support learners to have in-depth learning (M: Management), have the attitude and consciousness of a teacher, create the power for learners to believe that they can do those things well and cultivate good deeds. Together with morality along with having knowledge (A: Attitude) providing online platforms, media, and environments that are appropriate for student learning (R: Resource) by using technology as a tool to develop students to create innovations (T: Technology).

Research objective

-To study using Academic Leaders Model to create teacher leaders in the next normal.

The independent variable was using Academic Leaders Model to develop academic skills of teacher leaders in the next normal.

The dependent variable was academic skills of teacher leaders in the next normal.

Literature Review

What is 'Leader' and 'Academic Leader'?

The term '**leader**' is derived from the action of 'lead,' which means to guide or to go ahead and show the way. A leader takes the lead in front of others (a group, organization, or association) and directs them towards a specific direction. In the realm of management, a leader is someone who has the ability to persuade people to progress towards achieving a shared vision. This capacity to influence and guide individuals to follow a particular path is known as leadership. A leader guides and directs others towards a shared vision, influencing and inspiring them to work collaboratively towards a common goal. Leaders invest in team building and cooperation to nurture exceptional individuals. While 'leadership' is not determined by formal authority or legitimate power and formal authority refers to the power that leaders derive from their positions. However, leaders do not solely rely on this power, even if they hold esteemed positions. Instead, they rely on informal authorities, which stem from the trust that people have in their judgment, moral principles, integrity, and expertise. In the other hand, the term 'Academic Leader' is crucial for enhancing teacher education quality and driving school reform

efforts. It represents a shift towards collaborative change-making in education, empowering educators to bring about meaningful improvements in curriculum, instructional methods, technology integration, and student engagement. (Warren, 2021).

The Backgrounds of Using Models and Principles of Academic Leader Development

Higher education institutions recognized the need for academic leadership developments; there were 1) systemic leadership development 2) experiential learning and 3) social learning. Following leadership development as systematic perspective focused on the social capital, especially the social relationships and networks within organization, cooperative leadership, and human capital, more extraordinarily the knowledge, skills, abilities of every individual in order to the creation of personal and social capital to promote to the systemic growth of an organization. Another was an experiential learning which meant an opportunity for leaders to connect real-world to investigate experiences and bring their own experiences based on theory, practices, including the beliefs of old to new knowledge, effective feedback to develop leadership skills effectively. While social learning is a growing area of leadership development, as crossing social learning with trait development, cooperative learning environment, the social process: team performance, social interaction contributes to impact on the effectiveness of leadership development. It empowered teachers, nurtured their leadership potential, and inspired a commitment to excellence. The PDM challenges traditional structures, allowing teachers to shape their own development. Empowerment is a two-way process, with teachers both receiving and contributing to growth. Awareness was key, as intentional development of leadership skills is crucial. Collaborative metacognition drives continuous improvement and collective responsibility. Embracing this model could lead to a more empowered and engaged teaching community, moving towards a culture of ongoing improvement and shared goals. The COVID-19 pandemic has led to significant changes in various levels due to lockdown measures implemented worldwide. This study focused on the challenges faced by academic leaders at a University in Romania during the pandemic. Data was gathered through interviews with 11 university and faculty leaders, revealing three key themes: "the leader's personal attributes," "unity through decentralization," and "opportunities to reinvent the university." The study discussed best practices for managing academic institutions during times of crisis and offers recommendations for enhancing management efficacy. The analysis of themes uncovered three primary themes that were evident in the responses of the participants: "the characteristics of the leader," "cohesion via decentralization," and "chances for reshaping the university." In the following section, it outlined each of these themes, the subthemes we pinpointed for each theme, and excerpts from the interviews as examples. (Yıldız et al., 2022).

Certainly, cultural norms and values was significant in leader's society, therefore, the decline in teacher leadership functions can be attributed to the lack of internalization of cultural norms and values related to teacher leadership. That was exploring teacher leadership functions during and post-school disruption, due to COVID-19 pandemic. Participants were recruited from three primary government schools in Qatar, and included 12 teachers, three vice-principals (assistant principals) and three principals. A phenomenological research design was employed using semi-structured interviews for data collection. Findings suggested nine teacher leadership functions during school closure, two of which only were sustained postschool reopening. The study argues that the regression in teacher leadership functions relates to the failure in the internalization of teacher leadership cultural norms and values. It was found that the roles of teacher leadership during and after the disruption caused by the COVID-19 pandemic. (Adhikary, 2021) Later, educational institutions developed academic leadership model, focusing on the components and indicators of academic leadership that should be developed by teachers. For example, Savannakhet University created and develop a model for developing academic leadership of teachers in Savannakhet University evaluated the accuracy, appropriateness, feasibility and usefulness of the model for developing academic leadership of teaching staff in Savannakhet University, Lao People's Democratic Republic. This research uses research and development methods, dividing the research into 3 phases: Phase 1: Studying the academic leadership components of teaching staff; Phase 2: Designing and improving the academic leadership development model of employees. Teachers and Phase 3, field trials and summary of experimental results, in which each phase used populations/samples of 152, 10, and 30 people. Phase 1 of the research is a study of the components of academic leadership of teachers using a research tool, a questionnaire. Phase 2 is the creation and

development of a model for developing academic leadership of teachers. Phase 3 was examination. The effectiveness of the model for developing the academic leadership of teachers by using a real field trial. The data analysis method for quantitative was using a statistical package. In general, the faculty members at Savannakhet University demonstrated a high level of academic leadership skills. Vongphachanh P., Pawabutra C., & Pailai T. (2023).

Similarly, Nakhon Sri Thammarat Primary Educational Service Area Office had a study about the current conditions and needs for leadership development. Academics of teachers in basic educational institutions Under the jurisdiction of the Nakhon Si Thammarat Primary Educational Service Area Office, Area 1 2) To develop a model for developing academic leadership of teachers in basic educational institutions. the area office Nakhon Sri Thammarat Primary Education Areas 1 and 3) to examine the academic leadership development model of Teachers in basic educational institutions Under the jurisdiction of the Nakhon Sri Thammarat Primary Educational Service Area Office, Area 1, this research was mixed methods method has 3 phases of research, consisting of Phase 1, study of current conditions and development needs. The sample group consists of directors of educational institutions, academic administration heads and teachers, each group of 86 people, totaling 258 people from educational institutions in under the jurisdiction of the Nakhon Sri Thammarat Primary Educational Service Area Office, Area 1. A total of 86 locations using a periodic questionnaire.2. developing a model for developing academic leadership for teachers in basic educational institutions by using the results from the distance 1 to create a model for developing academic leadership for teachers in educational institutions and phase 3. to examine the model, develop the academic leadership of teachers in basic educational institutions by seminars based on experts and experts 9 people and a group discussion of 12 educational institution directors. Data were analyzed by finding frequencies and percentages, standard deviation and content analysis. It was found that the model for developing academic leadership among teachers in basic educational institutions under the Nakhon Sri Thammarat Primary Educational Service Area Office 1 has been found to be accurate, appropriate, possible, and applicable. This model can be utilized to enhance the academic leadership of teachers in all basic educational institutions. (Promkongand, A., & Kaenin ,T. 2023).

However, teacher leaders often receive little to no training in this area. Consequently, it was essential for future administrators and teacher leaders to share the specific knowledge and skills that were essential for effective educational leadership. This research study utilized survey data to investigate whether educational leadership (EDL) preparation programs contribute to the development of leadership skills among participating teachers. The findings indicated that teacher leaders who took part in the EDL program not only gained valuable leadership opportunities but also received increased support from their principals in applying their leadership skills. These results suggested a positive correlation between the knowledge and skills acquired through EDL programs and the promotion of teacher leadership. A survey was conducted among students in the EDL program to gather their responses on statements related to their participation in leadership decisions and activities within their school. The survey included statements on teacher leader actions from literature, prompting them to indicate if they perceived an increase or no change in involvement since enrolling in the program. The findings in Table 2 showed that over half of the EDL students noted increased engagement in decision-making, collaboration with peers, reflection on practice, and sharing ideas with colleagues. In summary, the study found that a higher percentage of principals reported increased involvement in various teacher leader activities compared to teachers. Both teachers and principals agreed on increased involvement in decision making, planning school improvement, sharing ideas with colleagues, collaboration with peers, leading school committees, and reflecting on practice. However, there was a discrepancy in perceptions regarding increased involvement in selecting professional development activities and providing professional development in services or workshops. (Bobbie, J.G. (2020).

On the same way, this research explored the transformative effects of a professional development model (PDM) implemented in three affiliated private schools in Beirut, Lebanon over a three-year period, with a primary emphasis on fostering teacher leadership. Within this PDM, teachers took on the role of trainers, guiding their peers during dedicated professional development sessions. Through a grounded theory methodology, the study conducted semi-structured interviews with 12 teacher trainers and collaborated with three school principals. The findings of the research identify five central categories. Two of these categories focused on the evidence demonstrating the advancement of teacher

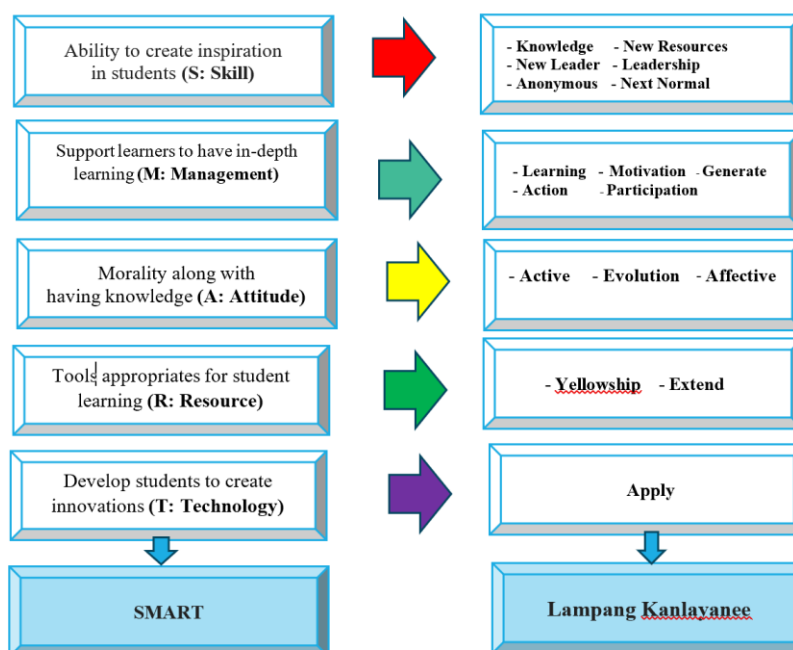
leadership: 1) utilizing research to improve teaching and student learning, and 2) promoting professional learning for ongoing enhancement. Furthermore, three categories shed light on the key elements that support the PDM's role in nurturing teacher leadership: mutual empowerment, conceptual understanding, and collaborative metacognition. This model transforms traditional hierarchical leadership structures, empowering teachers to actively shape their professional growth journey and fostering a more collaborative and purposeful approach to teacher leadership. This research has shown that the explored PDM is not just a typical professional development model; it was a catalyst for transforming education. It empowered teachers, nurtures their leadership potential, and inspires a commitment to excellence. The PDM fostered reciprocal empowerment, conceptual awareness, and collaborative metacognition, challenging traditional leadership structures. Teachers shape their own development journey, contributing to its growth. (Ghamrawi et al., 2024).

Conceptual Framework

Theory of Creating Academic Leader

The concept used in this research and development project is teacher development using a guiding process. Support teachers to find ways to develop themselves. Building a good relationship between the coach and the trainee/teacher. To enable the trainee to open their minds to receive new information for changing and ready to change towards new goals. Defining goals and plans together between the coach and the trainee. As for setting up the operating model and coaching methods. That was University researchers act as external coaches. Monitoring teachers in school and promote coaching within the school and support, follow up and evaluate. In the next normal, the education of upcoming principals and educators should emphasize the significance of teacher leadership through collaborative decision-making, shifting away from conventional responsibilities, and dispersing authority and impact across educational institutions. (TSE To-hung, 2006). Teacher leaders are anticipated to take the lead in various aspects to enhance their professional growth, daily tasks, and overall capabilities, ultimately contributing to the transformation of the school into an authentic learning environment. There were skills and knowledge and the ability to create inspiration in students (S: Skill) and know how to manage knowledge, including promote and support learners to have in-depth learning (M: Management), have the attitude and consciousness of a teacher, create the power for learners to believe that they can do those things well and cultivate good deeds. Together with morality along with having knowledge (A: Attitude) providing online platforms, media, and environments that are appropriate for student learning (R: Resource) by using technology as a tool to develop students to create innovations (T: Technology) as **the principles of Academic Leaders Model** (Takkere et al., 2023). below;

Principles of Academic Leaders Model Lampang Kanlayanee



L- Learning management process (Learning: L) Lampang Kanlayanee School has created a research project to develop teachers by inviting lecturers from universities in Lampang province, such as Suan Dusit University and Lampang Education Center Thammasat University, Lampang Center.

A- Action (Action: A) Organizing workshops for teachers about classroom research to develop teachers.

M- Motivation (Motivation: M) Promoting a research article writing completions and symposiums to find the best practice and masterpiece to commit research development process.

P- Participation (Participation: P) Promote the participation in classroom research and apply research to develop learning in order to use the results to develop teaching and learning in the future.

A- Active (Active: A) Activate teachers to become academic leaders.

N- New Leaders (New Leaders: N) Building the capacity of mindset-growth leaders to commit effective research development and produce teachers/leaders as mentors.

G- Generate (Generate: G) Be enlightenment of being “Smart School”, “Smart Student” and “Smart Teacher”, based on research- based curriculum of “L.K.S. LASER and SMART School Model”.

K- Knowledge (Knowledge: K) “Smart Teacher” who had research skill to improve teaching and learning in all levels of classrooms.

A- Affective (Affective: A) teachers had attitudes toward being trained by mentors.

N- New Resources (New: N) there were sufficiency and updated resources and technology for supporting researchers to create new knowledge.

L- Leadership (Leadership: L) leadership skill; a quality of mentors/ trainer/ coacher was used in peer coaching method.

A- Autonomous (Autonomous: A) teachers could be independent and having the power to make decisions individually to solve problem in research development process.

Y- Yellowship mentoring by academic professions to guide teachers/leaders to coach about research conduction from a variety of resources.

A- Application of technology (Apply: A) using tools to create questionnaires in Google form format to facilitate data collection.

N- Next Normal (Next Normal: N) creating academic skill teacher leaders in the next normal of Lampang Kalyanee School.

E- Evaluation (Evaluation: E) making of a judgment about value of research.

E- Extend (Extend: E) publishing and exchanging research knowledge among public in globalization.

The processes of promoting academic skills in creating teachers and leaders in the next normal consists of the following 8 practical academic leader skill development processes below;

The teacher leader skill development process I: Promote and develop teachers to have knowledge, understanding and skills in using digital technology in order to lead to organizing teaching or supporting teaching at a distance, as well as leading to promotion and stimulation, helping students understand and have the skills in using technology, especially, being aware of social media, analyzing data correctly and leading to the usefulness of the data.

The teacher leader skill development process II: Promote and develop teachers and educational personnel to be a guider and give advice because there was a lot of knowledge on the internet. On cloud media, there was open educational media. There were a multimedia format and video clips that help stimulate interest, fun, and inspired you to want to see teachers in their role of promoting and helping students to be able to learn on their own. Stimulate and enhance necessary skills for students, so that students develop creative skills. There would continue to be the power of imagination and initiative of the students.

The teacher leader skill development process 1: Promote the development of teachers to have knowledge and understanding about education law for access to educational rights in the educational profession and promote and support students to participate as learners according to the principles of democracy to join in creating the need for change in the world of the Next Normal.

The teacher leader skill development process 2: Promote and develop teachers to have a mindset that requires a paradigm shift in teaching and learning. And living in the world of the Next Normal, especially teachers, how could they work together, so that children could know their own potential, had good skills, attitudes, and knowledge for living in the present and in the future? By encouraging children to learn and have skills that came from practice and learn from real experiences with technology helping to support learning to make it more convenient.

The teacher leader skill development process 3: Promote and develop teachers through development and effective learning through online learning programs. Learning through online programs will develop yourself by reducing time for learning more efficiently. In addition, learning and development through online programs has a variety of knowledge that needs to be developed.

The teacher leader skill development process 4: Promote and develop teachers to use mobile phones in learning management and student development. Because of the Next Normal, mobile phones will be a technological tool that is constantly updated with innovations and new technologies, which will create convenience in managing learning and developing oneself continuously.

The teacher leader skill development process 5: Promote and develop teachers to use mobile phones in learning management and student development. Because of the Next Normal era, mobile phones would be a technological tool that was constantly updated with innovations and new technologies, which would create convenience in managing learning and developing oneself continuously.

The teacher leader skill development process 6: Promote and develop teachers to be aware of and attentive to health safety and give importance to working together to preserve the environment and the importance of renewable energy and renewable energy. This would bring such concepts to students, which would result in changes in behavior in order to jointly express social responsibility as a whole.

Methodology

This part includes participants, sampling, research design, data collecting tools and data collection.

Participants

The sample group consisted of administrators and teachers in Lampang Kanlayanee School. There was a total of 163 people. To conduct phenomenology research, detailed interviews with a limited number of participants are necessary. Therefore, a group of 163 teachers was selected using criterion sampling, a purposive sampling method based on specific criteria relevant to the research. Participants were chosen based on criteria such as gender and having or pursuing a bachelor's degree and a master's degree. The study group consisted of teachers working in schools in Lampang Kanlayanee School, Thailand during the 2023-2024 academic year, identified as demographic characteristics of the study group are presented in Table 1.

Sampling

The sample group consisted of 163 school administrators and teachers will be examined by using the Principles of Academic Leaders Model of Lampang Kanlayanee for promoting the academic skills of teachers.

Research Design and Collecting Tools

The study employed research and development design, a qualitative research approach. This design focuses on understanding the lived experiences of a specific group. Its primary objective is to provide a comprehensive description of the nature of the phenomena under investigation of Lampang Kanlayanee School has created a research project to develop 163 people by inviting lecturers from universities in Lampang province, such as Suan Dusit University and Lampang Education Center and Thammasat University, Lampang Center to promote the academic skills of teachers' classroom workshops. Content was analyzed by utilizing questionnaires with the evolution of statistics by the percentage. The research aims to uncover the perspectives and encounters of educators regarding the new normal academic leader skills outstandingly.

Data Collection

This research was conducted in the form of research and development (Research and development).

Preparing to demographic information of participants for development [R1]

Step 1 Research 1: R1 (Demographic Analysis: DA) is the step of analyzing the population. The researcher conducts a study of basic data and evaluates the needs of participants before setting classroom research workshops by using the Principles of Academic Leaders Model of Lampang Kanlayanee.

Step 2 A study of basic information, analysis, synthesis, concepts, theories, and research related to the development of leader academic leader skill development at the educational levels, competency in classroom research conduction, school research development's objectives, including educational policy, teachers and resources and technology.

Step 3 Analyze the needs of leader academic leader skill development by conducting interviews with 13 people, both experts and related people, it was a large group meeting of the head teachers of school departments and make suggestions. The researcher conducted the interviews in person at the meeting by using a structured interview form created by the researcher. Also, collecting information and opinions regarding the importance for academic skill development.

Processing to develop leader of academic skill [D1]

Step 4 The process of developing the draft topic and schedule workshops and pilot testing [D1] is the process of designing and developing the classroom research workshops by designing and developing the activities and contents. The researcher uses the information obtained from analysis and synthesis in step 1 are used in design and develop workshop outline, workshop plans, competences and skill assessment and make interviewing by questionnaires.

Step 5 Checking the quality of the classroom research workshops, judging by 7 experts. It is a small group meeting of teachers who works for school classroom research teamwork before making a pilot trial (Field Try-out) and checking the effectiveness by observing the participants in the classroom workshop that their academic skills will probably improve.

Testing workshop trial procedure [R2]

Step 6 Testing is the trial workshop procedure as following the experimental research model (Experimental Research) pre-experimental research type (Pre-Experimental Design) by conducting experiments to organize the classroom research workshop.

Evaluating the effectiveness and revising the curriculum [D2]

Step 7 Evaluating the quality of workshops by evaluating the effectiveness. The researchers conduct the questionnaire evaluation; the effectiveness of the classroom research workshops by 163 participants with sharing google form to collect the data.

Table 1 Demographic Information of Participants

Variable	Subgroup	f	%	m	%	N=163
Gender	Female	125	77%			
	Male			38	23%	
Education Level	Bachelor's degree	87	53%			
	Master's degree	76	46%			

*Lampang Kanlayanee School. (2024, June 4). Demographic Information of Lampang Kanlayanee Administrator and Teacher. Human Resource Management Office.

Table 1 shows that 77% of the teachers in the study group are female (f=125) and 23% are male teachers (m=38). In terms of education level is examined, 53% of the teachers (N=87) have a bachelor's degree, while 46% have received Master's degree (N=76).

Table 2 Findings Regarding Promoting the Academic Skills of Teachers by Using the Principles of Academic Leaders Model Lampang Kanlayanee

Lists	f	%	m	%	N=163
- Improving research school project which was trained by universities supervisors of Lampang Province (Suan Dusit University and Lampang Education Center Thammasat University, Lampang Center)	85	52%	55	34%	
- Giving the importance of organizing research workshops develop teachers about classroom research conduction	95	58%	78	48%	
- A capacity of a research article writing for the best practice and masterpiece to commit research development process	56	34%	45	28%	
- Applying research to develop learning in order to use the results to develop teaching and learning in the future	67	41%	39	24%	
-Activating teachers to become academic leaders	75	46%	22	14%	
-Building the capacity of mindset-growth leaders to commit effective research development and	55	34%	57	35%	

produce teachers/leaders as mentees and mentors

- Be enlightenment of being “Smart School”, “Smart Student” and “Smart Teacher”, based on research- based curriculum of “L.K.S. LASER and SMART School Model”	51	31%	33	20%
- Being “Smart Teacher” who had research skill to improve teaching and learning in all levels of classrooms	60	37%	34	21%
- Having good attitudes toward being trained by mentors	88	53%	50	31%
- Having sufficiency and updated resources and technology for supporting researchers to create new knowledge	54	33%	47	29%
- Having leadership skill; a quality of mentors/ trainer/ coacher was used in peer coaching method	50	31%	35	21%
- Being independent and having the power to make decisions individually to solve problem in research development process	58	36%	42	26%

Table 2 Findings Regarding Promoting the Academic Skills of Teachers by Using the Principles of Academic Leaders Model Lampang Kanlayanee (Cont.)

Lists	f	%	m	%	N=163
- Being trained by academic professions to guide teachers/leaders to coach about research conduction from a variety of resources	84	51%	20	12%	
- Using tools to create questionnaires to facilitate data collection	79	48%	28	17%	
- Creating academic skill teacher leaders in the next normal as following development process	90	55%	38	23%	
- Making of a judgment about value of research	65	40%	54	33%	
- A capacity of publishing and exchanging research knowledge among public in globalization	70	43%	50	31%	

Results

Table 2 shows the leader skill abilities that 85% and 52% (f=85, m=55) of teachers are improved by university supervisors of Lampang Province. 58% and 48% (f=95, m=78) of giving the importance of organizing research workshops. 34% and 28% (f=56, m= 45) of teachers are developed in terms of research article writing for the best practice and masterpiece to commit research development process. 41% and 24% (f=67, m=39) of teachers are able to apply research to develop learning in order to use

the results to develop teaching and learning in the future. 46% and 14% ($f=75$, $m=22$) becomes active teachers and academic leaders. 34% and 35% ($f=55$, $m=57$) of teachers are able to build the capacity of mindset-growth leaders to commit effective research development and produce teachers/leaders as mentees and mentors. 31% and 20% ($f=51$, $m=33$) of teachers be enlightenment of being “Smart School”, “Smart Student” and “Smart Teacher”, based on research-based curriculum of “LASER Model” (Smithsonian Science Education Center, 2015) and SMART School Model”. 37% and 21% ($f=60$, $m=34$) of teachers become “Smart Teacher” who had research skill to improve teaching and learning in all levels of classrooms. 53% and 31% ($f=88$, $m=50$) of teachers have good attitudes toward being trained by mentors. 33% and 29% ($f=54$, $m=47$) teachers had sufficiency and updated resources and technology for supporting researchers to create new knowledge. 31% and 21% ($f=50$, $m=35$) of teachers have leadership skill; a quality of mentors/ trainer/ coacher is used in peer coaching method. 36% and 26% ($f=58$, $m=42$) of teachers of being independent and having the power to make decisions individually to solve problems in research development process. 51% and 12% ($f=84$, $m=20$) of being trained by academic professions to guide teachers/leaders to coach about research conduction from a variety of resources. 48% and 17% ($f=79$, $m=28$) of teachers are able to use tools to create questionnaires to facilitate data collection. 55% and 23% ($f=90$, $m=38$) of teachers are able to create academic skill of teacher leaders as following development process. 40% and 33% ($f=65$, $m=54$) of teachers are able to judge about value of research. 43% and 31% ($f=70$, $m=50$) of teachers are able to publish and exchange research knowledge among public in globalization.

Discussion and Conclusion

In terms of leaders’ skills, Lampang Kanlayanee School aims to promote leadership development process in a higher education environment by using the Principles of Academic Leaders Model of Lampang Kanlayanee. It could be seen as 55% and 23% ($f=90$, $m=38$) of teachers are able to create academic skill of teacher leaders as following development process. Especially, the leaders; teachers and administrators who leads departments, research schools, or even the organization. Outstandingly, 58% and 48% ($f=95$, $m=78$) of giving the importance of organizing research workshops. Beside of this, they must also possess leadership and administration qualities. Apparently, mentoring plays a crucial role in facilitating the transition of academic professionals into new administrative leadership positions. (Middleton, 2015). However, to effectively develop academic leaders, training courses and seminar sessions for academic leadership development workshops should be designed in a flexible development process because of 46% and 14% ($f=75$, $m=22$) becomes active teachers and academic leaders. 34% and 35% ($f=55$, $m=57$) of teachers are able to build the capacity of mindset-growth leaders. In summary, female seems to be more motivated and empowered showing their leadership and academic skills toward public. Establishing academic workshops, it should aim to introduce essential subjects, knowledge, and skills through different sessions, allowing participants to deepen their understanding and practice addressing the diverse challenges encountered in academic leadership. It is crucial to determine the themes and subjects that are suitable for demographics; each educational level, concerning male and female should not be combined or generalized. (Jalal, 2019).

With regarding to the process of promoting academic skills in creating teacher leaders in the next normal of Lampang Kanlayanee School. It has been observed that being a research teacher or leaders still was new thing, that is 85% and 52% ($f=85$, $m=55$) of teachers are improved by university supervisors of Lampang Province. Using the peer coaching method; 53% and 31% ($f=88$, $m=50$) of teachers have good attitudes toward being trained by mentors was a good basis help for expanding the results of teacher development all over the school or creating professional learning communities (PLC). 43% and 31% ($f=70$, $m=50$) of teachers are able to publish and exchange research knowledge among public in globalization, which female group could perform their abilities of educational leadership in higher amount than the male group do in the next normal.

Obviously, 36% and 26% ($f=58$, $m=42$) of teachers of being independent and having the power to make decisions individually to solve problem in research development process. It shows that administrators play an important role in helping to expand results in the school if they could reinforce the process continuously. It would affect the potential of teachers to organize learning experiences to the level of empowerment and contribute students learning outcomes tremendously, 41% and 24% ($f=67$, $m=39$) of teachers are able to apply research to develop learning in order to use the results to

develop teaching and learning in the future, especially, students would gain four skills of 21st century skills: working collaboratively; analytical thinking, problem solving and communication as the following in the study of (Dechakupt, 2019) claimed.

Suggestions

1.The leaders' academic development processes and activities should be flexible and adopted with the varieties of gender and educational levels. In various circumstances, each workshop session should introduce with interesting topics, information, and various activities, enabling participants to enhance their comprehension and expertise in managing the various challenging obstacles faced in academic leadership.

2.Teachers of Lampang Kanlayanee school should be trained continuously to develop experience in conducting the classroom research workshops by using the Principles of Academic Leaders Model of Lampang Kanlayanee for promoting the academic skills of teachers. Moreover, the academic leaders should be rewarded of the best practices, including publishing their academic works in advance levels.

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APPLYING BUDDHIST PRINCIPLES FOR ENHANCED COMMUNICATION SKILLS AND PERSONAL GROWTH OF AIRLINE BUSINESS STUDENTS

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ABSTRACT

This study investigates the application of Buddhist principles to enhance communication skills, a core aspect of personality and personal development, among students majoring in airline business. The study aims to investigate the impact of Buddhist principles on the development of communication skills among airline business students, compare their communication skills before and after a learning intervention, and use the findings to establish guidelines for applying Buddhist principles to enhance communication skills in this student group. The research utilized purposive sampling, and the research tools included Communication Exercises, and pre-post tests. The study reveals that principles such as tolerance, clinging, diligence, and honesty can have a significant impact on students' self-development, resulting in noteworthy improvements in communication skills and overall quality of life. The participants demonstrated heightened communication skills through the incorporation of fundamental Buddhist teachings such as sila, concentration, and wisdom. The instructional approach involved clarifying course objectives, reviewing previous knowledge of Thai etiquette and morality and Dhamma principles, and integrating various teaching methods. These included practicing communication in community settings, job interviews, and encouraging the expression of opinions during class.

Keywords: Applying, Buddhist Principles, Communication skills, Personal Growth

Introduction

Interpersonal communication manifests in various forms, distinctly categorized into four types: anonymous, practical, formal, and informal. Psychologist L.S. Vygotsky conceptualized communication as a process rooted in rational understanding and intentional transmission of ideas and experiences, necessitating specific methodological approaches. A contemporary of Vygotsky, N. Leontev, also included communication as an element within his activity theory, deeming the enhancement of communication skills a pivotal component of human development. Furthermore, Leontev believed that purposeful human activity could shape cognitive processes. In Buddhism, these purposeful and intentional behaviors include activities such as meditation and acting mindfully. These serve as tools to stabilize the mind, preparing it to leverage wisdom to understand all dhamma conditions and to formulate the basis for systematic and logical thinking. This development system, a core component of Buddhist belief, can be applied to individuals across societies and castes. The personalities of the Buddha and his disciples play a vital role in the dissemination of these ideas, encouraging faith and guiding individuals toward a life of ethical, mindful, and virtuous existence. This systematic process of human development marks the birth of an ethical system aimed at helping humans achieve perfection.

The birth of a human's right view begins with the five sense systems: seeing, hearing, smelling, tasting, and experiencing preferences accepted by society. The personality, a crucial component, influences progress and success across various domains such as education, social integration, and work acceptance. From a psychological perspective, personality encompasses an individual's overall behavior, including physical appearance, participation in various activities, thought, and emotional patterns. The airline business major at the School of Tourism and Hospitality, Suan Dusit University Lampang Education Center, emphasizes the development of a strong academic foundation and the Suan Dusit Spirit. This university-wide characteristic, deeply embedded in the culture of Suan Dusit, underscores the importance of a good personality, proper respect, dignity, societal value, orderliness, awareness, joyfulness, and consciousness. The program instructors strive to develop students' personalities by highlighting their uniqueness and encouraging expressions of thoughts, actions, manners, and character traits aligned with their age and situation. The application of Buddhist principles

in teaching enhances students' physical and mental well-being, fostering knowledge, wakefulness, joy, and the consciousness to bring wisdom for self and societal development.

Personality is crucial for speaking especially in front of the public. The speaker or orators must have a personality that appeals to the listener. Personality is related to speaking in front of the public. The current training courses, thus, include the content of personality and speaking such as a course of public speaking and personality development, leadership speaking and personality development etc. It is, thus, seen that internal personality of the speaker is crucial in speaking. For external personality, good personalities of the speakers help succeeding in speaking. The speakers must also develop their personality through the following process of 4 steps in personality development including: self-analysis, improvement, expression and evaluation. Various personality traits also need to be developed in speaking such as appearance, dressing, presentation, eyes contact, voice tones, gestures, and self-confidence. In addition to developing the mentioned personality, the use of language in speaking is also necessary to be continuously developed. (Phramaha Pitsanu Sannametho, 2021)

Research Objectives:

1. Explore how to develop a Buddhist communication personality among airline business students.
2. To compare the communication skills and abilities of the communication personality development of airline business students
3. Utilize the results to establish guidelines to develop the communication personality of airline business students.

Methodology

Population and Samples

They were 9 first-year students in the second semester of academic year of 2023 from the airline business program in the School of Tourism and Hospitality at Suan Dusit University Lampang Education Center.

This study employed an experimental research design, specifically focusing on research and development. The sample group comprised first-year students from the airline business program in the School of Tourism and Hospitality at Suan Dusit University Lampang Education Center, totaling 9 individuals selected through purposive sampling. The research utilized various tools, including personality development learning plans, exercises, and pre- and post-learning achievement tests.

A mixed-methods approach was employed, combining quantitative research through questionnaires with qualitative research methods such as recording student behavior, conducting in-depth interviews, and analyzing relevant research documents. This comprehensive method aimed to explore the application of Buddhist principles in personality development and communication among the participants. The study included a thorough examination of religious concepts related to personality and a synthesis of information obtained from documents and related research to address the research objectives.

2. Research Instruments Regarding the steps of experimental process, below are Active Learning activities, techniques and tools used to obtain the results:

2.1 Conducted pre-test of 20 questions about personality and a synthesis of information obtained from documents. Pre-test and post-test (resume' writing and oral Q/A): designed to test the students' knowledge and attitude/aptitude towards writing proper contents.

2.2 Mock up Interview activity.

Data Analysis:

The study's qualitative data analysis followed a structured approach, involving the collection of data through behavioral observation and interviews. Participants underwent interviews to discern individual similarities and differences, emphasizing the importance and distinct characteristics of each piece of information. The interview data, prioritized for relevance, was then compared with pertinent document data, encompassing theoretical concepts and findings from related research. This comparative analysis sought to reveal similarities and differences in the characteristics of the data.

Systematic analysis of information obtained from interviews and various studies established connections among them, showcasing the significance of the information in a comprehensive manner. The study prioritized qualitative, non-numerical data that was descriptive, detailed, and provided depth, directly referencing the source of information, whether obtained from research or documents. Qualitative information, derived from interview responses (Interview Research) and various documents (Document Research), underwent analysis by establishing relationships across different aspects based on factual evidence, including cause-and-effect relationships. The analysis yielded descriptive findings and conclusions, aligning with academic principles for report writing.

In the Quantitative Data Analysis phase, numerical data underwent analysis using statistical tools, percentages, and descriptive summaries.

Result

Based on the continuous observations, findings analysis and test results, it was concluded that: the most reliable solution to improve the students' "When Responding to Questions" index with the score of 85% corresponded to Leong & Ahmadi (2017), which stressed the importance of creating motivation by ways of developing friendly and cooperative environment as this would enable learners to overcome their struggles, reduce fear and anxiety when performing oral dialogues.

Throughout the study, students actively cultivated mindfulness through prayer and meditation, guiding their thoughts and managing emotions such as anger, greed, love, delusion, and worry. This intentional practice, coupled with academic work, played a pivotal role in shaping a composed and focused personality, fostering greater control over their minds during study sessions. With the goal of reaching the state of "samadhi," students exhibited a notable ability to align their interests with the ongoing lesson, demonstrating a profound understanding of the subject matter. This heightened concentration facilitated the manifestation of wisdom, enabling students to delve more deeply into lessons and apply acquired knowledge in different scenarios.

This systematic process contributed to the development of more resolute, confident personalities among the participants. Moreover, the study underscored the significance of morality as a guiding principle, emphasizing the cultivation of positive friendships rooted in love, characterized by active listening, offering recommendations, and collaborative problem-solving.

Active participation in creative activities and collaborative group work further reinforced the development of a generous and kind personality among the students. The study's findings highlighted the positive impact of these practices on individual and collective personality development. Public service activities, particularly those involving the cleaning of religious spaces, emerged as meaningful contributors to a sense of responsibility, unity, and peace. The integration of Buddhist principles, including mindfulness, concentration, wisdom, Yonisomanasikkara, and goodwill, was a methodological cornerstone guiding the study. The results demonstrated that this integrated approach not only influenced individual progress towards success but also contributed to the establishment of a harmonious environment. The study's findings underscore the continuous application of these principles as a pathway to a fulfilling and well-rounded life.

Summary and Discussion of Research Results:

Communication in religion Buddhist methods of communication Principles of communication proceed from the point Start to reach the destination. This study reveals the profound impact of practicing self-development guided by Buddhist principles on shaping the personality and communication skills of airline business students. The investigation delved into the integration of Buddhist principles, emphasizing the use of mindfulness, concentration, wisdom, tolerance, perseverance, and ethics as guiding principles in the developmental journey.

Aligned with the findings of Su-Chao and Ming-Shing (2006), the research underscored the substantial influence of an individual's personality on psychological feelings, norms, and the inclination to collaborate within an organizational context. Applying Buddhist principles and teachings to communication-oriented personal development offers distinct advantages, leveraging the cause-and-effect paradigm inherent in Buddhism. Positive actions, or good karma, result in beneficial outcomes. For instance, students engaging in frequent speaking practices exhibit enhanced fluency and eloquence,

earning kindness and praise from their peers and educators. Conversely, those displaying aggressive or uncooperative behavior received more critical feedback and additional training.

While recognizing the limitations of the study, particularly the variance in participant readiness for self-development, the research emphasizes the consideration of individual student behaviors. Instructors play a crucial role in applying Buddhist principles to cater to students' diverse needs, fostering continuous participation in personality development according to these principles. The ultimate goal remains the cultivation of a strong and adaptive personality, progressing toward success in various life aspects. This aligns with the principles of mindfulness, concentration, wisdom, yonisomanasikkara, goodwill, and kindness, all of which serve as guideposts for holistic development. A well-cultivated personality contributes to job satisfaction, adaptability to the work environment, and harmonious relationships, corroborating with the findings of Dawis and Lofquits (1984) and Judge & Ilies (2002) that highlight the comprehensive influence of personality characteristics on behavior across diverse situations.

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THE EFFECTS OF INQUIRY-BASED LEARNING PROGRAM ON CREATIVE THINKING OF CULINARY NUTRITION COLLEGE STUDENTS

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ABSTRACT

The purpose of this study were to develop Inquiry-based learning program to enhance creative thinking of culinary nutrition students and to explore the effects of inquiry-based learning program on creative thinking of culinary nutrition college students. The samples of this study were 40 students majoring in culinary nutrition at Hezhou University, randomly divided into experimental group and control group, with 20 students in each group. The experimental group was provided inquiry-based learning program, while the control group was not. The study was a quasi-experimental design with a quantitative data analysis. The research design of pre-test and post-test control group was used to examine the effects of inquiry-based learning program on creative thinking of culinary nutrition college students.

The instruments used in this study are as follows: (1) The inquiry-based learning program to improve creative thinking of culinary nutrition college students in terms of three components: originality, fluency, and elaboration and (2) The Creative Thinking Test had a total reliability of 0.74 with difficulty index (P) was 0.49 -0.51 and discrimination index (D) was 0.38- 0.46. The Test of Creative Thinking was based on the Torrance test of creativity which a set of creative thinking test. To understand the effects of the inquiry-based learning program, the evaluation was conducted according to three components: originality, fluency, and elaboration. The data were analyzed by using descriptive statistics, mean, standard deviation, percentage, and t-test for dependent samples and independent samples. After the experiment, it was found that Creative Thinking of culinary nutrition college students in the experimental group was higher than the control group and before the experiment in three components with statistical significance at the .01 level.

Keywords: Inquiry-based learning, Creative thinking, Culinary nutrition, College students

Introduction

The development of creative thinking has become a hot topic in education circles. The United States, Canada, and other countries regard creative thinking as students' learning goals, hoping that students can use creative thinking to develop unique products or generate some constructive and unique ideas, summarized as basic learning tasks (Shaheen, 2010). As in eastern countries, since 1997, when the Ministry of Education (MOE) launched the 'Thinking Schools, Learning Nations' (TSLN) vision, Singapore has been committed to fostering creative thinking in students. Education for creativity has always been at the heart of Singapore's education policy, as reflected in various official documents and speeches. In its "Expected Educational Outcomes", the Ministry of Education stipulates that all students should be "creative and intellectually curious" by the time they graduate from secondary school, and "innovative and enterprising" by the time they graduate from tertiary school (Tan & Ng, 2021). In addition, especially in China, since 2001, China has prioritized the development of creative thinking skills and regards it as an important part of education (Vong, 2008). Despite the continuous progress of China's education system, further efforts and improvements are still needed to eliminate "stereotypes" and "traditional education" (Alshannag & Hamdan, 2015). Because China's education system is still inadequate to effectively produce creative, creative and entrepreneurial adults (Zhao, 2014). On the other hand, the current education in China emphasizes test-taking rather than learning creative thinking ability. Test-taking education is regarded as an instrumental teaching mode, which focuses on imparts rational knowledge to students and expects them to accept it passively. Under the exam-oriented education system, teachers do not want to use teaching methods to guide students to think independently, but pay more attention to how to improve students' exam skills (Meng, et al. 2021). As

a result, Chinese students are relatively weak in learning skills such as problem-solving and creative thinking. Therefore, China education today emphasized on cultivate students' creative thinking.

The importance and necessity of creative thinking lies in the fact that in the rapidly changing and uncertain future, cultivating creative thinking in education can help learners solve problems, cope with challenges, and improve competitiveness. Schools are also considered to be places that encourage creative thinking, where all subjects can be taught and learned in a creative manner, diverse environments offer opportunities for both students and teachers to engage in creative reflection, and all teachers have the chance to exercise creativity in their teaching practices (Kampylis & Berki, 2014). Torrance (1972) emphasized that creative thinking is a skill that needs to be improved through practice. Chu et al. (2021) mentioned in their book that there are three main knowledge areas for skills in the 21st century, among which the first is the skills of creative thinking, which can adapt to the daily personal professional needs and social environment of the 21st century. Therefore, fostering creative thinking is crucial because it helps people solve problems, build new businesses and organizations, creative educational approaches, and lead creative lives (Torrance, 1972).

Inquiry-based learning is an education approach that focuses on investigation and problem-solving, learning-independent teaching method that can cultivate students' higher-order thinking ability, critical and creative thinking and emphasize active participation (Cairns, 2019; Australian Government Department of Education, 2023). The implementation of inquiry-based learning program consists of five stages: Engagement, Exploration, Explanation, Elaboration, and Evaluation (Bybee, et al. 2006). Sanita et al. (2021) analyzed data using activity observation tables and creative thinking test tools to identify the various components of creative thinking ability, including fluency, flexibility, originality, and elaboration. The results show that applying the inquiry-based learning method in teaching can significantly improve students' active participation and creative thinking ability. This finding strongly supports the effectiveness of inquiry-based learning for creative thinking.

From the research of inquiry-based learning and creative thinking, there are few studies on the effects of inquiry-based learning on the creative thinking of students majoring in culinary nutrition. Therefore, it is of great significance to explore the effects of inquiry-based learning program on creative thinking of culinary nutrition college students.

Research Objectives

This study conducted to 1) develop Inquiry-based learning program to enhance creative thinking of culinary nutrition students and 2) study the effects of inquiry-based learning program on creative thinking of culinary nutrition college students.

Methodology

This study used a quasi-experimental pretest-posttest design, with inquiry-based learning program as the independent variable and creative thinking as the dependent variable. The study design divided the sample into two groups, the experimental group and the control group. After the pre-test, the experimental group was provided with the inquiry-based learning program but the control group was not and then compared the results of the post-test. The objectives were to develop the inquiry-based learning program and explore whether the inquiry-based learning program can improve the creative thinking of the students majoring in culinary nutrition in this study, students' creative thinking was examined by comparing the total average scores of the pre-test and post-test. The program lasted 4 weeks and included pre-test and post-test components.

Samplings/Participants

The population in the study was a total of 160 college students majoring in culinary nutrition in Hezhou University. Firstly, 160 students were given creative thinking test to examine creative thinking. The samples of this study were 40 students who were chosen by purposive sampling, and had mean score of creative thinking form the 25 percentiles down. They were randomized to the experimental group and the control group equally (20 students in each group). The experimental group was provided by inquiry-based learning program, while the control group was not.

Research Tools/Instruments

Inquiry-based learning program (IBLP)

Inquiry-based learning program is a student-centered teaching method that combines theory with practice. It mainly cultivates students' independent learning ability and learns to find problems to build their knowledge. The inquiry-based learning program consists of 12 activities and has five stages in each activity: Engagement, Exploration, Explanation, Elaboration, and Evaluation. To ensure that the inquiry-based learning program is more effective and scientific, this study selected three experts with extensive academic backgrounds and research experience in field of education. These experts include one professor specializing in culinary nutrition from university in China and two education experts were professors with experience in teaching in the department of educational psychology and curriculum and teaching from university in Thailand. Based on the opinions of these three experts, the inquiry-based learning program was improved, and a pilot study was conducted.

Creative thinking test

The Creative thinking test in this study was developed from the Torrance Test of Creative Thinking (TTCT), a widely used tool to assess creative thinking ability, created in 1966 by Ellis Paul Torrance. According to the Torrance creative thinking Test, a questionnaire on the creative thinking of culinary nutrition college students was designed by divided into 3 sections: Build the picture, Complete the pictures, and Draw a line. Each section lasts 10 minutes and measures in 3 components of Creative thinking as follows: fluency, originality, and elaboration.

Improving Creative thinking test based on 3 experts opinion. The index of item objective consistency (IOC) was used to check the content validity with the value of 0.67 up were selected. By using B-Index 700 program, The Creative Thinking Test had a total reliability of 0.74 with a difficulty index (P) was 0.49 -0.51 and a discrimination index (D) was 0.38- 0.46. The result showed that Creative thinking test developed in this study can used properly.

Procedure

Step1: pre-test

Before the experiment began, all the students took a pre-test to understand the basic level of creative thinking. This study uses creative thinking test to measure. After the students completed the creative thinking test within the prescribed time, the test was collected and graded. All subjects completed the first stage prediction and moved to the next stage.

Step 2: Inquiry-based learning program intervention

In this stage, test students will receive an inquiry-based learning program intervention to explore its impact on the creative thinking of the culinary nutrition specialty course "Technics of dough modeling".

In this study, the Inquiry-based learning program was used to intervene in learning, and the theme content was produced 12 activities. Guide students to actively participate in learning and improve their creative thinking by issuing tasks, pre-class homework, and personal practice. The inquiry-based learning program intervention lasted for four weeks, three times a week for 3 hours each time.

Step 3: post-test

After the inquiry-based learning program intervention, all the tested students were post-tested to understand the changes in the creative thinking of the students majoring in culinary nutrition. The post-test was measured using the same creative thinking test as the pre-test.

Data Analyses

In this study, SPSS statistical software was used for data analysis. For quantitative data, descriptive statistical analysis including mean and standard deviation with the SPSS program and t-test was used to compare and analyze the creative thinking data of the experimental group and the control group. The mean scores and standard deviation were calculated to determine whether the mean score of the pretest and posttest were significantly different by t-test dependent and t-test independent.

First, the researcher conducted independent sample T-test analysis on the pre-test data of the experimental group and the control group, and obtained the average value and T-value of the two groups. After the experiment, the two groups were re-tested, the data of the two groups were T-tested, and the average value of the control group and the experimental group was taken.

Results

From Research objectives 1, Design the inquiry-based learning program (IBLP); the result was as follows: Inquiry-based learning program comprised of 12 activities and based on the 5E teaching model of inquiry-based learning, which developed the subject knowledge system of creative thinking ability. The 5E teaching model consisted of five steps: Engagement, Exploration, Explanation, Elaboration, and Evaluation.

Step1 Engagement: By asking questions or setting up situations, teachers use teaching tools to stimulate students' curiosity and promote their re-understanding of existing knowledge. This guides students to understand new concepts and ensures that they remain focused, thereby stimulating their interest in exploring knowledge and facilitating the acquisition of new knowledge.

Step 2 Exploration: By providing a common base of activities for students to make an initial investigation of existing knowledge, they can facilitate a change in their perceptions. Through this kind of investigation, students have the opportunity to learn new knowledge, and in the process, use previous knowledge and experience to generate new ideas and enhance creative thinking ability.

Step 3 Explanation: At this stage, teachers should provide opportunities for students to share what they have learned during the discovery phase. Then, the teacher can introduce the concept directly to the student, demonstrating the process or technique. The learner will explain their understanding of the concept or presentation process, and the teacher can analyze the learner's understanding and guide them to further understanding.

Step 4 Elaboration: Practice to achieve your goals. At this stage, teachers can expand students' understanding of concepts and mastery of related skills. By having students practice making in person, students can better master skills and behaviors, and gain more information from them, resulting in more creative ideas and improved creative thinking ability.

Step 5 Evaluation: Experience internalization and sharing. Students are required to present their work and share their creative experience. Through mutual communication and sharing of learning experience among students, it can promote the collision of ideas. Such interaction helps to improve students' creative thinking ability.

From Research objectives 2, Study the effect of using the effects of inquiry-based learning program on creative thinking of culinary nutrition college students; the result was as follow:

Table 1 The t-test score of creative thinking between experimental group and control group before using Inquiry-based learning program

Creative Thinking	Experimental group pretest (N=20)		Control group pretest (N=20)		t	p
	\bar{X}	S.D	\bar{X}	S.D		
originality	3.65	1.35	3.20	1.36	1.050	0.300
fluency	3.50	0.89	3.60	0.60	0.000	1.000
elaboration	3.75	0.85	3.85	1.23	-0.300	0.766
Total	10.90	2.00	10.65	1.57	0.441	0.662

The data showed the total score of creative thinking ability in all dimensions of the experimental group and the control group, indicating that there were no significant difference in the development of creative thinking ability between the experimental group and the control group before the implementation of the inquiry-based learning program. Therefore, the students in the experimental group could be organized to carry out inquiry-based learning program.

Table 2 The t-test score of pre-test and posttest of creative thinking ability in experimental group

Creative Thinking	Experimental group pretest (N=20)		Experimental group posttest (N=20)		t	p
	\bar{X}	S.D	\bar{X}	S.D		
originality	3.65	1.35	8.20	1.01	-11.965**	0.000
fluency	3.50	0.89	4.90	0.31	-6.658**	0.000
elaboration	3.75	0.85	7.80	1.51	-10.650**	0.000
Total	10.90	2.00	20.90	1.90	-20.106**	0.000

**p < .01

The paired sample t-test was conducted on the pre-test and post-test scores of the experimental group. The results indicated that the mean score of the pre-test for the experimental group was 10.90 with a standard deviation of 2.00, while the mean score of the post-test was 20.90 with a standard deviation of 1.90. There is a significant difference ($p < .01$) between the two sets of data, including the mean (\bar{x}) and standard deviation (S.D.) From the data, it can be observed that after attending inquiry-based learning program, students in the experimental group showed the greatest improvement in originality ($\bar{X} = 8.20$, $S.D = 1.01$), followed by elaboration ($\bar{X} = 7.80$, $S.D = 0.31$), and finally, fluency ($\bar{X} = 4.90$, $S.D = 1.51$), in terms of creative thinking dimensions. The experimental results demonstrate that the inquiry-based learning program effectively enhances students' creative thinking.

Table 3 The t-test score of pretest and posttest of creative thinking ability in control group

Creative Thinking	Control group pretest (N=20)		Control group posttest (N=20)		t	p
	\bar{X}	S.D	\bar{X}	S.D		
originality	3.20	1.36	4.30	1.08	-2.820	0.011
fluency	3.60	0.60	2.85	0.60	5.252	0.000
elaboration	3.85	1.23	2.50	0.83	3.500	0.002
Total	10.65	1.57	9.65	1.73	1.859	0.079

The pre-and post-test data of students in the control group were tested by paired sample t-test. In the control group, the average pre-test score was 10.65, and the average post-test score was 9.65. The significance test before and after the control group was 0.079. The data showed that there was no significant difference between the total scores of the control group.

Table 4 The t-test score of posttests of creative thinking ability between experimental group and control group

Creative Thinking	Experimental group posttest (N=20)		Control group posttest (N=20)		t	p
	\bar{X}	S.D	\bar{X}	S.D		
originality	8.20	1.01	4.30	1.08	11.816**	0.000
fluency	4.90	0.31	2.85	0.60	13.829**	0.000
elaboration	7.80	1.51	2.50	0.83	13.782**	0.000
Total	20.90	1.90	9.65	1.73	19.666**	0.000

** $p < .01$

The results obtained from the independent sample t-test comparing the post-test scores of the experimental group with those of the control group are presented in Table 4 above. The experimental group students who participated in the inquiry-based learning program had higher creative thinking ability than the control group students who did not participate in the inquiry-based learning program with statistically significant at the $p < .01$ level in all components. The statistical significance were difference across various dimensions for the experimental group students who participated in the inquiry-based learning program (Originality $\bar{X} = 8.20$ $S.D = 1.01$, fluency $\bar{X} = 4.90$ $S.D = 0.31$ and elaboration $\bar{X} = 7.80$ $S.D = 1.51$)

The experimental results showed that the creative thinking level of experimental group was higher than that of control group. The results show that inquiry-based learning program can enhances creative thinking.

Discussion

From Research objective 1, Design the inquiry-based learning program (IBLP)

The inquiry-based learning program is student-centered. In this study, The program activities focus on the learning process of students. This method mainly cultivates students' advanced thinking and independent learning ability. Students need to participate in the learning process actively, learn to identify problems, think deeply, and build their knowledge in the process of inquiry. The program consists of five parts: classroom learning objectives, teaching focuses and difficulties, learning tools, teaching steps (5E Instructional Model), and classroom summary.

Inquiry-based learning aims to create an engaging and positive learning environment, combined with good teaching practices to stimulate students' enthusiasm and motivation (Khuana et al. 2017).

Activities started with stimulating students' curiosity and putting forward exploratory open-ended questions for students to participate in the investigation, active learning, and problem-solving. In learning, students could skillfully use their knowledge and skills from multiple perspectives to create creative works and enhance their creative thinking ability. Through exercises, students can combine life experience with the class, cultivate their spirit of active exploration, and enhance their love for dough molding craft courses. Teachers should learn to let students set goals, draw on existing knowledge and let students take more responsibility for their learning. With the characteristics of inquiry-based learning, students are the protagonists of the classroom and student-centered and student-active learning are the main characteristics of this method (Asy'ari et al, 2021).

According to Sarnita et al. (2021), their research results proved that students' activity and creative thinking ability can be improved by using inquiry-based learning in teaching, which proves that inquiry-based learning is effective in improving creative thinking. In the results of this study, it can also be seen that inquiry-based learning program improve students' creative thinking level, which is consistent with previous research results.

From Research objectives 2, Study the effect of using the effects of inquiry-based learning program on creative thinking of culinary nutrition college students

Hypothesis 1 After participating in inquiry-based learning program, the creative thinking level of the experimental group was improved compared with that before the experiment.

By comparing the differences in the creative thinking level between the pre-test and post-test scores of students in the experimental group, the research data show that the creative thinking level of students in the experimental group after completing the inquiry-based learning program has increased nearly twice compared with the pre-test, which confirms that the inquiry-based learning program is effective in improving the creative thinking level of students. The research results support the first research hypothesis.

This effect was due to the design of inquiry-based learning program. The change of students' creative thinking in this experiment mainly depends on reasonable teaching design based on inquiry-based learning program. This program created 12 themed activities that determine the purpose and method based on students' interests and professional characteristics. These themes can solve students' questions in the course and are consistent with students' existing experience, so that students have a high sense of identity with the theme of the inquiry-based learning program and students show a strong desire to explore. Some scholars believe that inquiry-based learning is a teaching method that combines students' curiosity to promote the development of students' higher-order thinking ability while learning (Qamariyah et al. 2021; Tindangen, 2018).

As a result, the program has been designed with 12 themed activities to gradually increase the difficulty. The first five topics are completed by students independently, the sixth is completed in groups of two, the seventh is in groups of two to three, the eighth is in groups of four, the ninth to tenth is in groups of five, and the eleventh to twelfth is completed in groups of ten. The gradual increase in the difficulty of the activities ensures that students are challenged within feasible limits and that they fully understand what they are learning.

In the first three thematic activities, teachers help students get started by demonstrating the basic shape of the theme and explaining key points. Teachers encourage students to make independent innovation while imitating, so as to cultivate their creative ability and hands-on ability. This teaching strategy is designed to allow students to continuously develop themselves in progressively enhanced challenges and to gain learning and collaborative experiences from them. Inquiry-based learning is a teaching process that starts with arousing students' curiosity and eventually forms interest and gets results. For example, in this study, several activity themes such as "Never-fading rose", "Monster Appearance" and "the strangest pumpkin" are taken as examples. Each activity can stimulate students' infinite imagination, and students can make full use of their existing experience to explore through daily life or exploration network. Inquiry-based learning is a student-centered teaching method that combines theory and practice. In the activities, emphasis is placed on student experience and participation.

The result conformed with research by Tindangen (2018) who conducted a study that adopted quantitative research methods and set pre-test and post-test control groups to study whether inquiry-based learning can improve students' higher-order thinking ability. The results showed that the higher-order thinking ability of the experimental group was higher than that of the control group. According

to Fatmawati, (2017) who used 50 first-year students as experimental subjects in his study, divided into control classes and experimental classes. In order to measure students' creative thinking, this paper starts with inquiry learning and surveys the relevant question formation by referring to the fluency, flexibility, and originality of creative thinking. The results show that the inquiry-based teaching class has improved in all three parts, which proves that inquiry-based learning can be used as a learning mode to cultivate creative thinking. In science curriculum learning, inquiry-based learning is regarded as the most basic and widely used teaching mode, which is important in encouraging students' creative thinking (Meador, 2003; Johnson, 2000 & kind, 2007). Therefore, in the research of many scholars, it is determined that inquiry-based learning is suitable for students of this course and this major. Therefore, the program based on inquiry-based learning in this study promoted the improvement of students' creative thinking ability. So the experimental group's post-test results were higher than the pre-test results.

Hypothesis 2 After participating in inquiry-based learning program, the experimental group had a higher level of creative thinking than the control group.

The results showed that there was significant difference between the experimental group and the control group, and the experimental group had higher scores than the control group. The results also support the second hypothesis.

The main reason was that students in the experimental group had gain experience in the teaching method based on inquiry-based learning program. The teaching process consisted of five stages. Among them, Engagement and Exploration are two tasks assigned to students before class, so that students can have more time to explore, discover and create. Explanation, Elaboration and Evaluation are completed in class. The theme setting of the whole inquiry-based learning program is relatively new, interesting and difficult. The students in the experimental group may encounter some obstacles and difficulties in the process of practice. But the process is more conducive to broadening the mind. Purnawati et al. (2021) studied improving creative thinking among 49 students in grade 4 in Sleman Private Primary School. Two cycles of classroom research were adopted, and finally, observation and questionnaire were used to collect data. The results show that inquiry-based learning modes can improve students' creative thinking ability. Sandika & Fitrihidajati (2018) introduced exploratory learning in the introductory biology class of biology education, hoping to improve students' creative thinking and shape scientific attitudes. In this paper, they adopted the descriptive quantitative method, which the second-grade student of the biological education department in 2017; the subject of the course is the transfer of the cell, and 25 students are involved in the learning process. The learning process was conducted in the two research sessions in November 2017. In order to determine the improvement of students' creative thinking ability, the study adopted the test design before and after the test and observed the students' curiosity, objectivity, and other scientific attitudes through non-test tools. The results show that the students' creative thinking ability is greatly improved in the introductory biology class, and the influence of scientific attitude has been made to improve their attitude to science.

Dewey is the first scholar to propose inquiry-based learning. He believes that the experience of students and the actual participation are the most important in teaching (Dewey, 1938). Therefore, in inquiry-based learning program, students are helped to connect new experiences with previous ones in order to achieve better experiences. In designing inquiry-based learning programs, teachers ensure that the tasks are both challenging and at the same time relevant to real-life meaning. This kind of task setting can not only stimulate students' interest, but also help them apply their classroom knowledge to real situations and improve their problem-solving skills. Yayuk & As' ari (2020) believe that creative thinking is a tool that can solve complex problems and improve the ability to solve problems.

Bruner (1960) emphasized the importance of active learning and problem-finding. This does not mean that teachers have no role in the classroom, on the contrary, teachers have more responsibilities. In the course of the activity, teachers need to plan ahead, anticipate possible problems, and prepare coping strategies. Before each activity, teachers need to prepare carefully to ensure smooth progress. In the teaching process, teachers should encourage students to think more divergent. Guilford (1950) identified the concept of divergent thinking as a key aspect of creative thinking. He believes that creative thinking is the ability to solve problems and to think of various ideas to deal with open-ended problems. This expanded thinking can help students explore topics from different perspectives and stimulate their creativity. Through guidance, students' originality in creative thinking ability has been significantly

improved. According to experimental results, inquiry-based learning program are more conducive to improving students' creative thinking.

Based on the above discussion, this study supports the effectiveness of inquiry-based learning program (IBLP) in improving students' creative thinking ability. Through well-designed courses, it effectively stimulates students' curiosity, promotes learners' independent exploration and cooperative learning, and significantly improves students' creative thinking level. The comparison of pre-and post-test data strongly supports the positive impact of inquiry-based learning program and validates the hypothesis that inquiry-based learning program can effectively cultivate creative thinking. The inquiry-based learning program creates an engaging and supportive learning environment. By combining theory with practice and gradually challenging students through thematic activities, this approach is consistent with the views of education scholars and the results of previous research, further confirming that inquiry-based learning program is an effective teaching method for developing students' creative thinking.

Conclusion

This study mainly uses inquiry-based learning program experiment method, adopts pre and posttest experiment design, and selects planned, purposeful and evidence-based inquiry-based learning as independent variable. Taking culinary nutrition students as experimental group, the study focused on students' creative thinking for 4 weeks. The research aimed to explore the impact of inquiry-based learning program on the creative thinking. Through activity and data analysis, this research found that Inquiry-based learning program can enhance creative thinking in the courses of culinary nutrition majors. It provides a new inspiration for promoting the creative thinking research of students and enriching the practical results of cultivating students' inquiry-based learning program. The results also support all hypothesis. Inquiry-based learning program has a significant impact on the three dimensions of creative thinking. The results concluded that inquiry-based learning program can promote the development of creative thinking of culinary nutrition majors in three dimensions: originality, fluency and elaboration. However, it was found that with improving the originality of students' work. Their fluency is not as developed as it should be. Because in develop of originality it is difficult for students to produce multiple ideas in a short time, which leads to the difficulty of improving originality and fluency simultaneously. This reveals the inherent tension between the two, which in developing unique perspectives and creating novel idea can affect the ability to quickly generate a lot of ideas.

Furthermore, In the process of carrying out inquiry-based learning program, emphasis should be placed on the grading of activity difficulty. Maintaining an appropriate level of challenge is essential to the development of students' desire for exploration and creative thinking. If the activity is too easy, students can easily complete the task, and may lose their interest in the activity, thus it is difficult to improve their creative thinking ability.

Importantly, the design and organization of inquiry-based learning program should be student-centered and fully stimulate students' independent learning ability. Pink's (2011) research on learning motivation and autonomy is related to inquiry-based learning. He stresses the importance of intrinsic motivation and autonomy. Teachers should create a lively and interesting learning environment for students, which can stimulate curiosity and make students feel happy in learning. When students are happy with the classroom experience, they are more likely to be fully engaged and do not see the classroom as a task, but rather to explore. This change makes students' learning motivation shift from external to internal driving, thus improving their learning autonomy and promoting them to pursue knowledge and develop themselves more creatively.

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EFFECT OF USING QUIZZZ PROGRAM TO DEVELOP ENGLISH SPELLINGS

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ABSTRACT

The intentions of this classroom research are 1) to assess the improvement of the 7th grade students' vocabulary spelling skill with the Quizizz program and 2) to find out their satisfaction levels towards using Quizizz program in an English for Reading and Writing course. The research employed the pretests and posttests with the purposive sampling of 36 seventh grade students of M.1/1 who participated in the Quizizz spelling games. Hence, the instruments in this research included 1) the pretests and the posttests in the form of paper-based tests, 2) the two sets of spelling online games using the Quizizz program, each contained 10 multiple-choice questions and 3) the questionnaires for measuring the satisfaction level on using Quizizz in the English classes. This research used the descriptive statistics to show the results of the pretests, the posttests, and the satisfaction levels in mean scores and percentages. The results of the research found that students' posttests (mean = 16.19) were higher than their pretests (mean = 15.33). The mean score increased by 4.30 %. In addition, this research revealed that the students were highly satisfied (mean = 4.55) with using the Quizizz games in the English classes. This research indicates the appropriateness of using the Quizizz program in developing spelling skills and other English skills of the middle school students.

Keywords: Quizizz program, Basic vocabulary, Spelling game

Introduction

Vocabulary spelling plays an important part in an English writing skill assessment. For writing, it is an English language skill that needs to be taken into an account for Thai learners, there has been shown it as the weakness among other language skills. Recently, the International English Language Testing System (IELTS, 2022), reported the unsatisfactory level of writing skill amongst other skills of Thai test takers.

Among English writing mistakes found, vocabulary spelling tends to be highlighted as a major problem (Manok, 2021). This spelling error should not be ignored on Thailand's developing school framework if the expectation of the nation aims at uplifting English proficiency of Thai people into the international framework. As Thailand ministry of education has the expectation with the English proficiency of Thai learners based on the Common European Framework of Reference for Languages (CEFR), Thai students need some room for improvement on this spelling skill. Particularly, the basic vocabularies seem to be a first door to bridge the idea of the beginners who use English as a Foreign Language (EFL) into the international context. Since Thai people do not speak English as their official language, writing skill therefore is more likely to be used for gaining and responding of information.

In Thai schools, especially public schools, teaching English writing is more likely to fall under the umbrella foreign language teaching/instruction. Surasakmontree school, for instance, is a special big public school located in Bangkok, where English is taught as a foreign language from the seventh grade to the twelfth-grade levels. For the compulsory education (the ninth graders), the ministry has the expectation towards CEFR at level A2, which means that the Thai seventh grade students need to push themselves up from the beginning (Level A1) until they are able to reach the expectation of (Level A2) at the end of their compulsory educational periods. Thus, to design the activities and tests for the seventh grade students (aged 12-14 years old), it should be based on the vocabulary at CEFR from level A1 - A2, for instance, as cited in the Cambridge online dictionary (<https://dictionary.cambridge.org/>) and the Learn English Online, British Council.

More importantly, in the 21st century, the age of digital connection, people, especially teenagers, tend to use their smartphones in learning or accessing the information more often than before. Acquiring vocabulary knowledge and other language learning activities are often seen in the form of online based.

Hence, to reach that English proficiency expectation, it needs to emphasize on an online-based learning technique to be able to boost their English ability, as well as their motivation in language learning. Pusparani et. al. (2021) has proved that using digital (or online) games suits these students aged 12-14.

Among several online game sources, Quizizz is an online platform that English language researchers recommend. There has been reported that Thai students had an extremely high satisfaction level towards using Quizizz program (Patisung, 2020). Furthermore, several research have indicated the positive outcomes of applying Quizizz for an interactive classroom in English language learning (Penhataikul, 2022) in Thai schools. Even in the international institutes, they have supported Quizizz as a tool to enhance students' English skills (Liong, Y., Kwan, P., Abdullah, A. N., Govindasamy, P., & Yunus, M. M. 2019; Law Sze Huei, Melor Md Yunus, Harwati Hashim, 2021; Pusparani, A. D., 2021) particularly to improve their vocabulary knowledge (Diem Bich Huyen Bui, Tien Thinh Vu, 2022; Hesti Nabila, A. Muliati, Ahmad Talib, 2023). As mentioned, several studies revealed the effectiveness of using Quizizz in language learning. Nevertheless, a few conducted the research to improve the vocabulary spelling, despite the fact that spelling is a major problem of Thai students in writing English.

Research Objectives

To prove how effective and motivating the Quizizz program on English learning is, this classroom research intends to 1) improve the basic vocabulary spelling of the seventh-grade students by using Quizizz and to 2) measure their satisfaction levels towards using Quizizz in English Reading and Writing course.

Methodology

Participants

This classroom research used the purposive sampling for choosing the 36 seventh grade students of M.1/1 class. This target group fit this research since they are stable in classmate numbers; there are 36 students regularly in a classroom each year. In addition, the readiness of the classroom equipment seemed better for the teacher utilizing the Quizizz spelling games. The target group consisting of 12 male and 24 female students, aged 12-14, attended the English for Reading and Writing course during the second semester, 2023.

Research Instruments

The research instruments consisted of both paper-based and online-based tools. The first instruments were the pre-tests and the post-tests in the form of paper-based tests. Each contained a short passage. Words contained in the passage were chosen by the CEFR level equivalent to Level A1 – A2, as cited on the website of Cambridge online dictionary. This research was intent to test the vocabulary spelling skill in all parts of speech which included (noun, pronoun, verb, adverb, adjective, preposition, conjunction, and interjection). The passage is about being able to explain favorite activities, plans, timing and invitations which were described in English language users' ability in CEFR level from A1 – A2. In order to compare the improvement results, the pre-tests and post-tests used the same short passages that contained 20-word gap fills. The second instrument was the two sets of Quizizz spelling games, in the form of online-based interaction. Each game contained 10 multiple choice questions that required the students to choose the correct spellings. The third instrument was the questionnaires measuring the students' satisfaction levels towards using Quizizz games in the English classes. There were 5 statements to explore their satisfaction levels towards using Quizizz program.

Procedure

This research implemented the pre-tests, the post-tests, Quizizz spelling games and questionnaires to assess and measure the 36 Thai seventh grade students' vocabulary improvement and their satisfaction levels in using Quizizz program in the second semester, 2023, Surasakmontree school, Din Daeng, Bangkok. To validate these tests, games and questionnaires, a native English teacher and two Thai professional teachers who have been teaching in Thai public schools for more than 5 years, were invited to check the correctness and agreement. After that, the pretests were initially conducted to the sampling group. To standardize the short passage pronunciation of the pre-test, this research invited the native English teacher to read the passage out loud. After testing, the students kept studying as scheduled on the regular lesson plans. The Quizizz spelling games were used twice during their normal classes and

studying as the additional activities in the English classes. To assess the program and games, the pilot study was conducted with other seventh grade and high school students to evaluate whether the target group would be able to get their Quizizz program personalized. The first set of Quizizz spelling games was brought into the class before February, 2024. For the spelling sentences, the teacher created the sentences which were based on Cambridge online dictionary, together with the multiple choices based on the students' misspellings chosen from misspelt words on the pre-tests. This spelling activity allowed students to use their smartphones in order to get the Quizizz online spelling game personalized. The second part of the game was conducted in February before the big final examination. One week later, the students took the daytime post-tests in a similar methodology as the pre-tests. After the post-tests, they went back home to evaluate the satisfaction levels towards using the Quizizz games in the English classes. The evaluation was utilized by Google Forms. The rates of satisfaction levels were interpreted in 5 numbers which included the value of 5 (Highly satisfied), 4 (Satisfied), 3 (Moderate), 2 (Unsatisfied), and 1 (Highly unsatisfied).

Data Analysis

After testing all research instruments to the students, data were collected (the pre/post-test scores and the responding questionnaires). To assess the data and answer two research objectives, the misspellings of the pre-tests and the post-tests were illustrated by the frequency numbers, whereby the pre-test vs post-test scores were tabulated to compare the improvement, if any. For table explanations, the research employed the descriptive statistics to display the data in mean scores and percentages. Meanwhile the rating scores of the questionnaires were presented in the form of mean scores. In explaining the satisfaction levels towards using Quizizz in the English classes, the five-Likert scales were also applied to display the mean scores as the following interpretations: 5.00-4.50 (Highly satisfied), 4.49-4.00 (Satisfied), 3.49-2.50 (Moderate), 2.49-1.50 (Unsatisfied), and 1.49-1.00 (Highly unsatisfied) respectively.

Findings

The findings in this research were presented in two sections under the research objectives. The first section demonstrated the results of 1) the improvement the basic vocabulary spelling of the seventh-grade students by using Quizizz and 2) their satisfaction levels towards using Quizizz in English Reading and Writing course.

1) The improvement the basic vocabulary spelling of the seventh-grade students by using Quizizz

Table 1: The improvement of the basic vocabulary spelling ability

Student No.	Pre-test score (20)	Post-test scores (20)	Difference
1	18	17	-1
2	15	20	5
3	17	20	3
4	16	18	2
5	10	14	4
6	12	13	1
7	15	20	5
8	16	13	-3
9	17	15	-2
10	15	18	3
11	7	13	6
12	19	19	0
13	17	19	2
14	13	11	-2
15	18	9	-9
16	10	10	0
17	12	13	1
18	14	16	2
19	15	19	4
20	15	12	-3

21	19	19	0
22	18	18	0
23	16	19	3
24	14	17	3
25	14	18	4
26	19	19	0
27	18	9	-9
28	16	18	2
29	16	15	-1
30	16	19	3
31	16	15	-1
32	16	16	0
33	18	19	1
34	17	16	-1
35	15	18	3
36	13	19	6
n	36	36	36
Sum	552	583	31
Mean	15.33	16.19	0.86

Table 1 indicated the improvement of English spellings ability of the 36 seventh grade students. In general, the post-test scores (Mean = 16.59) were slightly higher than the pre-tests scores. (Mean = 15.33). The mean scores increased by 4.30%. The score differences altered, 20 increasing (55.55%), 10 decreasing (27.78%) and 6 stable (16.67%). Thus, the majority increased.

Table 2: Pre/post-test misspellings of the seventh-grade students

No.	Vocabulary	Part of speech	Misspelt frequency		Example of misspelling
			Pre-test	Post-test	
1	Course	Noun	33	21	couse, corse, cost, cuost
2	Summer	Noun	1	1	sommer
3	Swimming	Noun	1	1	siwimming
4	Tennis	Noun	10	2	tenis
5	Science	Noun	8	9	Scient, scienc
6	Technology	Noun	9	12	tecnology
7	Museum	Noun	9	11	musium, musiem, musuem
8	Film	Noun	26	13	flim, fim, few fill, fail
9	Message	Noun	5	13	Massage, messga
10	Us	Pronoun	-	1	ut
11	Visit	Verb	3	3	viti
12	Send	Verb	15	10	sent, senh, sand
13	Watch	Verb	3	6	What
14	Favourite/ favorite	Adjective	4	4	faverite

15	Good	Adjective	-	-	-
16	Please	Adverb	4	8	plese, pleuse
17	Always	Adverb	9	6	alway, away
18	With	Preposition	2	1	wish
19	Because	Conjunction	7	13	becaous, because, becuese, because
20	Oh	Interjection	-	1	Ow
Total frequency			149	136	

The tests also explored the most frequent misspelt in the top 3 vocabularies in Table 2. The most misspelt word was “*course*” by 33 numbers in the pre-tests and 21 numbers in the post-tests. The second ranked went to the word “*film*” which were 26 numbers and 13 numbers misspelt on the pre-tests and the post-test respectively. The 3rd top misspelt vocabulary varied, which was “*send*” (15 numbers) on the pre-tests, and technology (12 numbers) on the post-tests. In the pretests, the finest vocabularies that no one misspelt were “good”, “us”, and “Oh”. Those vocabularies are at CEFR level A1. However, among the top 3 vocabularies that no one missed, only the word “good” was found no one misspelt in the post-tests.

2) Students’ satisfaction levels towards using Quizizz in English Reading and Writing course.

Table3: Summary of Students’ satisfaction levels towards using Quizizz in the English classes

Statement	5	4	3	2	1	\bar{x}	Interpretation
1. Using Quizizz for spelling games is convenient to access.	12	8	2	1	-	4.35	Satisfied
2. Using Quizizz for spelling games is useful for learning English.	15	6	2	-	-	4.57	Highly satisfied
3. Using Quizizz for spelling games grabs students’ attention in an English class.	17	5	1	-	-	4.70	Highly satisfied
4. Using Quizizz for spelling games helps improve English spelling.	14	5	4	-	-	4.43	Satisfied
5. Using Quizizz for spelling games should be repeated in the future.	18	3	2	-	-	4.70	Highly satisfied
Mean						4.55	Highly satisfied

As presented in Table 3, in general, the 23 students who responded to the questionnaires were highly satisfied (Mean = 4.55) towards using Quizizz program in their English spelling activities. The two aspects that they were most satisfied with were the statement number 3 “Using Quizizz for spelling games grabs students’ attention in an English class.” and number 5 “Using Quizizz for spelling games should be repeated in the future.”. Furthermore, the third section of the questionnaires provided space for their opinions towards using Quizizz in English vocabulary spelling activities, it was found that they felt very good, they thoroughly enjoyed the Quizizz and it kept them interested. They desired to experience the Quizizz game in an English class again.

Results and Discussion

This research revealed the positive effects towards using Quizizz program in English basic vocabulary spelling skill. The intentions of this research were to

- 1) improve the basic vocabulary spelling by using Quizizz games and to
- 2) measure their satisfaction levels towards using Quizizz in an English course.

It could be described in the following details below.

1) The improvement the basic vocabulary spelling by using Quizizz games

As mentioned in the previous section, the English vocabulary spelling correctness climbed up to 4.30 %. In terms of the vocabulary improvement by the use of Quizizz, it was comparable with the research done by Law Szee Huei et. al. (2021). Her research indicated the improvement on learning the science and math vocabularies of the primary students when they learned the language with using Quizizz program. This research results also matched the similarity as cited in the findings of Hesti Nabila et. al. (2023). She conducted the pre-test and post-tests with the 30 seventh grade students studying in Indonesia to observe the effectiveness of Quizizz application in vocabulary improvement. The results of her research supported the effectiveness of Quizizz application on the seventh-grade students' English vocabulary development. Those researchers mentioned above agreed that using Quizizz made the English class atmosphere enjoyable and interesting. For this classroom research, there might be some reasons that why Quizizz programs made the English vocabularies achievement: 1) The similarity of the passages. To control external variables and unclear comparisons between the pre-test and the post-test, all of the tests contained the same passages. The period of taking the post-test was left off in order to not let the students memorize the target words in the previous test. However, there were some students who had a good memorization skill and could memorize the vocabularies used in the previous test; 2) Vocabulary acquisition by Quizizz games: As explained by the study of Pusparani (2021) and the results of the research done by Hesti Nabila et. al. (2023) the Quizizz application could develop students' vocabulary mastery. It might be caused by the game motivation and attention, since Quizizz helped student interact in English vocabulary learning by playing games and this would increase and enhance their attention to attempt to rise their names up to the top 3 rankings shown on the projector's screen during using the Quizizz program. Paying attention to a single vocabulary in the games might be reasonable to let students remember its correct spelling; 3) Learning from mistakes. As stated above that both pre-tests and post-tests used the same passages, instead of favored games, some students might learn by themselves from their misspellings and tried to find out the correctness afterwards. Decreasing of misspelt words therefore inferred that students were able to learn from what they had misspelt thus gaining knowledge.

2) The satisfaction levels towards using Quizizz in an English course

As presented in the previous section, in general the mean scores of the seventh-grade students' satisfaction levels towards using Quizizz on the English classes were at highly satisfied. This high satisfaction tended to be similar to the study of Diem Bich Huyen Bui and Tien Thinh (2022) in terms of a high satisfaction level of the secondary students towards using Quizizz in English language learning. This research was also in agreement of Sumpun Patisung (2020) on the study titled: "*Thai high school students' attitudes towards using Quizizz on English vocabulary learning*" and Hesti Nabila et. al. (2023) on the research titled: "*the effectiveness of using Quizizz to improve the students' vocabulary*". Both of their findings suggests that the participants agreed that students tended to find it to be enjoyable, interacted and activated in English learning while using Quizizz in an English class. Hence, it is clear that Quizizz program grabbed students' attention in English learning. This research supported the previous studies in terms of students' paying attention while playing Quizizz.

Conclusion

This classroom research intends to find out the effectiveness of using Quizizz program on English basic vocabulary spelling development and to measure its satisfaction level of the Thai seventh grade students who studying in a Thai public secondary school. From the results of this research it has proven that Quizizz program enhanced the students' spelling skills in the basic English vocabularies at CEFR level A1-A2. Undoubtedly, this research is concrete evidence to support the Thai secondary students' desires that using Quizizz program should be repeated with the reason that it makes an English class useful, enjoyable, interesting, and boredom less atmosphere. Hence, this research is recommended for the Thailand Ministry of Education, the Office of the Basic Education Commission, and other government agencies to create and design more online materials through the Quizizz program and/or other online and digital game platforms so that the secondary students could access the entertained learning English language anytime and anywhere. Although several research have proven the advantages of using Quizizz program, its disadvantages still existed. Some students in this research could not access the Quizizz program in time due to the internet Wi-fi instability. At the same time, some of them was able

to get in the games again and again while playing. This might create an unfair and cheating habits if the teachers did not notice. Therefore, using Quizizz program would be appropriate as long as just for enhancing the English language acquisition and other academic fields. This research suggests for the next studies using online platforms in other areas of language that are still room for improvement. Furthermore, this online platform might be helpful for the future researchers or any other scholars to take this online learning process to apply to the rural areas of Thailand where there are a few experts or native English teachers teaching. Using Quizizz would be an appropriate choice as it is free to sign up to help expand students' English skills in some rural areas. There are other demands of English teaching materials, especially the beneficial and satisfying online games, so that those students who are far from the central hearted institutes would be able to uplift their English ability and develop English teaching and learning process. The author would go out on a limb and propose that the Quizizz program might also be beneficial as from grades five or six. This hypothesis needs to be evaluated and begs further study and investigation in order to test the practicality thereof for very young learners.

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THE LEADERSHIP DEVELOPMENT EXPERIENCES OF MID-LEVEL ADMINISTRATORS IN PRIVATE NON-SECTARIAN HIGHER EDUCATION INSTITUTIONS OF DAVAO CITY: A MULTIPLE CASE STUDY

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ABSTRACT

The study aimed to delve into the leadership development journeys of mid-level administrators within non-sectarian private higher education institutions in Davao City. It sought to uncover the challenges inherent in their roles and to dissect the methods through which they enhance their leadership prowess to tackle these challenges. Employing a qualitative multiple case research design with purposive sampling, data were gathered through interviews, brief questionnaires, and archival records. Framed within the andragogy framework, the study's findings were categorized into several themes: the internal drive for self-improvement, unique challenges faced by mid-level administrators, their coping strategies, the developmental process of leadership skills, required competencies, institutional responsibilities for leadership development, and the necessity for sustainable leadership programs facilitated by the Commission on Higher Education. The study found that mid-level administrators face challenges like personnel management, campus politics, and heavy workloads. It highlighted the importance of structured leadership mentorship and training for improving effectiveness and career advancement. The findings recommend revising policies to include leadership criteria in accreditation standards and provide continuous leadership training for mid-level administrators.

Keywords: Leadership development experiences, mid-level administrators, higher education

Introduction

Over the course of a thirty-year career in education, various roles have been held, including guidance counselor, coordinator, program chair, and Dean. During the tenure at the initial workplace (1992-2021), a significant interest in the experiences of mid-level administrators developed, spurred by real-world challenges such as leadership succession crises precipitated by the retirement and resignation of top officials. This narrative continued into the current workplace (since 2022), where the resignation of key academic leaders was again observed. This recurring theme of leadership voids has driven an exploration into how institutions manage such pivotal moments.

Recent research underscores the impending leadership void due to retiring baby boomers and a limited pool of skilled workers (Riggio & Newstead, 2023). Hence, Piwowar-Sulej and Iqbal (2023) highlight the critical role of mid-level administrators during such leadership transitions. Concerns about community college leadership, especially in the context of impending retirements, have been raised by sources such as The Chronicle of Higher Education. The increasing job expectations faced by community college presidents, as pointed out by (Fries et al., 2021) further emphasize the need for robust succession planning.

Moreover, research reveals a broken pipeline for the presidential position, adding stress to community colleges seeking qualified candidates (Boeske, 2023). Addressing these issues requires a focus on preparing mid-level administrators for higher leadership roles.

Additionally, concerns about leadership engagement in Asian companies and the importance of succession planning in family businesses (Shvetsova et al., 2021) underscore the broader significance of effective leadership development strategies. This study aims to contribute to addressing leadership shortages by focusing on preparing mid-level administrators for higher leadership positions.

Objectives

The main purpose of this study was to explore on the leadership development experiences of the mid-level administrators in the private non-sectarian Higher Education Institutions (HEIs) of Davao City. Specifically, it described the challenges that these mid-level administrators have faced in their current

positions. More importantly, to look into the learning process that mid-level administrators are engaged in to cultivate their leadership skills and address the challenges of leadership succession that eventually prepare them for higher-level administrative positions. Furthermore, the study describes the type of knowledge and skills that mid-level administrators believed to be necessary for them to be successful managers in educational institutions. Finally, the study sought out mid-level administrators' perception of the leadership resources available to them, and whether the current training programs could prepare them for the next administrative position.

Methodology

The multiple case study approach was chosen for this research to provide an in-depth and comprehensive understanding of the leadership development experiences of mid-level administrators in private higher education institutions. This method allows for the exploration of complex phenomena within their real-life context, offering rich, detailed insights that other methods, such as surveys or experimental designs, might not capture as effectively. The case study approach is particularly suited for examining contemporary events where the behaviors cannot be manipulated, and it facilitates the inclusion of multiple sources of evidence, enhancing the robustness and credibility of the findings.

Hence, employing this approach, the study aims to uncover the nuances and contextual factors that influence leadership development, thereby contributing valuable knowledge to the field and offering practical implications for succession planning and leadership training programs. This study employs a multiple case study approach to investigate the leadership development experiences of five mid-level administrators in private higher education institutions in Davao City. Participants were purposefully selected based on predetermined criteria, and data was collected through in-depth interviews, a brief questionnaire survey, and archival documents for triangulation. Data analysis followed a qualitative approach, focusing on rich description, coding, categorization, and theme development, influenced by Knowles' assumptions of adult learning. Trustworthiness was ensured through member checking, peer debriefing, and triangulation techniques, while ethical considerations included obtaining informed consent, maintaining confidentiality, and providing tokens of appreciation for participants. The researcher played a participant-observer role, engaging in data collection, transcription, analysis, and interpretation, while adhering to ethical guidelines and ensuring rigor throughout the study.

Participants

The participants were selected for interviews based on the following criteria: (1) currently holding a position as a mid-level administrator, particularly with the title of a dean or director regardless of their reporting structures at any HEIs in Davao City and (2) have a minimum of five (5) years of experience as an administrator.

Three participants had the titles of a dean, one is a director of the Office of Student Affairs and one is an OSA head which is equated to that of a director in other schools. Four of them reported to the vice-president of academic affairs, and one has a dual position, she is the dean of college and at the same time the vice-president for academic affairs, therefore she is reporting directly to the president. Three of the participants were female and two were male. Two of the participants were under the category of 30-39 age group, one in the 50-59 age group, one in the 40-49 age group and another one belonged to 60 or older age group. Four of the participants were working in the academic administrative function and one was in a non-academic administrative function. Participants' years of experience in an administrative role ranged from five to eleven years. Pseudonyms were assigned to each participant to protect their real identities and maintain the confidentiality of their cases.

Research Tools/Instruments

This study used semi-structured interviews, demographic questionnaires, and archival documents. Data were collected from five administrators, including deans and directors with over five years of experience. The interviews were guided by Knowles' Adult Learners' theoretical framework. Results revealed diverse perceptions of leadership support, highlighting participants' comfort in discussing career goals with supervisors while also indicating some uncertainty and reservations regarding diversity and mentoring programs.

Data Analyses

Higher Education Institution mid-level administrators were in their current career path because of their desire to contribute and improve the fields that they were in. They were passionate about developing their growth while at the same time helping their colleagues, and improving student's leadership skills which led to their success. At the same time, they are faced with many leadership and managerial challenges that somehow prevent others from achieving their goals and career aspirations. The role of a mentor helped guide mid-level administrators in different challenges and navigate the culture and climate of their institution so that they can become better administrators and leaders. Skill sets that would be helpful for mid-level administrators included developing a school political perspective, managing employees effectively, interpersonal skills, and building a repository of broad knowledge including legal matters of how HEI operates and other issues of an academic institution. However, barriers such as unclear vision of mid-level administrators of their program, unwillingness to accept new responsibilities, and limited professional budget for leadership development program somehow have prevented them from taking advantage of leadership development training and resources that were available to them. And lastly, the mid-level administrators' recognition of CHED's programs about different issues and concerns for update and learning were presented and they were thankful on it yet some find it as incomprehensive, unsustainable, and insufficient due to constant changes.

Based on the andragogy framework, this study reveals several key themes regarding mid-level administrators' professional development. Intrinsic motivation for self-improvement and growth emerged as a significant factor, with administrators driven by a personal desire to enhance their skills and advance their careers. The study highlights the unique challenges faced by mid-level administrators, such as balancing administrative duties with leadership responsibilities, navigating institutional politics, and managing limited resources. To address these challenges, administrators employ various strategies, including seeking mentorship, engaging in continuous learning, and developing effective communication and problem-solving skills. The process by which administrators develop and cultivate their leadership skills involves a combination of formal training, experiential learning, and reflective practice. Essential competencies and skills identified in the study for effective mid-level administration include strategic thinking, emotional intelligence, conflict resolution, and fostering a collaborative work environment.

Results

Findings from the study suggested that mid-level administrators were motivated by two factors: the need for challenge and self-growth and the desire to contribute something that is bigger than them. These motivations explained why mid-level administrators chose the tertiary administration career path, the ways in which they addressed challenges unique to their role, how they cultivated their leadership skills and the resources they would need to develop those skills. The findings also indicated that middle managers sought out mentors to help guide them through leadership and managerial challenges. Often, their leadership mentoring is informal. However, not all managers were able to develop the mentor-mentee relationships with their supervisors. Others considered their colleagues, professional affiliation, seminars and their experiences as mentors of their leadership challenges.

Discussion

Mid-level Administrators' Career Pathway

Mid-level administrators' career paths are varied, with some transitioning from faculty roles to department chairs and deans, while others come from non-educational sectors or public education. Regardless of their background, they entered college administration seeking challenges and opportunities to contribute to their field. They were motivated by the belief that administration allows them to impact student learning and support colleagues. However, some are unsure about advancing to executive roles due to concerns about workload, experience, age, and school owner's discretion. Despite hesitation, they would consider executive roles under the right circumstances.

Leadership and Managerial Challenges

Mid-level administrators face two main categories of challenges: leadership transition challenges and ongoing challenges. Transition challenges include adapting to institutional culture, navigating political climates, and clarifying job roles amidst organizational changes. Additionally, administrators struggle with asserting decisions, particularly with older colleagues, and addressing

increasing accountability demands such as improving student success. Ongoing challenges involve resistance to change from faculty and the burden of increasing job demands due to retirements, reorganizations, or budget cuts. Despite these challenges, administrators are dedicated to fulfilling their responsibilities, often working beyond regular hours to meet demands.

Approaches toward Addressing Challenges

Mid-level administrators employ purposeful learning strategies to tackle challenges, often seeking mentorship from supervisors, former colleagues, and professional affiliations. Supervisor support is crucial for building confidence in leadership decisions. Additionally, administrators enhance their skills through leadership training programs and advanced degrees. Some participants advocate for institutionalized leadership development programs, noting the lack of formal mentoring from superiors. Professional organization-sponsored programs also contribute to their development, although there are concerns about program availability and sustainability.

Necessary Competencies

Mid-level administrators recognize the importance of various skills to effectively manage personnel, understand the college's broader context, and navigate its political landscape. Some suggest the need for legal knowledge to bolster decision-making confidence, while research skills are seen as essential for understanding student and teacher needs. Understanding the college's operations and political acumen are also deemed crucial, although these skills may not be readily gained through traditional leadership training. Participants stress the value of workshops, comprehensive training programs, and mentorship to develop these skills, not only for career advancement but also for enhancing their effectiveness as managers and leaders.

Resources for Administrators

Mid-level administrators seek diverse resources to enhance their leadership skills and advance their careers. They emphasize the importance of formal mentorship programs, which they believe would build confidence and foster successful relationships. However, many institutions lack such formal mentoring structures. Additionally, administrators see value in attending leadership seminars and pursuing higher education, with most already possessing master's degrees and some pursuing doctorates. Some administrators benefit from a rotational appointment system for broader learning opportunities. Institutions provide support through study leaves, grants, and seminar attendance. However, some administrators fail to fully utilize available resources due to unclear goals, reluctance to take on new responsibilities, or budget constraints.

Implications of Research Findings

The study highlights various implications for mid-level administrators' challenges, leadership skills development, resources, and future research. Challenges faced by administrators align with previous research, indicating potential risks of burnout due to increasing responsibilities. Mentorship is crucial for leadership growth, although formal mentoring programs are lacking in many institutions. Leadership training programs and advanced degrees are valued but hindered by budget constraints. Colleges should consider formalizing mentoring programs and allocate more resources for professional development. Policies should ensure adequate funding for mid-level administrators' professional growth. Practices should focus on effective onboarding processes for new administrators and provide budget support for training programs. Future research could explore institutional readiness for leadership transitions and the experiences of specific demographic groups, such as women or tribal leaders, in addressing challenges and developing leadership skills.

Conclusion

The literature on higher education leadership highlights the pressing need for colleges to address the broken leadership pipeline, particularly amidst the impending retirements of key administrative figures like vice presidents and presidents. This study aimed to explore how mid-level administrators experience leadership, navigate challenges, and develop skills to become better leaders and managers. Findings revealed that these administrators are driven by a desire to contribute and enhance their fields, yet face numerous challenges that impede their career aspirations. They attribute their growth to mentors and educational programs, emphasizing continuous learning as adult learners. However, barriers such as unclear program vision, reluctance to accept new responsibilities, and limited professional budgets hinder their access to leadership development resources. The study underscores

the importance of reevaluating the role and support provided to mid-level administrators in colleges. Institutions striving for organizational effectiveness should consider bolstering resources and support for these administrators to equip them with the necessary tools for success and preparation for higher administrative roles.

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ENHANCEMENT OF EMOTIONAL INTELLIGENCE OF SECONDARY VOCATIONAL SCHOOL STUDENTS THROUGH ONLINE GROUP COUNSELING SRINAKHARINWIROT UNIVERSITY

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ABSTRACT

Emotional Intelligence can influence many part of students' life, that is important in school, when students can understand and manage their emotions, student are more likely to get good academic performance, better personal well-being and interpersonal relationships with others. The research was conducted to investigate the emotional intelligence of secondary vocational school students. And to examine the effect of online group counseling on Emotional intelligence among secondary vocational school students. The sample of this study was 170 secondary vocational school students by the Taro Yamane formula in that school to measure the emotional intelligence level, and 18 students were selected using purposive sampling, and then randomly assigned to the experimental group and the control group (9 students in each group). The experimental group received online group counseling, while the control group did not receive any intervention. Emotional intelligence was evaluated using WLEIS, which was semantic perfect and was reviewed by experts and online group counseling program was designed according to the emotional intelligence dimension of WLEIS and was reviewed by experts. The statistical analyze employed were descriptive statistic, with a t-test for the independent samples.

The results of this study showed secondary vocational school students were high emotional intelligence ($M = 79.55$ $S.D. = 17.06$). And after the experiment, the emotional intelligence of secondary vocational students in the experimental group was significantly higher than that of secondary vocational students in the control group at the level of 0.05. Conclusion that the online group counseling could be effective to enhance emotional intelligence among secondary vocational school students.

Keywords: Emotional intelligence, Secondary vocational school students, Online group counseling

1. Introduction

Vocational and technical education had received much attention and had flourished over the past years, vocational education also undergone significant changes in Jiuquan City, Gansu Province, China. But as a result of the examination and enrollment system, most of the secondary vocational school students came from the group of students who were not admitted to high schools (Duan and Xiao, 2022). The problem of secondary vocational school students had studied as follows. It was talked that school students were forced to enter secondary vocational school because they could not get into high school, and they were poor in academics, bad habits, and disobedience (Li et al.2022). Liang and Lei 's study also wrote that students' behaviors would show weary of learning, laziness, civilized habits of speech and behavior were completely capricious, uncontrolled and in poor sense of self-discipline when they entered secondary vocational school stage. The overall manifestations were firstly, loss of interest in learning. Secondly, lack of self-confidence. Thirdly, emotional impulsiveness and poor self-control (Liang and Lei, 2023).

Zou (2019) said that Chinese education had a strong intellectual color.The National Education Conference proposed the simultaneous development of the five education, emotional intelligence education was forgotten, the purpose of education in each period was to serve the national talent training specifications and standards, emotional intelligence education has not been paid attention to for a long time . Jiang 's research shows that half of secondary vocational students have low emotional intelligence. Classroom education neglects the cultivation of students' EI. Although schools offer mental health courses, they were generally theoretical courses, and students' participation was not high, and they could not have more and better emotional experiences (Jiang, 2017).

After some literature research, the researcher's eyes were attracted by Emotional intelligence (EI). It was a area where China's education was not pay much attention to and it would have a positive influence on the problems above-mentioned (Zou, 2019, Jiang, 2017). Bar-On et al. in the book said that children in America and many other developed countries began to appear a series of problems, such as violence, drug abuse, dropping out of school and unwanted pregnancy a period of time. A series of initiatives had taken place in many schools to deal with the problem, but when Salovey and Mayer in 1990 laid out the framework of emotional intelligence and what it meant to teach children with it, educators in the United States took this idea of the field and experimented with it. The results proved to be substantial, with lower drop-out rates, improved school discipline, and more pro-social student behavior (Bar-On et al.,2007).

After a lot of EI literature reading and considering the problems faced by secondary vocational schools at the present, combined with the literature of importance about emotional intelligence and online psychological counseling and group counseling. There is little research on the use of online group counseling to enhance emotional intelligence. This study intends to discuss enhancement the EI of secondary vocational school students though online group counseling.

1.1 Emotional intelligence

Emotional intelligence (EI) was full of controversy and crucial. Researchers and psychologists had come up with a variety of theories of EI. Most researchers on emotional intelligence took the concept proposed by Mayer and Salovey as their starting point (Cherniss, C., & Goleman, D.,2000). The researcher said that many EI popularizes misuse and abuse the term (Cherniss, C.,2000). To express this concept scientifically, accurately. Mayer et al. (1990) was quoted here as saying, "Emotional Intelligence refers to an ability to recognize the meanings of emotions and their relationships, reasons and problem-solve on the basis of them. Emotional Intelligence is involved in the capacity to perceive emotions, assimilate emotion-related feelings ,understand the information of those emotions, and then manage them(Mayer et al.,1999,p1). "

Emotional intelligence is a human's comprehensive ability to relate to their emotions. The concept is subdivided into four dimensions.

The first dimension refers to the ability of an individual to begin to realize that a person is an emotional individual. In other words, it is the ability to recognize that one person have emotions and what emotions he has. It refers to the ability to recognize one's own emotions (ROOE).

The second dimension refers to the ability to recognize the emotions of others. The ability of an individual to recognize and detect the emotions of others through observation, listening, contacting with others, or interpersonal communication (REO).

The third dimension refers to the individual's ability to accept emotions, reflect on emotions and deeply understand emotions (ARUE).

The fourth dimension refers to the individual's positive ability to deal with emotions after accepting and reflecting on emotions. This ability can lay the foundation for good social skills. Solve the problem of individuals getting along well with themselves and others and everything around them (DWE).

1.2 Measures of Emotional Intelligence

Wong and Law EI Scale (WLEIS) (Wong, C.-S., Law, K.S., 2002;). WLEIS was a brief measure of EI, which was based on the model of EI theory by Mayer and Salovey, involving the estimate of one's own emotions, the estimate of other people's emotions, the make use of emotions, and the management of emotions. WLEIS Emotional Intelligence Scale contains 16 items (Wong, C.-S., Law, K.S., 2002;).

All items were 7-point Likert Scale options ranging from 1 = strongly disagree to 7 = strongly agree (Wong, C.-S., Law, K.S., 2002). The WLEIS was conceptualized within a cultural framework of Chinese , and research had shown that this scale could be used in Chinese populations aged 13--40 years (Kong, 2017 ;Pong, H. K., & Leung, C. H. 2023). Higher test scores indicated higher levels of perceived EI, and it was considered to be a reliable instrument for measuring emotional intelligence in Chinese, showing good reliability and validity (Shi, J., & Wang, L., 2007), and good reliability and validity among adolescents in China (Shi, J., & Wang, L., 2007 ; Kong, 2017 ;). WLEIS had been used in studies to estimate EI in Chinese (Tan ,2021;Tang et al.2022;Pong, H. K. & Leung, C. H. ,2023).

1.3 The importance of to be emotionally intelligent

The method to prove the importance of emotional intelligence was perceived by people who had a higher emotional intelligence level tend to perform better in various aspect of life than do people who were lower emotional intelligence level (Bar-On, 2006). With the help of measurement , many researchers had examined what the EI predicted and how well in many studies.

Literature studies had shown that emotional intelligence was beneficial to children's cognitive and social development (Denham, 2007), and that emotional intelligence showed an advantage in many cases, especially in educational Settings. Emotional intelligence was associated with better academic adjustment and achievement in students, positive social behavior, less distress, and better test and assessment results (Greenberg et al., 2003). On the other hand, students with higher emotional competence could set higher academic goals and reflect better levels of self-discipline, motivation, stress regulation, work organization, learn more efficiently, and achieve better in performance (Duckworth & Seligman, 2005; Elliot & Dweck, 2005).

A study (Tam, H.-l. et al.,2021) in Hong Kong examined the relationship between emotional intelligence and learning motivation. Two important factors affected academic performance. Emotional intelligence played an important role in improving students' academic performance. By improving students' emotional intelligence level, their learning motivation would be correspondingly improved, and ultimately improved their academic performance.

In summary, from the concept of emotional intelligence, the importance of the concept of emotional intelligence, the composition of emotional intelligence, the measurement of emotional intelligence and the application of emotional intelligence, emotional intelligence showed great research significance and practical significance. In short, improving people's emotional intelligence played an important role.

1.4 Improvement of emotional intelligence

In Goleman's (2014) book, he wrote that emotional intelligence could be learned and improved (Gottman, J.,2014). Like other types of intelligence, EI was also affected by genetic factors and acquired factors. Through adequate EI training, enterprises can obtained more employees with high EI capacity (Gottman, J.,2014).

Chinese researchers had conducted some studies on improving emotional intelligence (Wang, 2020; Yang et al., 2015; Fang, 2017). Fang conducted a self-designed group counseling program for 7 times of group counseling emotional intelligence research on first-year secondary vocational students in a higher vocational and technical college in Nanjing, and concluded that the intervention effect was obvious (Fang, 2017).

1.5 Online psychological counseling

Some studies pointed out that all aspects of human life had been greatly affected by the Internet, including the impact on psychological health (Sukmawati et al.,2019). Studies shown that the combination of the Internet and psychological counseling would treat psychological health problems. Online psychological counseling was a concept that went with The Times. It was a treatment and counseling provided through the Internet and the combination of technology and therapy (Yurayat & Seechaliao,2022). Zhou (2022) argued in his paper that online psychological counseling had made contributions to public psychological health under the Covid-19 situation, and online psychological counseling had its unique advantages.

1.6 Definition of Group Counseling

Groups were a very beneficial and efficient approach. Groups could be used in many professions, such as counselors, psychology researchers, teachers, etc., to help individuals with the same problems cost-effectively and efficiently. The group approach provided an additional option for individual counselors, and many schools and institutional administrators required their counselors to lead groups (Ed Jacobs et al.,2010). Group counseling was a kind of psychological counseling in which counselors used group methods to help individuals economically and efficiently with the same problems and concerns.

Research Objectives

The purpose of this study was to investigate the emotional intelligence of secondary vocational school students and to explore the enhancement of EI of secondary vocational school students through online group counseling.

Methodology

This study was mainly a quasi-experimental study, which investigated the influence of online group counseling intervention on secondary vocational students through experimental group and control group.

Populations

The population of this study was 408 students in grade one in a secondary vocational school in Northwest of China.

Samplings

The sample of this study was 181 secondary vocational school students based on the Taro Yamane formula in that school. The formula was $n = N / (1 + N(e)^2)$, n signified the sample size, N signified the population signifies the margin error (it could be 0.05 based on the needs of my study). Of the 181 participants, 170 were assessed for emotional intelligence.

Participants

Then 18 students were selected using purpose sampling, and then randomly assigned to the experimental group and the control group (9 students in each group).

Table

Samples of 170 first-year secondary school students were included in the study finally. The number and percentage of generic data for the sample were shown in Table 1.

Table 1 Number and percentage of general data for students in secondary vocational schools (n=170)

General data of secondary vocational school students	Number of Students	Percentage
1. Gender		
Male	122	71.80
Female	48	28.20
Total	170	100.00
2. Age		
Fifteen-year-old	30	17.60
Sixteen-year-old	46	27.10
Seventeen-year-old	35	20.60
Eighteen-year-old	59	34.70
Total	170	100.00
General data of secondary vocational school students	Number of Students	Percentage
3. Class		
Grade 2023 Childcare class	30	17.65
Grade 2023 Computer graphic design	46	27.06
Grade 2023 Construction class	35	20.59
Grade 2023 Mechanical and electrical technology application	59	34.71
Total	170	100.00

According to data in Table 1, in the first year of secondary vocational school students, boys accounted for 71.80% and girls accounted for 28.20%. Students aged 18 accounted for 34.70%, followed by 16-year-olds with 27.10%, 17-year-olds with 20.60% and 15-year-olds with 17.60%. The class of mechanical and electrical technology application in 2023 had the largest number of students, accounting for 34.70%, followed by the class of computer graphic design in 2023, accounting for 27.06%. 2023 architecture class students, accounting for 20.59%. The proportion of students in the 2023 nursery class was 17.65%.

In Table 2, the mean and standard deviation of emotional intelligence of first-year students in secondary vocational schools were analyzed, as shown in Table 2.

Table 2 Mean and standard deviation of emotional intelligence of first-year students in secondary vocational schools (n=170)

Emotional Intelligence

Emotional Intelligence	M	S.D.	Levels
Emotional Intelligence	79.55	17.06	High

Table 2 the mean emotional intelligence of first-year students in secondary vocational schools was 79.55 and the standard deviation was 17.06, which was at a high level.

Table 3 Mean and standard deviation of emotional intelligence between the control and the experimental group after secondary vocational students participated in online group counseling (n=18)

Emotional Intelligence	Group	Before Experiment			After Experiment		
		M	S.D.	Level	M	S.D.	Level
Emotional Intelligence	Experiment (n=9)	49.00	11.70	Medium	77.89	10.15	High
	Control (n=9)	48.67	15.27	Medium	49.56	15.50	Medium

Table 3 the mean emotional intelligence of secondary vocational students in the experimental group before the experiment was 49.00, which was in the middle level, and the standard deviation was 11.70. After the experiment, the mean of emotional intelligence was 77.89, and the standard deviation was 10.15, which was at a high level. In the control group, the mean emotional intelligence before the experiment was 48.67, and the standard deviation was 15.27, which was in the middle level. After the experiment, the mean of emotional intelligence was 49.56, and the standard deviation was 15.50, which was at the medium level.

Table 4 Comparison of emotional intelligence of experimental group students before and after online group counseling (n=9)

Emotional Intelligence	Before Experiment		After Experiment		MD	t	p
	M	S.D.	M	S.D.			
Emotional Intelligence	49.00	11.70	77.89	10.15	28.89	11.39*	.00

*p<.05

Table 4 The experimental group of vocational students' emotional intelligence was significantly improved at 0.05 level.

Table 5 Comparison of differences in emotional intelligence between the control group and the experimental group after group counseling (n=18)

Emotional Intelligence	Experiment Group		Control Group		MD	t	p
	M	S.D.	M	S.D.			
Emotional Intelligence	77.89	10.15	49.56	15.50	28.33	13.80*	.00

*p<.05

Table 5 After the experiment, the emotional intelligence of secondary vocational students in the experimental group was significantly higher than that of secondary vocational students in the control group, at the level of 0.05.

Procedure

Step 1 Pretest

Before the experiment began, the students in the sample were given a pretest to investigate their basic level of emotional intelligence.

Step 2 Emotional intelligence group online counseling intervention

In this stage, students in the experimental group received group counseling on emotional intelligence to explore the impact of online group counseling on students' emotional intelligence.

The online group counseling intervention on emotional intelligence lasted for 4 weeks. The students in the experimental group were required to attend the group counseling on emotional intelligence twice a week and 1.5 hours each time.

Step 3 Post-test

After the group counseling intervention, all experimental and control students were given a post-test to assess their emotional intelligence.

Results

The emotional intelligence of secondary vocational school students was evaluated by emotional intelligence assessment tool WLEIS and SPSS software. The results showed that the emotional intelligence of grade 1 students in secondary vocational school was at a higher level ($M=79.55$, $S.D.=17.06$). The experimental group and the control group of 18 students were sampled for the purpose. After online group counseling, the emotional intelligence of the experimental group students increased from the original medium level ($M=49.00$, $S.D.=11.70$) to the higher level ($M=77.89$, $S.D.=10.15$). The online group counseling had a positive influence on the secondary vocational school students.

Discussion

Online consultation had unique advantages. Seven of the nine panelists in the study, who were mainly 16 or 17 years old, said they were very socially phobic, timid, nervous and afraid to speak in face-to-face interactions with others. Group counseling was conducted online, and group members use mobile phones as the medium to avoid the fear and timidity of face-to-face communication. Zhou (2022) et al. also talked about the unique advantages of online group consultation compared with offline counseling. In group counseling, counselor used questioning, encouragement and active listening skills to guide group members to participate in emotional awareness experience activities.

Active listening was an important skill that group leaders must use, and group leaders also need to teach group members to actively listen to each other (Corey, 2016). The group members were given meditation training before each group counseling to gradually improve their emotional awareness. Most notably, after participating in three group activities, the group members' verbal communication increased, while the text input decreased.

From the use of techniques and theories to discuss, I thoroughly adopt Person-centered theory. This theory held that the relationship between client and counselor was the key to therapeutic change. The primary goal of the first counseling was to establish a relationship with the members, and an atmosphere of security and trust was established during the counseling. I also used unconditional acceptance. By respecting group members and helping them to explore themselves, they could have a better experience, stimulate individual potential, and finally realize their self-knowledge and self-emotional knowledge (Corey, 2016, Li, 2016).

Conclusion

In conclusion, the average result of overall emotional intelligence showed that the average total emotional intelligence of grade one students was at a higher level ($M=79.55$, $SD=17.06$). The results of emotional intelligence in the experimental group ($M=77.89$, $SD=10.15$) and the control group ($M=49.56$, $SD=15.50$) were obtained. After the experiment, the emotional intelligence of the experimental group was significantly higher than that of the control group at 0.05 level. Online group counseling had a positive effect on the improvement of emotional intelligence of secondary vocational students.

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THE EFFECTIVENESS OF MODULAR-VIDEOLAR INSTRUCTION OVER PERFORMANCE AND PERSONAL SATISFACTION OF GRADE 7 STUDENTS

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ABSTRACT

This study gives an insight into the effectiveness of the combined approach of teaching modules in text format and instructions in video format, over the performance of students and their personal satisfaction. It employs a mixed-methods approach, combining quantitative analyses of learning outcomes with qualitative assessments of student engagement and satisfaction. This research was to check the employment of video instructions in the textbook material which was not available in the textbooks. The research was conducted on 135 students across three nations. The students from Canada, Thailand, and India were contacted to help in the research with the help of three teachers including me. The participants are from grade 7 of three different schools in Canada, Thailand, and India. Participants were divided randomly into groups and given modular and a combination of modular and videolar instructions. They were asked to take a test after an hour of self-learning. Further exploration was taken to get qualitative data from the students. After taking the test, the students were given a survey questionnaire to fill out to know their views about the instructional methodology and their personal satisfaction with it. Data collected were analyzed qualitatively and quantitatively to show the percentage of participants, their achievements, and personal satisfaction. The results of the tests of those students were analyzed. It was found that a combination of modular and videolar instruction helped more students solve complex problems than those who studied through modular instruction only. The result of the study shows a positive impact of the combination of modular and videolar instructions. The study concludes with the suggestive application of this idea on different subjects so that learners who can't avail of mainstream schooling can also benefit well via distance learning compared to conventional books.

Keywords: Modular Instruction, Videolar Instruction, Performance, Personal Satisfaction

Introduction

Even in today's world, most modern textbooks are prepared using conventional teaching methodologies in mind. The world has switched to online for the study of different streams after COVID-19. Even the remote parts of developing countries have access to smartphones and the internet. But still, there are places where kids can't go to school because of their distant location. They do have access to smartphones and courier services but schools are far as building a structure requires financial spending. There are different types of learners: some are visual, some are kinesthetic, some of them can understand concepts with texts only, and some require video. It has been observed in classes that students prefer videos more than the textual information on board. They feel more interested in the subject while watching videos during the classes than textual information on board or in the presentation. Interest brings the attention of students, and thus affects the performances. Therefore, a textbook is required to help those kids by creating it with the help of a combination of text and video. The term 'videolar' is used to have a synonymity with the word 'modular', which means video only. This research is an attempt to find if the use of video links along with modular instructions is helpful in the personal satisfaction of students as well as their performances. The research also tries to see if there is any correlation between the performances of the students and the type of instruction.

Research Objectives

The study aims to achieve the following research objectives:

- The efficacy of modular-videolar instruction in the performance of students as well as self-satisfaction.
- Finding the shortcomings of the modular-videolar approach to prepare a better book.

- The mathematical correlation between the scores of the students and their medium of instruction.
- Variables:** Performace (Dependent Variable), Type of Instruction (Independent Variable)

Methodology

135 students from three different schools were informed about the research and asked if they wanted to be a part of the research. The students from Regina Public Schools are my tutees and their friends. The students of Phichai Rattanakhan School, Thailand were assessed by my former colleague teaching there. And, the students from the Sarvodaya Secondary School, Madhubani were accessed by the sister of my former colleague teaching there. Participants were selected based on their willingness and not on their capabilities. The study aimed to give a completely new topic to students. The topic chosen was: Indices.

- Study material was prepared in text form with clear learning objectives.
- A video lesson was prepared to have a combination of modular and videolar instruction.
- Students were given 30 minutes each for videolar as well as modular-videolar instruction.
- 10 questions were asked in both simple and complex questions categories and given 30 minutes each for solving.
- Their score in the above two categories were recorded and analyzed with the help of Microsoft Excel.
- Spearman's coefficient was used to find out the correlation between the ,modular-videolar instruction and students' scores.
- Participants were asked to participate in a survey to know their experiences.
- Conclusion were made based on data analysis and survey to prepare a better textbook using modular and videolar instruction.

Sampling/Participants:

135 students from three different schools across the Globe have been involved in the study: Phichai Rattanakhan School (Ranong, Thailand), Sarvoday Secondary School (Madhubani, India), and (Regina Public Schools, Regina Canada). These students were studying in grade 7. The students were asked to study using printed materials involving text and video instruction in the form of QR codes printed on paper. They were later assessed in two categories: Simple Questions and Complex Questions. Scores were obtained from the students after the assessment to check their performances and tabulated with the help of Microsoft Excel. Students were given the online survey to know their satisfaction with the help of Google Forms to fill out and later processed with the help of Microsoft Excel.

Literature Review:

Effectiveness of Modular Instruction

The modular approach is one of the oldest approaches which is still being used all across the world. During COVID-19, most students studied online mostly with the help of written text or modules. Therefore, the effectiveness of this approach needs to be checked before making this mandatory for any kind of learner. (K Jaya Sree, 2004) considers self-learning modules as part of a modular teaching and learning approach.

(Taneja, 1989) considers a module as a unit of instruction that is self-contained as a measure of teaching that builds up knowledge and skills. However, the modular approach can't necessarily be successful. If the edification strategies are infectious to support the learners in achieving the learning objectives (Ramsden, 1992). (Daries, 1981) believes that after completing a series of modules, a certain level of proficiency can be achieved.

Planning and development of modular materials are promoted by the development of modules. A common framework is developed by the module writers to design and develop modular materials. (Pareek & Rao, 1981) suggest that the need of the target population needs to be identified before heading towards the module design process. They also suggest the requirement to draft a module, review it, and then revise it.

Students studying mathematics through modular distance learning found the process less difficult (Dangle, 2020). (Nardo, 2017) believes that the learner's autonomy in this strategy or process helps in increasing self-confidence. (Fabro, 1980) asks to make the modules interesting, easy, and familiar in

terms of reliability, relevance, and readiness. (Dangle & Somaoang, 2020) found that 70% of students were not able to follow directions. Most students were not able to review the unit on their own. Choi (2006) found significant variances in comprehension and learners' satisfaction when using video instruction and group discussion. His study was to identify the effects of group discussion and video instruction on the performances of the learners.

Effectiveness of Videolar Instruction

According to a study done by (Das & Praseeda, 2023) on medical students found that students who were taught using video demonstration performed the experiments comparatively better than the students without it. The feedback received from students showed that they prefer video instruction more than the conventional method of instruction.

(Sutirman, 2019) also observed that the learning outcomes have been improved with the help of video instruction. The learners' understanding of the subject matter has also improved after studying using video instruction. (Mercado, 2022) in her study on grade 5 students, found that multimedia instruction helped in improving their scores than the traditional way of teaching This is similar to what was achieved by (Dollente, 2015) on grade 1 kids.

(Gyeltshen & Dorji, 2023) in their research on grade 6 kids have found that kids got more interested in learning mathematics when YouTube videos were clubbed with the traditional way of teaching. The mid-term and final results showed a significant improvement in the student's performance in mathematics after including YouTube videos related to mathematics during teaching.

Data Collection and Processing:

Simple Questions:

In the simple question category, they were given 10 questions of 1 mark each. The answers were matched from the already prepared answer keys. The correct answers to these questions show a clear understanding of the concepts and thus better performance.

The scores obtained were converted into percentages and then tabulated using the Pivot Table to find out the number of students achieving that score.

When the students were asked to use one instruction method e.g. Videolar, we received the following result:

Percentage Score	Count of %Score of Students after using Videolar Only (Out of 100)
70	1
80	34
90	57
100	43
Grand Total	135

Table 1: Number of Students with % of Marks Scored in Case of Videolar Instruction

Here, the student's scores varied in that, 43 students got 100, 57 students got 90, 34 students got 80 and only one student got 70. After the students used modular-videolar instructions, the following result was obtained:

Percentage Score	Count of %Score of Students using Modular-Videolar (Out of 100)
80	3
90	66
100	66
Grand Total	135

Table 2: Number of Students with % of Marks Scored in Case of Modular-Videolar Instruction

In the simple question category, 132 students received scores of more than 90% in the assessment while only 3 students received an 80% score which shows the effectiveness of the combination of modular-videolar approach for simple questions.

Complex Questions

Next, we analyzed the data of students after they solved the complex question set of 10 questions carrying 2 marks each. The following count table is obtained using the Pivot function of Microsoft Excel:

Percentage Score	Count of %Score of Students after using Videolar Only (Out of 100)
60	24
70	27
80	61
90	23
Grand Total	135

Table 3: Number of Students with % of Marks Scored in Case of Videolar Instruction

The table of students who they tried Videolar instruction showed the varying distribution of students achieving different scores: 60, 70, 80 & 90. None of the students got 100 as some of the questions in complex categories were of higher order thinking. Only 23 students got a 90 score, while 61 students got 80, 27 students got 70, and 24 students got 60.

The table with the scores of students who used both the modular and videolar methods is as follows:

Percentage Score	Count of %Score of Students after using Modular-Videolar (Out of 100)
70	6
80	35
90	94
Grand Total	135

Table 4: Number of Students with % of Marks Scored in Case of Modular-Videolar Instruction

The table shows that the students' scores improved when they switched to a combination of modular and videolar instruction. As 94 students got a score of 90 compared to 23 students when they only studied using videolar instruction. While 35 students got 80 and only 6 students got 70. This shows a transition of students from lower scores to higher scores.

Finding Correlation through Spearman's rank Coefficient

Spearman rank correlation is used to check the correlation between the scores of the students in three categories and the categories. The two categories were used for the study: Videolar and Modular-videolar. A rank of 1 is given to Modular-Videolar as it carries maximum counts and a rank of 2 is given to comparatively lesser count. Similarly, the highest score was given a rank of 1 and it followed the same for lower scores. The average score of 135 students was used for this study.

The following table is prepared to calculate Spearman's rank coefficient:

Average Score	Category	Rank of Scores	Rank of Category	D	D ²
91	Modular	3	2	1	1
95	Videolar	2	3	-1	1
99	Modular-Videolar	1	1	0	0
					2

Table 5: Spearman's Table for Simple Question Category

Average Score	Category	Rank of Scores	Rank of Category	D	D ²
76	Modular	3	2	1	1
81	Videolar	2	3	-1	1
87	Modular-Videolar	1	1	0	0
					2

Table 6: Spearman's Table for Complex Question Category

The Spearman's coefficient is calculated using the following formula:

$$\rho = 1 - \frac{6 \sum D^2}{n(n^2 - 1)}$$

Where ρ = Spearman's coefficient

D = difference of ranks

n = total number of observations

$$\rho = 1 - \frac{6 \times 2}{3(3^2 - 1)}$$

$$\rho = 1 - \frac{12}{3(9 - 1)}$$

$$\rho = 1 - \frac{12}{3 \times 8}$$

$$\rho = 1 - \frac{12}{24}$$

$$\rho = 1 - 0.5 = 0.5$$

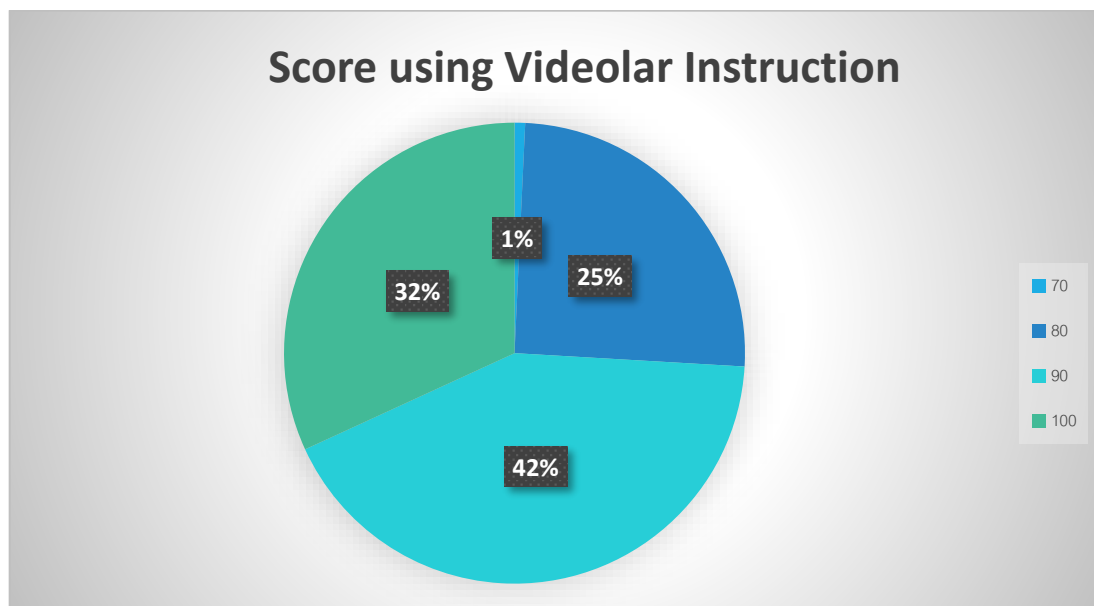
The value of the coefficient is mid-way between -1 and +1, which does not give a clear analysis of whether the scores of the students are correlated with the categories or not. However, the tables and graphs give a positive indication of the efficacy of Modular-Videolar instruction.

Data Analyses

Pie charts were plotted to get the percentage of students achieving certain scores in the two categories of questions.

Simple Questions:

The following pie chart is obtained for students who studied only through videolar instructions:

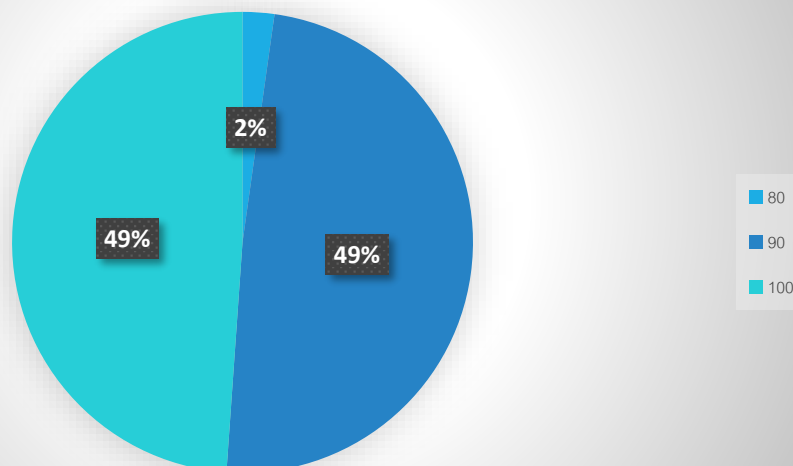


Graph 1: Percentage of Students with % of Marks Scored in the Case of Videolar Instruction

The graph shows a varied distribution of students getting scores ranging from 70 to 100. the varied results might also have occurred due to the inefficiency of the video sample chosen or the accent of the teacher teaching through videos as the participants were from three different geographical locations watching the same video.

The following pie chart of students who used both modular and video instruction:

Score using Modular-Videolar Instruction

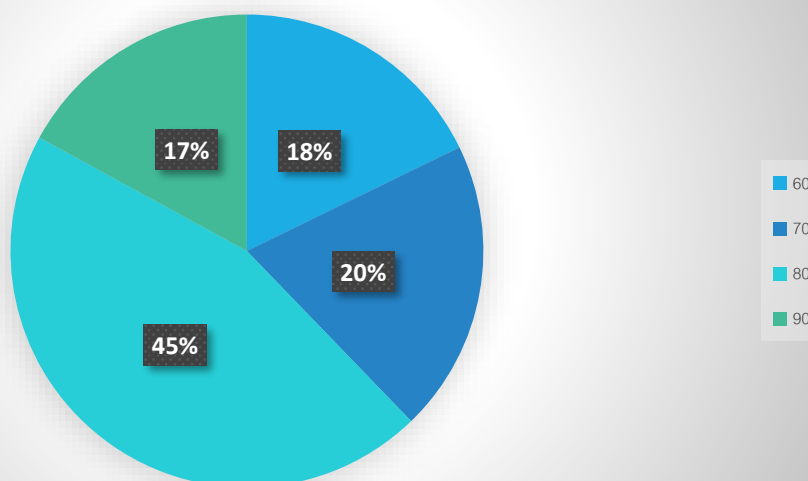


Graph 2: Percentage of Students with % of Marks Scored in the case of Modular-Videolar Instruction
The pie chart showed an improved score of students with a minimum score moved from 70 to 80, and an equal number of students got scores of 90 and 100. Modular instruction or a text-based approach doesn't make much impact compared to video instruction. Therefore, the shortcomings of video-only instruction are overcome by modular-videolar instruction.

Complex Questions Category:

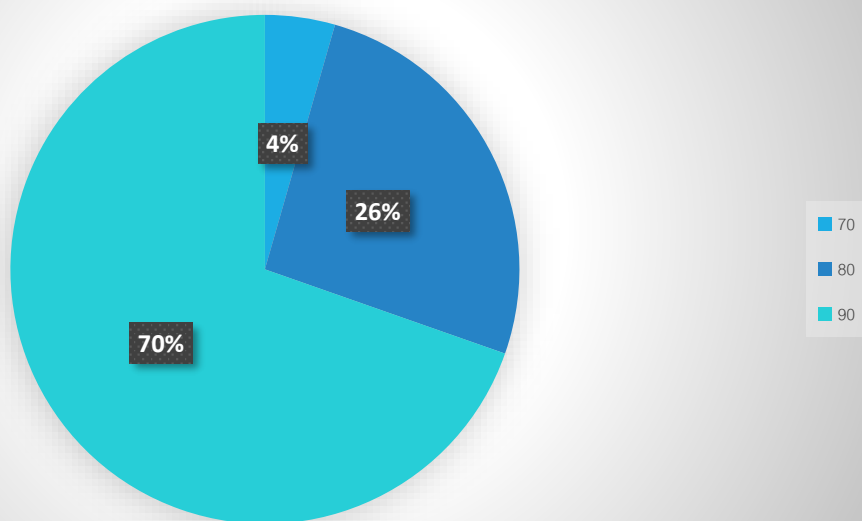
10 complex questions that required higher-order thinking were also given to the students. Complex questions carried 2 points. The answers were matched from the already prepared answer keys. The pie chart of the scores of students who used video instructions is as below:

Score using Videolar Instruction



Graph 3: Percentage of Students with % of Marks Scored in the Case of Videolar Instruction
The chart shows that the students got a score ranging from 60 to 90 and have a varied distribution where only 17% of students got a score of 90, while 45% of the participants got 80, 20% of them got 70, and 18% of them got 60. The scores were rounded off to the nearest tens.
The following is the pie chart for students who used modular-videolar instruction:

Score using Modular-Videolar Instruction



Graph 4: Percentage of Students with % of Marks Scored in the case of Modular-Videolar Instruction
The graph showed a significant improvement from 17% to 70% of students getting a score of 90 after using modular and videolar instruction. The students scoring 70% have also decreased to 4% and students scoring 80% have reduced to 26%. This is probably due to the transition of students to a higher percentage.

Results of Qualitative Analysis

4 questions were asked with the help of Google Forms, to participants after they solved the simple and complex questions and got their scores.

1	Do you consider video to help understand the concept?	
	Yes	123
	No	12

123 students out of 135 which is 91% agreed that video was helpful to them in understanding the concept.

2	Do you consider video instruction helpful in solving complex questions?	
	Yes	45
	No	95

Only 33% of students considered video instruction helpful in solving complex questions. This helps us understand the shortcomings and how to improve the book by adding videos that also help in solving some difficult questions.

3	What do you like to have in a Mathematics book?	
	Instructions in the form of text only	12
	Instructions in the form of video only	56
	Instructions with a combination of text and video	67

Almost 50% of students were in favor of modular-videolar instruction and 41% were in favor of video instruction. This study can change the way teachers are teaching across the globe if they are not using videos in their teaching methodology.

4	How do you rate this teaching material?	
	Bad	
	1	0
	2	0

		3	0
		4	14
		5	87
	Excellent		34

64% of participants gave the material a rating of 5 and 25% of the participants considered the teaching material as excellent.

Conclusion

The study shows that video instructions help students improve their understanding of concepts and thus their overall performances. However mathematical tool analysis was not able to find any correlation between the scores of the students and the medium of instruction. The number of observations for Spearman's correlation was less, this might have led to the coefficient being 0.5. The pie charts and tables gave a go-ahead signal to prepare something for students involving text and video instructions that are easy to understand. During participation, a large number of students asked how to find out the value of x and y questions. These questions were not covered in the video instructions. A large number of students were also not able to do 2 questions. These questions were of higher thinking skills, which suggests changing or recording the self-help videos to make them more effective. A textbook can be prepared and research could be extended on a larger scale to observe the efficacy of students with varied mathematical abilities. As the participants were from different geographical locations, the issue might have arisen from the pronunciation of the speaker in the video and the way of teaching. Students from two countries: India and Thailand were non-native English speakers and from lower secondary schools. This could also have contributed to not getting a more accurate result. Therefore, it is necessary to increase the sample size to 1000 and check the efficacy separately in each country rather than making it combined.

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DEVELOPING SECURITY MEASURES FOR A SAFE AND HIGH-QUALITY ACTIVITY PROGRAM THROUGH THE SCHOOL MARSHAL INITIATIVE AT LIANGA NATIONAL COMPREHENSIVE HIGH SCHOOL

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ABSTRACT

This study investigates the implementation of the School Marshal Initiative at Lianga National Comprehensive High School (LNCHS), aimed at improving school security and educational quality during school-sponsored activities. Recognizing the pivotal role of schools in fostering intellectual and social growth, this research is motivated by the need to enhance student participation in extracurricular activities, especially during a public health emergency. The intervention involved the deployment of Student Marshals across classrooms to ensure attendance and prevent unsupervised exits during events. Through a qualitative action research approach, the perspectives of students, teachers, principals, and other stakeholders on the program's effectiveness were explored. Data collection methods included structured interviews, pilot testing for refining interview questions, and a thorough analysis of participant feedback using MAXQDA 12. Findings suggest significant improvements in school security, student participation, and organizational quality of school programs. Recommendations for program enhancement focus on structured training, clear guidelines, and administrative support for marshals. This research contributes to the broader discourse on school safety and educational excellence, offering a model for similar initiatives in other educational contexts.

Keywords: School Marshal Program, Educational Quality, School Security, Action Research

Introduction

Children and teenagers heavily rely on schools for their intellectual and social development (Genari et al., 2022). School serves as the central hub of their day, where they engage in academic and extracurricular activities, recognizing education's significance for their future happiness (Willms, 2003). Director Leila Areola of the Bureau of Learning Delivery (BLD) stresses the importance of extracurricular activities in supporting students' physical and mental well-being during public health emergencies (Department of Education, 2022).

LNCHS is committed to actively participating in educational events mandated by the Department of Education (DepEd), aiming to celebrate student achievements and underscore its dedication to academic excellence. However, the school faces challenges that hinder the smooth execution of these events. Distractions such as student inattentiveness and aimless wandering during activities undermine the intended outcomes. Additionally, instances of students consuming alcoholic beverages on school premises during events, as documented by the guidance office, exacerbate these challenges.

Moreover, the situation is further complicated by reports of disruptive behavior, including students throwing plastic chairs during conflicts with teachers and engaging in physical altercations, such as punching classmates due to personal disputes. These incidents disrupt the educational environment and pose significant safety risks. Addressing these disruptions necessitates proactive measures to maintain order and ensure the well-being of students and staff during school activities.

In response to these challenges, this paper proposes the implementation of the School Marshal Initiative. This initiative suggests appointing Student Marshals in each classroom to oversee proceedings, monitor student behavior, and intervene in instances of disorderly conduct. By establishing a system of supervision and accountability, the proposal aims to restore order and facilitate the seamless

conduct of school events. Furthermore, this study seeks to evaluate stakeholders' perceptions of the effectiveness of the school marshal program in fostering a safe and positive learning environment, offering valuable insights for schools seeking to enhance the quality and security of their activities. Additionally, research by Cobb (2021) underscores the significance of such studies in guiding policy development and interventions to address and ultimately eliminate school violence, motivating researchers to undertake this study to tackle pressing issues with the aid of this initiative.

Relevant Theories and Conceptual Framework

The study incorporated various theories from education and psychology to construct a robust theoretical framework. It drew on Bandura's Social Learning Theory (Bandura & Walters, 1977), which posited that individuals, especially children and teenagers, learn by observing the behaviors and consequences of others, influencing students' behavior during school activities. Additionally, it utilized Maslow's Hierarchy of Needs (McLeod, 2007), highlighting the importance of fulfilling basic psychological needs like safety and belongingness within the school environment. The implementation of the School Marshal Program was examined for how it met these needs. Deci and Ryan's Self-Determination Theory (Vallerand, 2000) was also integrated, suggesting that individuals are intrinsically motivated to satisfy needs for autonomy, competence, and relatedness, aligning the School Marshal Program with principles of autonomy and competence to enhance student motivation potentially. The conceptual framework depicted in Figure 1 revolved around the School Marshal Program and evaluated both pre- and post-implementation impacts. It considered the initial perceptions of school participants on the organization and security of school programs before the program's introduction. Post-implementation, the framework assessed how the program enhanced security and the overall quality of school activities, grounding this evaluation in the three aforementioned psychological theories. These theories elucidated observed changes and guided future improvements in the program's execution.

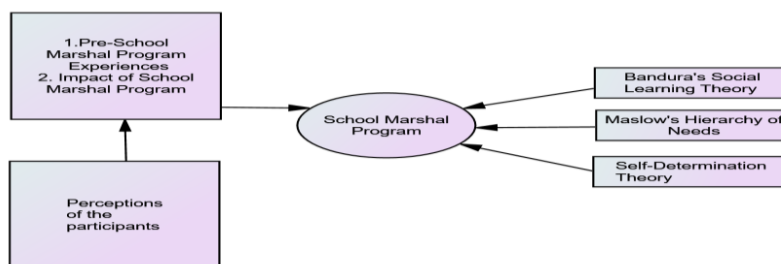


Figure 1. Conceptual Framework

Action Research Questions

This qualitative action research project investigated the perceived effects of the Marshal program and the experiences of the LNCHS participants. The study was guided by the three research questions listed below:

- What were the lived experiences related to security and the organization of school programs before the introduction of the school marshal program from the perspectives of students?
- In what ways has the introduction of the school marshal program contributed to enhancing the security and the quality of school programs for students and visitors during school activities?
- What insights have been derived from the responses collected throughout the study?

Action Research Methods

Opting for a qualitative research design, this study leveraged the depth and detail it affords to explore the School Marshal program at LNCHS, focusing on enhancing safety and quality in school activities. The choice facilitated an in-depth understanding of participants' perspectives and experiences. Furthermore, action research was employed to not only examine but also implement interventions aimed at improving school security and program quality, allowing for stakeholder engagement in refining practices based on the data (Mills & Butroyd, 2014). This approach, characterized by its cycle of identifying and acting on improvement opportunities, was highlighted for its unique ability to enable participants to address challenges and achieve professional success through praxis—applying findings to inform new actions.

Intervention

The School Marshal Program at LNCHS, establishes a systematic approach to improving school activity safety and quality. Leadership roles are allocated to Grade 11 and 12 students, overseeing flag ceremonies and religious events, utilizing a buddy-buddy system for efficient execution and minimal disruption to educational activities. This initiative enhances student leadership, discipline, and responsibility by involving them in event organization, venue preparation, and post-event duties, including cleanup and debriefings. Marshals, under guidance, ensure smooth event conduct and manage discipline, reporting any misconduct to the designated authority, Mr. TERSONA, and escalating serious issues to the principal. This program demonstrates flexibility and adaptability in managing various school events, contributing to the academic integrity and structured environment of LNCHS.

Participants and/or other Sources of Data and Information

Krathwohl (2009) indicated a minimum requirement of 10 participants for the research to be valid. The potential pool included eight subject coordinators, two school leaders (Principal and School Head), ten SSG members, and five students from grades 10 to 12, targeting those directly involved or impacted by the research focus. Ultimately, thirteen participants were selected, representing grades 10 to 12, SSG, subject coordinators, and school leadership, to reflect the study's demographics. The inclusion criteria were narrowed to SSG officers and students from grades 10 to 12, due to their experience with school events under the school marshal program, excluding grades 7 to 9 primarily because of their lack of participation in relevant events, influenced by pandemic restrictions.

Data Gathering Methods

Following the methodology outlined in Majid (2017), the researcher developed a series of open-ended interview questions to explore participants' perceptions of the School Marshals' impact on school safety and activity quality at LNCHS. The questions were refined with the assistance of the district's language specialists to ensure clarity and relevance, avoiding any leading questions. Pilot testing, approved by the school principal, involved volunteers matching the main study's demographic profile, including the English coordinator and the PTA president who also served as the district research coordinator. Conducted on January 6, 2022, pilot interviews, recorded and lasting between 32 to 37 minutes, aimed to test the questions' effectiveness and provide preliminary insights, aligning with Jacob and Furgerson (2012)'s guidance on interview duration. This phase was crucial for refining the researcher's interviewing techniques and establishing rapport. The main research interviews were then carried out on January 26, 2022, with data analysis performed using MAXQDA 12 to identify patterns and themes relevant to the research objectives, as recommended by Yin (2017). This structured approach ensured a thorough exploration of the study's focus within a robust methodological framework.

Discussion of Results and Reflections

This section summarizes the findings and insights from data gathered from teachers, students, and the school principal, focusing on the state of school activities prior to and after implementing the school marshal program. It outlines the initial challenges faced, such as discipline issues, noise, and safety concerns, and discusses the program's benefits, including enhanced security, better participation, improved behavior, and organizational gains. Additionally, it offers suggestions for further improving the program and underscores the significance of recognized authority, ultimately stressing the program's positive influence on school activities.

A. What were the lived experiences related to security and the organization of school programs before the introduction of the school marshal program from the perspectives of students?

Based on the responses provided by participants, we can analyze the experiences during school activities before the implementation of the school marshal program, as well as the strategies used when students were not actively participating and how chaos was managed during these activities. Here is a summary of the findings:

Experiences During School Activities Before the School Marshal Program

Table 1 outlines pre-School Marshal Program experiences at school, focusing on behavior and organizational issues identified by Subject Coordinators/Teachers, School Principals/Heads, the Supreme Student Government (SSG), and students. Key concerns included lack of discipline, noise, disorganization, indifference, crowd control, low participation, stress among teachers and advisers, and safety issues, with a total of 159 mentions indicating widespread concern about the school's

environment. Educators and students, particularly Subject Coordinators/Teachers (58 mentions) and students (43 mentions), were the primary voices highlighting these issues. This analysis provides a basis for understanding the challenges before the program's implementation, suggesting areas for potential improvement. This aligns with Jones and Bubb (2021), emphasizing the recognized need for enhancing student security and school activities.

Table 1

Coding Reference and themes from all the participants for Experiences During School Activities Before the School Marshal Program

Themes	Sources				Total
	Subject Coordinator/ Teachers	School /Principal/ Heads	Supreme student government (SSG)	Students	
Lack of Discipline	8	2	12	7	29
Noisy and Disorganized	10	1	8	5	24
Indifference to Speaker	11	2	4	7	24
Crowd Control Issues	5	1	5	5	16
Lack of Participation	3	1	5	6	15
Teacher and Adviser Stress	11	2	5	6	24
Safety Concerns	10	6	4	7	27
Grand Total	58	15	43	43	159

Strategies Used When Students Were Not Actively Participating

Table 2 details the strategies adopted by school staff and student leaders to address low participation rates prior to the School Marshal Program, documenting a total of 140 instances where various approaches were used. The strategies ranged from enhanced teacher and adviser involvement (29 and 28 instances, respectively) to active student leadership engagement (26 instances) and the implementation of communication strategies (24 instances). Notably, the most common approach involved incentivizing participation through rewards rather than punishments, cited 33 times, echoing Langa (2014)'s findings on the effectiveness of such strategies in modifying student behavior. This compilation of efforts highlights the school community's multifaceted approach to improving engagement and discipline, with a particular emphasis on positive reinforcement, as evidenced by the frequent use of incentive systems, indicating their success in fostering a more engaged and well-behaved student body.

Table 2

Coding Reference and themes from all the participants for Strategies Used When Students Were Not Actively Participating Before the School Marshal Program

Themes	Sources				Total
	Subject Coordinator/ Teachers	School /Principal/ Heads	Supreme student government (SSG)	Students	
Teacher Involvement	10	5	10	4	29
Involvement of Advisers	13	3	4	8	28
Involvement of Student Leaders	14	2	7	3	26
Communication	7	3	8	6	24
Rewards Over Punishments	15	4	4	10	33
Grand Total	59	17	33	31	140

Management of Chaos During School Activities

Table 3 highlights strategies for managing disruptions during school activities, with a focus on early intervention as the main approach, notably advocated by the Supreme Student Government (SSG) in 45 cases, in line with crisis management literature (Allen et al., 2008). Vigilance was frequently employed, mentioned 47 times, to prevent disturbances. Participation of school guards and the principal in maintaining order was recorded in 15 and 20 instances, respectively. Emphasizing student dignity, mentioned 36 times, suggested a respect-based disciplinary strategy, while stopping activities was considered a last resort for severe chaos. Prior to the school marshal program, response strategies included immediate intervention and, less frequently, pausing activities to address problems. The importance of vigilance by school guards, SSG's role, and the principal's direct involvement were pivotal. Despite challenges with noise and disorganization, the emphasis on positive reinforcement and dignity was crucial for promoting orderliness at school events.

Table 3

Coding Reference and themes from all the participants on how they Management of Chaos During School Activities

Themes	Sources				Total
	Subject Coordinator /Teachers	School /Principal/ Heads	Supreme student government (SSG)	Students	
Intervention at First Sign of Trouble	15	6	16	8	45
Stopping the activity	2	4	1	0	7
Discipline and guidance	16	3	2	0	21
Increase vigilance	11	4	20	12	47
Involvement of school guards	1	4	7	3	15
Involvement of the Principal	1	5	8	6	20
Importance of student dignity	16	6	4	10	36
Grand Total	62	32	58	39	191

B. In what ways has the introduction of the school marshal program contributed to enhancing the security and the quality of school programs for students and visitors during school activities?

Based on the responses from participants regarding the school marshal program and its impact on the security and quality of school activities, we can analyze the data as follows:

Improvement in Security during School Activities

Table 4 provides an analysis of feedback on the school marshal program at school, focusing on its impact on security and activities. Key themes identified include increased participation, intimidation and discipline, safety measures, crowd control, and overall safety, with overall safety being the most noted concern (61 mentions) and intimidation and discipline the least (40 mentions). The data, collected from various school stakeholders, shows unanimous support for the program's positive effect on security. Teachers, the most active respondents, highlighted its success in enhancing student engagement and safety, supporting Usmen et al. (2002) on teachers' pivotal role in school security. The marshals' active involvement has led to greater student attendance and discipline, while their vigilance ensures student safety and effective emergency response, enhancing the school's overall safety and order.

Table 4

Coding Reference and themes from all the participants on How does the school marshal program Improvement in Security during School Activities

Themes	Sources				Total
	Subject Coordinator /Teachers	School /Principal /Heads	Supreme student government (SSG)	Students	
Increase Participation	20	4	18	10	52
Intimidation and discipline	10	2	10	18	40
Safety measures	15	4	10	14	43
Crowd control	14	4	14	12	44
Overall safety	12	6	18	25	61
Grand Total	71	20	70	79	240

Improvement in the Quality of School Activities

Table 5 summarizes stakeholder perceptions of the school marshal program's impact on school activity quality, identifying themes such as reduced class cutting, discipline and order, enhanced organization, and assistance with ceremonial aspects. Discipline and order received the most feedback (71 mentions), while assistance with ceremonial aspects received the least (39 mentions), totaling 237 responses. This feedback indicates significant improvements in reducing absenteeism, enhancing discipline, structuring activities more efficiently, and supporting ceremonial formality, attributing these advancements to the marshal program. The presence of marshals has notably contributed to a safer, more disciplined, and focused school environment, leading to more successful and enjoyable school events. The data reflect a broad consensus on the program's positive effect on the school environment, echoing the community's appreciation for the marshals' contributions.

Table 5

Coding Reference and themes from all the participants on How does the school marshal program Improvement in the Quality of School Activities

Themes	Sources				Total
	Subject Coordinator /Teachers	School /Principal / Heads	supreme student government (SSG)	Students	
Reduced class cutting	22	1	15	28	66
Discipline and order	18	5	28	20	71
Enhanced organization	17	3	25	16	61
Assistance with ceremonial aspects	16	3	10	10	39
Grand Total	73	12	78	74	237

How does the school marshal program improve school program activities?

Table 6 provides a comprehensive overview of stakeholder feedback on the school marshal program, encompassing input from subject coordinators, teachers, school principals, supreme student government (SSG) members, and students. It identifies three key themes: enhancing safety during school activities, refining the marshal program, and managing disobedience. With 136 responses, the data indicate strong agreement on the program's importance in enhancing safety and discipline within schools. Feedback highlights the need for structured training, clear guidelines, and better support for marshals to ensure effectiveness. This aligns with Allen et al.'s (2008) study, which emphasizes the positive impact of staff training on school safety. The subsequent analysis confirms the program's value in promoting safety

and discipline, supported by detailed responses. Marshals play a critical role in preventing unsupervised student departures, managing crowds, and ensuring safety during emergencies. Stakeholders propose ongoing training, institutionalization, financial backing, and clearer guidelines to enhance program efficiency, ensure coverage across all grade levels, and address disobedience challenges for a safer, more orderly school environment.

Table 6

Coding Reference and themes from all the participants on how does the school marshal program improve school program activities

Themes	Sources				Total
	Subject Coordinator/ Teachers	School /Principal /Heads	supreme student government (SSG)	Students	
Promoting safety during school activity	12	2	16	14	44
Improvements for the school marshal program	14	6	20	10	50
Dealing with disobedience	18	2	12	10	42
Grand Total	44	10	48	34	136

C. Reflections or Insights and Implications

The table provides a comprehensive overview of stakeholder reflections on the school marshal program, categorizing feedback into six themes: pre-implementation challenges, program impact, improvement recommendations, authority recognition, safety and discipline priorities, and ongoing enhancement needs. Data highlights consensus on the program's effectiveness in improving school safety and discipline. Pre-program challenges in behavior management and safety have significantly decreased since implementation, resulting in a more organized environment. Stakeholders express strong support for program benefits, including improved student engagement and conduct. Recommendations for program development include organizational support, clear protocols, and consistent marshal training. Stakeholder feedback emphasizes the need for formal recognition and support from the school administration for marshals. This shared ambition for safety, order, and ongoing improvement aligns with research emphasizing the critical role of safety and discipline in schools. Hundeloh and Hess (2003) advocate for tangible changes in school operations to enhance safety, while Woodside et al. (2022) stress the importance of inclusive safety strategies involving various stakeholders. Cornell and Mayer (2010) underline the significance of maintaining safety and order for a positive learning environment. These perspectives collectively underscore the necessity of a comprehensive approach to school safety, discipline, and advancement.

Conclusion

The study comprehensively analyses the school marshal program's impact on school safety, discipline, and overall activity quality, utilizing feedback from stakeholders, including teachers, students, principals, and the supreme student government. Preceding the program's introduction, the school faced challenges like lack of discipline, noise, safety concerns, and organizational inefficiencies, potentially influenced by Bandura's Social Learning Theory (Bandura & Walters, 1977), which posits that individuals, especially teenagers, learn through observing others' behaviours and consequences. However, the implementation of the school marshal program led to significant improvements in these areas, including enhanced student behaviour, participation, safety measures, and activity organization, possibly linked with Deci and Ryan's Self-Determination Theory (Vallerand, 2000), indicating intrinsic motivation driven by the fulfilment of fundamental psychological needs. Stakeholders acknowledged the program's positive impact while suggesting enhancements like improved training and clearer guidelines for marshals, recognizing the initiative's role in fulfilling basic psychological needs within the school environment, echoing Maslow's Hierarchy of Needs (McLeod, 2007). The study underscores

the vital role of recognized authority in ensuring a safe and orderly environment, advocating for continuous improvements and prioritization of safety and discipline, ultimately affirming the school marshal program's effectiveness in cultivating a conducive learning atmosphere, consistent with existing literature on the educational emphasis on safety and discipline.

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SOCIOECONOMIC LIFESTYLE AND THE PERFORMANCE OF SENIOR HIGH SCHOOL TEACHERS AMIDST PANDEMIC

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ABSTRACT

The study aimed to determine the significant relationship between socioeconomic lifestyle and the performance of senior high school teachers amidst the pandemic. The objectives include the level of socioeconomic lifestyle with indicators of financial management, organizational civic affiliation, recreation and leisure, and household comfort, and the level of performance of senior high school teachers amidst the pandemic with indicators of task performance, contextual performance, and adaptive performance. The study used a quantitative research design utilizing the descriptive-correlational method. Random sampling technique was employed to identify the 100 SHS teachers in a public secondary institution in Davao City, who served as the study's respondents. To guarantee ethical standards in data gathering, informed consent was accomplished. Data gathering was done online using Google Forms. The mean, Pearson Product Moment Correlation of Coefficient, and Regression Analysis were used to analyze the data. The researcher found that there is a significant relationship between the socioeconomic lifestyle and the performance of SHS teachers. The results indicated that the relationship between socioeconomic lifestyle and teaching performance of SHS teachers showed a positive correlation but significant result. The correlation or r value is 0.738, denoting a high positive correlation between the level of socioeconomic lifestyle and teaching performance of senior high school teachers. School Administrators may figure out a program or series of webinars or seminars that will help to address the socioeconomic lifestyle of the senior high school teachers in connection with their performance.

Keywords: Socioeconomic lifestyle, Performance, senior high school teachers.

Introduction

Quality education has been considered a foundation of social transformation and economic development. The educational quality and its growth have been observed as crucial for teaching and learning. Teaching is fundamental because it brings about meaningful learning through a morally and academically standard process. However, the COVID-19 pandemic has already had devastating impacts that are likely to have long-term social and economic consequences, especially for different institutions. Lately, distance education has been implemented in all institutions, and their educational platform will be based on digital technologies. Using digital tools is an art of the professional skills expected of all teachers. This affects how teachers spend, hence, their socioeconomic lifestyle. Out of that situation, the researcher believes that socioeconomic lifestyle plays a significant role in the performance of teachers, which is brought about by the current situation we are experiencing.

In the study of Zulaihathia (2019), there is a positive influence of a person in the financial literacy on teachers' financial behavior, which has four types of behavior including saving behavior, shopping behavior, long-term planning, and short-term planning. A high level of financial literacy will lead to saving more money for the future, comparing prices before shopping and getting the sale when shopping, setting financial goals, and arranging a financial budget for the short-term and long-term. Also, based on Robosa et. al. (2021) the household comfort of teachers and those working at home is significantly challenged by the lack of resources, handling of students, and the submission and workloads that contribute to stress and burnout. The incidence of the digital age has limited most public school teachers. They hardly perform specific tasks for the students, virtually, provide an effective learning environment, and communicate with students, given that the resources are insufficient.

Additionally, the study of Boris et al., (2020) examining the effects of physical activity in France and Switzerland during the pandemic found that as expected, more leisure time was spent in inactive behavior and less time was spent doing dynamic physical activity. However surprisingly, they noted an increase in walking and moderate physical activity during leisure time. Teachers are the ones who

suffer the most because a lot of teachers change their lifestyles because of the situation that they have experienced today. Meanwhile, the teachers' work commitment during the COVID-19 crisis is really important. Teachers needed to abruptly change their lessons from physical classrooms to distance learning platforms in response to this pandemic. However, they are struggling with many challenges in their efforts to meet the development needs of their students, they remain committed to their learners' education and emotional, social, cognitive, physical, and spiritual well-being (Baloran & Hernann, 2020).

Lastly, according to Toquero (2020), the Department of Education, and numerous higher education institutions, both private and state colleges and universities in the Philippines are not prepared to implement this online system in some instances the equipment used by teachers as they teach the online class is not enough. Filipino teachers are worried about the safety of their families and even their socioeconomic lifestyles have been affected because of the fears due to the covid-19 pandemic. Nonetheless, Filipino teachers have shown a positive attitude in life during the outbreak of the COVID-19 pandemic, they are still vulnerable to anxiety since the pandemic is still ongoing globally. However, these teachers are well aware of what they are going to do to cope with their social, personal, and educational concerns. This study points out that there is enough evidence that Filipino teachers exercise measures to deal with anxiety since they follow the protective and educational policies of the Department of Education and Commission on High Education in fighting against the COVID-19 pandemic (Talidong & Toquero, 2020).

Research Objectives

This study aimed to find out the socioeconomic lifestyle and the performance of senior high school teachers amidst the pandemic. Thus, the study aimed to answer the following questions;

1. What is the level of the socioeconomic lifestyle of senior high school teachers in terms of:
 - 1.1 financial management;
 - 1.2 organizational civic affiliation;
 - 1.3 recreation and leisure; and
 - 1.4 household comfort?
2. What is the level of the performance of senior high school teachers in terms of:
 - 2.1 task performance;
 - 2.2 Contextual Performance; and
 - 2.3 adaptive performance?
3. Is there a significant relationship between socioeconomic lifestyle and the teaching performance of senior high school teachers?
4. Is there an indicator of socioeconomic lifestyle that significantly influences the teaching performance of senior high school teachers?

Methodology

This study used a quantitative research design utilizing descriptive correlation. According to Grant et al., (2017), quantitative research methods are an inquiry into a sociable problem and describe phenomena by gathering numerical data that are analyzed using mathematically structured methods like in particular statistics. Meanwhile, the descriptive-correlational design is suitable for this study since it intends to look into the correlation between the socioeconomic lifestyle of teachers amidst the pandemic and the performance of senior high school teachers.

Samplings/Participants

The researcher made use of stratified random sampling in identifying the respondents of this study. Hayes and Westfall (2020) said that stratified random sampling is a method of sampling that pertains to the division of the target population into subgroups and randomly selects participants from each subgroup known as strata. This is to ensure that the sample represents a proportional number of subgroups from the target population. This technique is best for this study to avoid bias and ensure proper representation in selecting the respondents. This is helpful to ensure the scientific process of selecting my respondents. The researcher classified one hundred (100) senior high school teachers from public schools in Davao City for the school year 2020-2021.

Table 1
Characteristics of Participants

Characteristics	School 1		School 2	
	n	%	n	%
Male	25	50	30	55
Female	25	50	20	45

Research Tools/Instruments

In gathering the data for the independent variable, the research devised a self-made questionnaire on the socioeconomic lifestyle in terms of financial management, organizational civic affiliation, recreation and leisure, and household comfort. The self-made questionnaire was validated by experts and underwent pilot testing to establish reliability. Pilot testing was given to 30 respondents from selected public schools in Davao City. The parameter limits of socioeconomic lifestyle of Senior High School Teachers have had a five scale with 4.21-5.00 strongly agree, 3.41-4.20 agree, 2.61-3.40 moderate, 1.81-2.60 disagree to 1.00-1.80 strongly disagree. The Likert scale below was used to describe the data for Socioeconomic Lifestyle. In gathering data for the dependent variables, the second instrument was a self-made questionnaire on the performance of Senior High School Teachers. It is a self-rated evaluation in terms of task performance, contextual performance, and adaptive performance. The parameter limits of Performance of Senior High School Teachers have had a five scale with 4.21-5.00 strongly agree, 3.41-4.20 agree, and 2.61-3.40 moderate, 1.81-2.60 disagree to 1.00-1.80 strongly disagree. The Likert scale below was used to describe the data for Socioeconomic Lifestyle.

Procedure

The researcher underwent the following steps and procedures in gathering the data for this study: seeking permission to conduct the study, administration, and retrieval of questionnaires, and gathering and tabulation of data.

Seeking Permission to Conduct the Study. The researcher asked for an endorsement letter from the Dean of the Graduate School of Holy Cross of Davao with the consent of the thesis adviser to conduct the study on the Socioeconomic Lifestyle and Performance of Senior High School Teachers in Two Public Schools in Davao City. With the endorsement letter, they sent a request letter addressed to the Division Office of Davao City through the Schools Division Superintendent (SDS) to conduct the study. Then, the researcher will ask first for the consent of the school principal in the said school.

Administration and Retrieval of Questionnaires. With the approval and full support of the school division Superintendent and school principal, the manner on how to answer the given questionnaires was thoroughly explained by the researcher to the respondents. During the actual administration of the survey questionnaires, the survey questionnaires will be done through a Google form. After the respondents had completely and honestly answered and provided all the necessary data needed in the questionnaire, the researcher retrieved all the answered questionnaires.

Gathering and Tabulation of Data. After the successful administration and retrieval of the survey questionnaires, the data was collated and tabulated. Then, appropriate statistical tools were employed to get the necessary data for interpretation and further analysis

Data Analyses

In examining the result of the study, the researcher was using the following;

Mean. This was used to answer the first two objectives of the study. Specifically, it was used to describe the level of the socioeconomic lifestyle and the level of Performance of SHS teachers.

Pearson Product Moment Correlation of Coefficient. This statistic was used to determine the significance of the relationship between the socioeconomic lifestyle and the performance of senior high school teachers and also based on categorized by the type of school.

Regression Analysis. This was used to identify which among the indicators of socioeconomic lifestyle where significantly affect the level of the Performance of senior high school teachers.

Results

Table 1. Level of the Socioeconomic Lifestyle of Senior High School Teachers

Indicators	Mean	Description
Financial Management	4.00	High
Organizational Civic Affiliation	4.07	High
Recreation and Leisure	3.67	High
Household Comfort	4.18	High
Overall Mean	3.98	High

Table 2. Level of the Performance of Senior High School Teachers

Socioeconomic Lifestyle	Mean	Description
Task Performance	4.23	Very High
Contextual Performance	4.13	High
Adaptive Performance	3.67	High
Overall Mean	4.01	High

Discussion

Level of the Socioeconomic Lifestyle of Senior High School Teachers

The first objective of this study was to determine the level of socioeconomic lifestyle observed by the senior high school teachers in Davao City. Using the mean formula, the level of the socioeconomic lifestyle of senior high school teachers in terms of financial management, organizational civic organization, recreation leisure, and household comfort were determined. The research on this item was examined, and the descriptive statistics are provided in Table 1 to indicate the level of the socioeconomic lifestyle of senior high school teachers.

In particular, among the four indicators of socioeconomic lifestyle, respondents perceived that household comfort has the highest mean score of 4.18 or higher. This describes that working at home during the pandemic in terms of household comfort as observed by the senior high school teachers is good. This further implies that the senior high school teachers working at home amidst the pandemic feel safe, protected, and relaxed. Working at home amidst the pandemic can help senior high school teachers increase their protection even if they are still working at home because teachers no longer have to go to school to work. Also, working at home, the senior high school teachers are relaxed it is because they feel that being at home they can always see their families, and they feel motivated because of the support, love, and care of the family.

This study was proved in the study of Purwanto et al. (2020) that teachers who work from home can feel that they have more free time to gather with their family at work. And also, working at home, teachers can create a more secure, comfortable, and conducive atmosphere. This means that the household comfort of teachers becomes more important amidst pandemics. Working from home could give them more free time for their families and at the same time he/she has time to prepare their lessons even for their families. Working at home amidst a pandemic could give more security for the senior high school teachers as mandated by the IATF that all institutions should have a skeletal working force or working agreement wherein a minimum number of employees is required to go to the office to prevent the covid-19.

This finding substantiates the idea of Yalcin et al. (2021) that teachers at home are recreated by new experiences of people under the circumstances of the lockdown, confirming the notion of the home being a symbolic and fantastical place. Senior high school teachers can easily adjustments in their daily life practices, intersectional subjectivity emotions, habits, and behaviors culminated in an aggregate modification in experiencing home, which led to alterations in people's idea of home during the lockdown. It means that because of the lockdown schools nationwide are closed brought by the COVID-19. Amidst the pandemic, the home is symbolic, because, during the height of the lockdown, all the offices were forced to close due to the covid-19, one of which was the schools. Due to the lockdown,

the teachers were forced to work at home, and the home became the center of everything because they could not go out, the home became everyone's substitute.

The second-highest indicator is Organizational Civic Affiliation with a mean score of 4.07 or high. This means that teachers have a high level of socioeconomic lifestyle in terms of organization and civic affiliation. This implies that Organizational Civic Affiliation is still important for senior high school teachers amidst pandemics, they still have time to engage, participate, and communicate with other communities in cooperating with other groups of people. Although participating in any activities during a pandemic might seem a daunting task, remember the value these types of engagements can bring, especially when so many people's social circles have gotten much smaller and people may feel disconnected from their usual supportive services and networks. Community engagement can create connections between strangers; build social capital and support networks; and help shape programs, policies, and organizations that are doing critical work during this time.

As supported in the study of Dagli et al. (2017) the administration should express a proper environment for educational and training activities to take into account teachers' demands on the occupational and organizational grounds and empowerment of communication within the organization, democratic leader, transparent management style on the organization, open communication channels for the employee, and teachers' value decisions should be included in mind to prevent separation and continue their vocation. It implies that the school administrators should create a working environment in which less division is experienced and added citizenship behaviors are encouraged by giving teachers humanitarian working conditions and they should include teacher's educational employees, in creating and implementing decisions related to them by acting responsibly. It implies that for the teacher will participate in any activities or organizational activities in school, the administration should establish a democratic and welcoming atmosphere for all employees. In that case, teachers will be encouraged and will volunteer to participate in any organizational activities in the institutions that they belong and also it could influence the performance of the teacher because they feel that they belong.

The third highest indicator is financial management, with a mean score of 4.00 or higher. This means that senior high school teachers have a high socioeconomic lifestyle in terms of financial management. This implies that most of the time, the teachers have no issues regarding their financial management. This further implies that they have the senior high school teachers practiced financial management, thus, amidst the pandemic senior high school teachers can independently and appropriately spend their money. Also, amidst pandemics teachers have strictly followed their financial plans in spending their money during the pandemic.

The result is contrary to the study conducted by Acedillo (2018), in which teachers who participated in the conduct of the study had poor personal financial practices. However, the result is consistent in some cases as the study respondents showed excellent financial practice that led them to decide wisely and effectively economic behavior (Zulaihathia et al. 2019). They manage money effectively and efficiently, which is a vital behavior indicator of financial capability (Ferrer, 2018). It implies that good financial management is not true for all teachers. Financial distress is a frequent issue observed among public school teachers. They engage in different loans. Public school teachers have high tendencies to be fatalistic and materialistic. Also, they want to buy things even beyond their means, thus pushing them to engage in different loans. Though they have financial distresses, their values in believing God prevail as they expect God's intervention in their financial difficulties. Furthermore, findings show that teachers are somewhat not literate in managing their finances. They do not give much importance to recording and organizing their expenses. They have the overwhelming stress of their financial well-being as they are not satisfied with their financial situation and are afraid of their future financial concerns. Additionally, the teachers' lifestyles are influenced by their poor financial literacy.

The lowest indicator is recreation and leisure, which was 3.67 or higher. Based on the data result, senior high school teachers enjoy having personal recreation and leisure time. Further, this implies that senior high school teachers amidst pandemics can still have time for their recreation and leisure. Working at home, senior high school teachers are still engaged in various physical activities, even though there is a pandemic teacher have more time to engage in the community but in the new platform, like engaging in seminars and conferences related to their work or profession.

The result is contrary to the study conducted by Hsu et al. (2020) that the teachers have experienced psychological effects of the COVID-19 crisis, most report emotional instability, they experience

anxiety, and headaches because of the overloaded working out they cannot spend more time personally interest, indigestion, and overeating habits, and some report experiencing psychological problems such as a sense of loss, weakness, and irritability and out from that they don't have time to talk more often and personally to their family, relatives, and friends brought by Covid-19 pandemic. It implies that senior high school teachers experience physiological and emotional instability brought on by COVID-19. Teachers develop a culture of fear because of many lockdowns imposed by the government which is why teachers cannot go outside, they cannot easily participate in the organizational activities in their school because of this covid-19. Also, the performance of teachers has been greatly affected because they cannot concentrate on their work. After all, home is not a conducive atmosphere to work in.

Additionally, this was verified based on the the result of the study by Yucedag et al. (2020) that teachers mostly perceived staying at home as increasing their leisure, required leisure activity can positively affect their personal development, and positively affect my family relationships. Also, they significantly have leisure perceptions including rest, and out from that they have more time for their interests. Also, it has a good opportunity for hobbies, and opportunities to participate in social, cultural, and professional events. Based on the study they revealed that they frequently spent time on social networks, followed the news regularly, watched TV and movie series, and also listened to music and read books. In this statement, it implies that by staying at home most of the time teachers have more time in their leisure. Staying and Working at home, teachers have more time to develop their characters. Out from that leisure, it could give a positive outlook for the teachers, even if there is a lockdown, still, the teachers can still participate in social, cultural, and professional events using different social media platforms.

As supported by the data presented in Table 1, the level of the socioeconomic lifestyle of senior high school teachers has an overall mean score of 3.98 (SD = 0.88) or high. This descriptive level means that the teacher's socioeconomic lifestyle level is high. Most of the time, the teacher has no issues regarding their financial management. The teacher also has a good stance regarding their organizational, and civic affiliation involvement. Additionally, the teacher enjoys having personal recreation and leisure time and feels relaxed and protected with their household comfort amidst the pandemic. All indicators under the socioeconomic lifestyle of senior high school teachers have a verbal description of high. It implies that all of the indicators in the socioeconomic lifestyle of senior high school teachers have no problem and they did not experience difficulties amidst the pandemic.

The result is contrary to the study of Frohn (2021) which exacerbates the socioeconomic lifestyle of senior high school teachers. First of all, lack of financial resources, space and living conditions, and tranquility are all regarded as economic investment problems. Second, lack of cultural capital, because of the pandemic, teachers cannot engage in societal activities and have no social relation to others or in the organization. Thirdly, is lack of social capital has an impact on teaching for the student. While family as social capital often seems to lead to disadvantaging conditions, relationships between students and teachers as social capital are supposed to be one of the most important variables in students' learning because of the pandemic.

This result is further in line with the Self-Efficacy Theory by Albert Bandura (1977). People believe in their capabilities to exercise control over their functioning and over events that affect their lives. Teachers have their full determination and motivation to continue their tasks and improve their performances although their socioeconomic lifestyle has been affected because of the pandemic. Even in difficult situations teachers showed competencies in their work and execute a plan of action in prospective situations.

Also, it is in line with the theory of social economics by Gary Becker (1955). Teachers commit to giving their best to give quality education to the students despite the pandemic the passion of the teachers is present to do their duties even do there are economic down and lack of support but still, they have a motivation to improve their performance for the students amidst the pandemic.

Level of The Performance of Senior High School Teachers

The second objective of this study was to determine the level of performance of senior high school teachers. Using the mean formula, the level of the performance of senior high school teachers in terms of task performance, contextual performance, and adaptive performance was determined. The research questions of this item were examined, and the descriptive statistics are provided in Table 2 to indicate

the level of the performance of senior high school teachers. In particular, among the three indicators of the performance of senior high school teachers, respondents perceived that task performance had the highest mean score of 4.23 or very high. Based on Table 2, the task performance of senior high school teachers gets a mean of 4.23 or very high, which means that the senior high school teacher's performance in terms of task performance is excellent. This further implies that amidst pandemics senior high school teachers have no problem regarding their task performance as always. Furthermore, it implies that even though there is a pandemic, teachers are still showing excellence in their work, though there are many obstacles that the teachers are finding ways to still deliver the correct quality of their teaching even in the online setup. The teacher also demonstrates the ability to make decisions amidst the risks posed by the COVID-19 pandemic, and above all the teachers believe their skills and teaching methodologies are still beneficial to the students. Even if teachers work at home they still maintain interpersonal relationships with others at work.

This was also supported by the study of Mbon (2017), who stated that teachers' decision-making strategy and leadership style have an important influence on teachers' task performance. The teachers' communication skills have a significant relationship with teachers' task performance. It implies that amidst covid-19 pandemic, decision-making strategy and leadership style are very important for senior high school teachers. Because everyone is forced to work in their homes, senior high school teachers have to decide what the faithful do about their work because there is no one to watch over them while working at home. The second is that a teacher has a leadership style because the students depend on him so that they can learn even if the students are only at home. Furthermore, it implies that communication also serves as a significant instrument for schools to reach the members of the community or an institution. Communication positively increases the involvement of the family and the demand for better information from teachers and schools and freedom and continuity of exchanged information among colleagues and teachers as they engage and involved in school affairs.

Also, this was supported by the study by Savitri & Sudarsyah (2020), who stated that improving teacher teaching task performance can be improved by developing the capacity of the teacher capacity building. Capacity building is a process of improving the ability of teachers in terms of knowledge and skills, as well as their attitudes and behavior of teachers in educational organizations, this process can surely be done in many ways, through competency-based education and training that could help teachers and also clear career pattern development, all of which is to progress the performance of teachers in carrying out their duties. It implies that capacity building is closely related to a teacher's abilities, institutional capabilities, and organizational system competencies of a teacher. Further, it implies that even with the COVID-19 pandemic, senior high school teachers are still looking for ways to improve their teaching task performance. Despite many obstacles during this time, teachers remained positive to maintain their excellence by participating in Zoom webinars related to their profession.

The contextual performance was rated by the senior high school teachers as the second highest with a mean score of 4.13 or higher, which means that senior high school teachers' performance of this indicator is very satisfactory. This implies that teacher has a good stance regarding their contextual performance involvement in the organization or institution's activity. Further, it implies that contextual performance could help to increase the productivity of the senior high school teachers in different ways like cooperative and courteous teachers supporting their heads of department in reducing time or energy spent on group-maintenance activities. The senior high school teachers help their supervisors to focus on tasks that do not involve close monitoring of the discipline of teachers. In this way, they give valuable feedback to the supervisor by operating at all levels for improved productivity of the teachers.

This study supported by Saboor, Rehman, and Rehman (2018) expressed that respectful cultures smooth relationships, make workers more compassionate, and reduce attention to justice. In general, this principle appears to uplift contextual performance, therefore it should be encouraged. Also, this study was supported by Organ (1988), as cited by Muchhal (2014) that contextual performance is not only behaviors such as helping co-employee or being a dependable member of the organization, but also making suggestions about how to improve work procedures. In short, contextual performance is not a single set of uniform behaviors but is in itself a multidimensional concept. In implies that the contextual performance of senior high school teachers could help to increase the productivity of the teachers in different ways cooperative and courteous teachers support their department heads in reducing time or energy spent on group maintenance activities. Further, it implies that the senior high school teachers

help their supervisor to focus on tasks that do not involve close monitoring of the discipline of teachers. Further, it implies that in this way, they give valuable feedback to the supervisor by operating at all levels for improved productivity while reducing the burden of managers for employee development.

Meanwhile, “Adaptive Performance” was rated by the senior high school teachers as the lowest with a mean score of 3.67 or higher. This means that the senior high school teacher’s performance in terms of adaptive performance is still satisfactory. Additionally, teacher enjoys and can quickly adapt and handle their work amidst the pandemic. Further, it implies that adaptive performance consists of dimensions like handling urgent situations, handling stress at work, solving problems, demonstrating interpersonal adaptability, and displaying physically oriented adaptability. Under adaptive performance, the learning itself is seen as part of the performance of a particular teacher. This was supported by Pulakos et al. (2000) as cited by Khan, (2012) that adaptive performance is a new concept of performance in which learning involves a major performance element. Under this concept of performance, there is a leaving from the past conceptualization of performance in which learning was viewed as a criterion for performance. Moreover, Organizations with more adaptive employees can easily respond to environmental changes and have higher performance and productivity (Asheghi & Hashemi, 2019). It implies that senior high school teachers should become more flexible enough to deal with changes in our teaching during a challenging time, such as the COVID-19 pandemic. But there is still a big factor in their organization and school where they are connected to have a better and quality performance of teachers and more productivity is due to union and good relationship with their co-workers and especially with their administrator.

This result is further in line with the Self-Efficacy Theory by Albert Bandura (1977). People believe in their capabilities to exercise control over their functioning and over events that affect their lives. Teachers have their full purpose and motivation to continue their tasks and improve their performances even in difficult times, they should continue exposing quality and standard performance, and continue in participation to other organizations that could help improve their professionalism. Even in difficult situations teachers showed competencies in their work and executed a plan of action in prospective situations.

Conclusion

Based on the data gathered, the following conclusions were drawn:

The overall mean score of the level of the socioeconomic lifestyle of senior high school teachers in terms of financial management organizational civic affiliation, recreation and leisure, and household comfort was described as “high.” This means that the teacher’s socioeconomic lifestyle level is high. Most of the time, the teacher has no issues regarding their financial management. The teacher also has a good stance regarding their organizational civic affiliation involvement. Additionally, the teacher enjoys having personal recreation and leisure time and feels relaxed and protected with their household comfort amidst the pandemic. The overall mean of the level of the performance of senior high school teachers in terms of task performance, contextual performance, and adaptive performance was described as “high.” This implies that the teacher’s performance at the SHS teacher’s level is high. Most of the time, the teacher has no problem regarding their task performance. The teacher also has a good stance regarding their contextual performance involvement in the organization or institution’s activity. Additionally, teacher enjoys and can quickly adapt and handle their work amidst the pandemic.

There is a significant relationship between socioeconomic lifestyle and the teaching performance of senior high school teachers. The increase in the socioeconomic lifestyle of senior high school teachers also tends to increase their teaching performance. To improve the teaching performance of senior high school teachers, they may focus their efforts on organizational civic affiliation, recreation and leisure, and household comfort. Teachers may take advantage of these areas of socioeconomic lifestyle to help boost their teaching performance, especially in this time of the pandemic.

Recommendations

Based on the findings and conclusions, the following recommendations are put forward to those concerned;

It is recommended that the Department of Education formulate policies and develop programs to help maintain the socioeconomic lifestyle and performance of senior high school teachers. The head of the

department should support the implementation of these policies to uphold teachers' socioeconomic lifestyle and well-being.

The school administration is strongly advised to support the policies and guidelines from the national level to maintain and sustain the socioeconomic lifestyles and the performance of senior high school teachers in different situations.

Social Studies teachers should fully realize that entering this profession is challenging. They should increase their awareness about their socioeconomic lifestyle, which has significantly affected their teaching performance. This paper will help them improve their lifestyle, which will, in effect, improve their socioeconomic well-being and social and financial situation based on the findings presented in this paper.

Future researchers may use this study to further the scope of this paper, like helping them develop a guide for improving research related to socioeconomic lifestyles and the performance of senior high school teachers amidst the pandemic.

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EXPLORING THE CHATGPT ERA: FINDING EQUILIBRIUM BETWEEN INNOVATION AND TRADITION IN EDUCATION

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ABSTRACT

The study examines the optimal integration of AI-powered chatbot ChatGPT into educational methods. It assesses the equilibrium between embracing innovation and preserving traditional teaching approaches to enhance learning while addressing concerns about reduced human interaction and misinformation. The research utilizes qualitative methods, including semi-structured interviews with 30 educators, students, administrators, and other stakeholders. It also involves focus group discussions with 20 participants to facilitate collaborative sense-making. Thematic analysis is employed to identify recurring themes and patterns in the qualitative data. The results indicate that while ChatGPT offers potential for personalized and interactive education, it poses challenges such as context comprehension and potential biases. Educators recognize the benefits of using ChatGPT for writing prompts, storytelling assistance, and vocabulary improvement. However, concerns about technological reliance and misinformation risk are prevalent. The study offers practical insights for educators and policymakers on responsibly integrating ChatGPT into educational environments. Recommendations include implementing resistant assessment methods, utilizing plagiarism detection software, conducting viva voce sessions, and educating students on ethical AI use. Emphasizing the importance of upholding academic integrity and promoting a culture of honesty is crucial. This research expands understanding of ChatGPT's role in education, emphasizing the need to balance AI innovation with traditional pedagogical principles. It underscores the necessity of responsible technology use and provides strategies for effectively leveraging AI advantages while maintaining the core values of education.

Keywords: artificial intelligence (AI), chatbot, ChatGPT, openAI, technology.

Introduction

The rise in popularity of conversational bots is undeniable, with major technology giants like IBM, Facebook, Google, and other influential players actively contributing to this trend. These adaptable entities, chatbots, virtual assistants, conversational interfaces, or automated chat systems, are essential for businesses. They bring new energy to websites, engage online audiences, enhance user experiences, and significantly facilitate gathering valuable data about website visitors, ultimately leading to conversions.

The benefits of utilizing chatbots are manifold. In the realm of education, specialized chatbots, known as education chatbots, are making waves in EdTech companies, colleges, and educational institutions. Tailored specifically for the education sector, they serve various purposes, including delivering curriculum updates, grading papers, collecting student and alumni data, and streamlining the admissions process. While the education sector has traditionally been quick to embrace technological advancements, the COVID-19 pandemic accelerated the adoption of transformative changes in the distance learning landscape.

Online education has moved beyond platforms like Coursera and Udemy; it has become integral to mainstream education. Universities now offer flagship online courses and distance learning programs, with chatbots powered by EdTech companies revolutionizing the educational experience for students, professors, and administrators. In November 2022, OpenAI introduced ChatGPT, an AI-powered chatbot capable of engaging in conversational interactions, answering questions, correcting errors, and generating content such as blogs and essays. While ChatGPT holds promise for education, it faces challenges such as context comprehension, tone and emotion analysis, handling complex subjects, and crafting personalized lesson plans. Concerns also exist regarding the potential fostering of excessive reliance on technology, which may impede students' problem-solving skills. Some educators fear

stifling creativity, but experts argue that students can still turn to textbooks for answers rather than relying solely on online tests.

The key question arises: Can ChatGPT be effectively utilized as a teaching and learning tool? This paper seeks to address this question within the educational system. While the theoretical understanding of ChatGPT is clear, delving into its technical intricacies, such as its operational mechanisms and associated algorithms, is essential, and this will be briefly explored in the subsequent section. The significance of this study lies in the transformative potential of ChatGPT, an AI chatbot reshaping education. While ChatGPT's proficiency in content generation is remarkable, it presents opportunities and challenges for educators and institutions. This research emphasizes the importance of responsible technology use, acknowledging the pivotal role of OpenAI in shaping its impact on education. ChatGPT could be a valuable educational resource, provided it is used wisely.

Statement of the Problem

In the era of ChatGPT and AI-driven education, the balance between embracing innovation and preserving traditional teaching methods poses a significant challenge. While these advanced technologies offer unprecedented opportunities for enhancing learning experiences, they also raise concerns regarding the potential loss of human interaction and the proliferation of misinformation. This study investigates how educators can effectively integrate ChatGPT into educational practices while maintaining the integrity of traditional teaching approaches, thereby fostering a balanced and effective learning environment.

Significance of the Research

This research holds paramount significance as it addresses the pivotal intersection of technology and education in the ChatGPT era. With the rapid integration of AI-driven tools like ChatGPT into educational settings, there is a pressing need to understand how these innovations impact traditional teaching methods and student learning outcomes. By exploring the delicate balance between innovation and tradition, this study aims to provide valuable insights for educators, policymakers, and stakeholders in navigating the complexities of the evolving educational landscape. Ultimately, the findings of this research have the potential to shape strategies for effectively harnessing the benefits of ChatGPT while preserving the fundamental principles of education.

Literature Review

OpenAI, founded in 2015 by Sam Altman, Elon Musk, Greg Brockman, Ilya Sutskever, and Wojciech Zaremba, is a leading research company focused on artificial intelligence (AI) [1, 3]. ChatGPT, a state-of-the-art language model, is based on the transformer architecture [2]. It has been trained on a large-scale dataset consisting of text and code, enabling it to perform tasks such as text generation, language translation, content creation, and answering questions [4]. The transformer architecture, well-suited for natural language processing, operates by attending to different parts of the input sequence, allowing it to capture relationships between words and phrases. ChatGPT has been trained with over 10 billion words and 8 million documents, making it highly versatile for various tasks [5].

Generating text:

ChatGPT has the capability to produce human-like text and can be leveraged for generating news articles, blog posts, marketing materials, and various other forms of textual content.

Translating languages:

ChatGPT can translate text from one language to another, as well as documents, websites, and other types of content.

Writing different kinds of creative content:

ChatGPT can write creative content like poems, stories, and scripts.

Answering your questions in an informative way:

The following text provides an overview of the capabilities of ChatGPT, an AI language model, in the context of education: ChatGPT's advanced natural language processing allows it to effectively respond to a wide range of questions, including those that are complex or unconventional. Its AI-powered technology has the potential to transform education by enhancing personalization and interactivity. As a versatile tool, ChatGPT can assist students in various ways, such as creating customized vocabulary lists, generating writing prompts, facilitating storytelling, and providing detailed responses to textual

inquiries [6]. Furthermore, it is capable of language translation. In the educational setting, ChatGPT can be leveraged in numerous specific applications.

Improving vocabulary:

ChatGPT can be leveraged to generate tailored word compendiums for educational purposes. This feature facilitates students' acquisition of new vocabulary and comprehension of word definitions.

Generating writing ideas:

The ChatGPT platform offers the ability to generate writing prompts, which is particularly useful for aiding students in initiating their writing assignments and fostering innovative thinking.

Helping with storytelling:

ChatGPT has the capability to assist students in crafting narratives, thereby enhancing their writing proficiency and fostering creativity.

Understanding reading passages:

ChatGPT has the capability to generate questions based on reading passages, which aids in comprehension and retention of content for students.

The current iteration of ChatGPT, an expansive language model chatbot developed by OpenAI, is still in its developmental stage, but it shows promising potential [7]. There are concerns about its accuracy and potential biases, as it generates responses by choosing the most likely words based on previous patterns, which occasionally leads to errors, especially when encountering unfamiliar queries. Furthermore, its training on a vast and diverse dataset, which includes biased and harmful content, raises the possibility of ChatGPT producing similarly biased or harmful text [8]. Instances of ChatGPT delivering inaccurate or offensive responses have been noted, including content that is racist, sexist, or otherwise objectionable, as well as providing misleading medical or financial advice. OpenAI is actively addressing these concerns by developing filters to exclude harmful content from ChatGPT's training data and improve its accuracy [9]. It is important to acknowledge the limitations of ChatGPT; while not without flaws, it can be a powerful tool if used carefully and not as a replacement for human judgment.

Research Methodology

The research methodology for exploring the ChatGPT era and its impact on education will primarily employ qualitative methods to investigate the dynamics between innovation and tradition in educational practices. This qualitative approach will involve interviews with 30 educators, students, administrators, and other relevant stakeholders to gather nuanced perspectives, experiences, and insights regarding integrating ChatGPT into educational settings. These interviews will be semi-structured, allowing for open-ended exploration of participants' attitudes, challenges, and successes in utilizing ChatGPT as a teaching and learning tool. Additionally, focus group discussions will be conducted with 20 participants to facilitate rich conversations and collaborative sense-making among participants. Thematic analysis will be employed to identify recurring themes, patterns, and implications emerging from the qualitative data, providing a robust foundation for understanding the complexities of integrating AI technologies into education while maintaining the essence of traditional pedagogical approaches.

Main Points and Discussion

The study conducted a qualitative investigation into the integration of ChatGPT in educational settings, focusing on the balance between innovative AI technologies and traditional teaching methods [1]. Interviews with 30 educators, students, administrators, and other stakeholders, along with focus group discussions with 20 participants, provided in-depth insights [2]. Thematic analysis identified key themes, revealing both the potential benefits and challenges associated with ChatGPT in education [3].

Key Themes and Insights:

Enhanced Personalization and Interactivity

Customized Learning: Many educators and students highlighted ChatGPT's ability to tailor educational content to individual learning needs. For example, ChatGPT can generate personalized vocabulary lists, writing prompts, and tailored reading comprehension questions, thereby enhancing the learning experience [4].

Engagement and Motivation: Participants noted that the interactive nature of ChatGPT makes learning more engaging and enjoyable for students. The chatbot's ability to respond instantly and provide feedback was seen as a motivator for students to engage more deeply with the material [5].

Challenges in Context Comprehension and Personalization

Contextual Understanding: Several educators reported that while ChatGPT is proficient in generating content, it sometimes struggles with understanding the context of more complex or nuanced questions. This limitation can lead to generic or inaccurate responses [6].

Personalization Limitations: Despite its capabilities, ChatGPT occasionally fails to provide the level of personalized interaction that a human educator can offer. For instance, it might not fully grasp the emotional tone of a student's query or provide sufficiently nuanced guidance [7].

Concerns about Misinformation and Bias

Accuracy and Reliability: A significant concern among participants was the risk of misinformation. Since ChatGPT generates responses based on patterns in its training data, it can sometimes produce incorrect or misleading information. This risk is particularly concerning in academic settings where accuracy is paramount [8].

Bias and Ethical Issues: The potential for bias in ChatGPT's responses was another major concern. Given that the model is trained on diverse datasets, it may inadvertently perpetuate existing biases present in those datasets. Instances of biased or inappropriate responses highlight the need for careful oversight and continuous refinement of the technology [9].

Impact on Traditional Teaching Methods

Supplementary Tool: Many educators view ChatGPT as a valuable supplementary tool rather than a replacement for traditional teaching methods. It can assist with routine tasks such as grading and providing instant feedback, freeing up educators to focus on more complex instructional activities [4].

Maintaining Human Interaction: There was a consensus that human interaction remains crucial in education. The relational aspect of teaching, including mentorship, emotional support, and personalized feedback, cannot be fully replicated by AI. Educators emphasized the importance of maintaining these human elements to foster a well-rounded educational experience [1].

Ethical and Practical Considerations

Academic Integrity: Concerns were raised about students potentially using ChatGPT to cheat or plagiarize. Educators stressed the need for robust academic integrity policies and tools to detect AI-generated content [5].

Training and Adaptation: Effective integration of ChatGPT requires proper training for educators. Participants highlighted the need for professional development programs to help teachers adapt to and leverage AI technologies effectively in their teaching practices [3].

Practical Implications

The findings suggest several practical implications for the integration of ChatGPT into educational settings:

Policy Development: Educational institutions should develop clear policies on the ethical use of AI, including guidelines for preventing misuse and ensuring data privacy [2].

Teacher Training: Professional development programs should be implemented to equip educators with the skills to effectively incorporate ChatGPT into their teaching while maintaining traditional pedagogical principles [8].

Balanced Integration: Strategies should be devised to balance the use of AI with human interaction, ensuring that technology enhances rather than detracts from the educational experience [6].

The integration of ChatGPT into education offers both opportunities and challenges. While it can enhance personalization and interactivity, concerns about misinformation, bias, and the potential erosion of human interaction must be addressed. By adopting a balanced approach and fostering responsible use, educational institutions can leverage the benefits of ChatGPT while preserving the essential elements of traditional teaching methods [7].

Conclusion

After weighing the advantages and disadvantages of ChatGPT, it's apparent that despite its potential, the technology is still in its early stages of development. Acknowledging the essential requirement for guided or supervised instruction in the learning journey, the cooperation between human educators and AI chatbots like ChatGPT is vital. Human oversight is indispensable for productive learning, guaranteeing a harmonious balance between human and machine roles. This piece suggests that

ChatGPT can be a valuable asset in teaching and learning, underlining the importance of educators and learners developing responsible usage habits when utilizing this technology.

Harnessing ChatGPT's Power Ethically: Best Practices for Users

AI-driven chatbots like ChatGPT present a challenge for educators as they can facilitate student cheating. To address this issue, teachers can implement various preventive measures. Firstly, incorporating assessment methods resistant to manipulation, such as open-ended questions or projects requiring creative and independent thinking, can deter cheating. Employing plagiarism detection software enables copying material identification, offering a proactive approach to upholding academic integrity. Conducting viva voce sessions as part of the grading process allows teachers to evaluate students' task approaches and detect signs of cheating. Educating students about the ethical use of AI and highlighting the risks and consequences of cheating with AI helps instill a sense of responsibility. Keeping abreast of technological advancements, including AI, empowers teachers to anticipate and tackle potential challenges.

Furthermore, fostering a culture of academic integrity is essential. Instilling values of honesty and fairness, along with clearly defining what constitutes cheating, establishes the groundwork for a trustworthy learning environment. Developing rapport with students encourages open dialogue, reducing the likelihood of resorting to cheating. Maintaining vigilance is crucial, requiring awareness of evolving cheating techniques and a readiness to take action when suspicions arise. By implementing these strategies, educators can create a fair and honest learning environment for all students.

Future Research

Future research exploring the ChatGPT era and its impact on education should delve deeper into developing innovative teaching methodologies that integrate AI technologies like ChatGPT while preserving traditional pedagogical approaches. Investigating the long-term effects of incorporating ChatGPT into various educational settings, such as K-12 classrooms, higher education institutions, and corporate training programs, can provide valuable insights into its efficacy and potential challenges. Additionally, examining the ethical implications surrounding using AI-driven chatbots in education, including privacy, data security, and equity, is crucial for ensuring responsible implementation. Moreover, future research could explore strategies for effectively training educators to utilize ChatGPT as a teaching tool and empower them to adapt to the evolving educational landscape. Overall, future studies should strike a balance between leveraging the benefits of AI technologies like ChatGPT and upholding the principles of effective and equitable education.

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THE DEVELOPMENT OF PSYCHOLOGICAL IMMUNITY PROGRAM ON ADVERSITY QUOTIENT IN LATE CHILDHOOD

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ABSTRACT

This research aims to develop a Psychological Immunity Program (PIP) that enhances Adversity Quotient (AQ) in late childhood. The program focuses on developing Adversity Quotient that have four aspects: Control, Origin and ownership, Reach, and Endurance. The researcher reviewed the literature and developed the program based on the Psychological Immunity Theory of Dujduen Panthumnawin and Ngamta Wanninthanon. The Psychological Immunity Program consists of eight activities, with 2 activities per component. Each activity lasts 60 minutes. The activity was conducted twice a week for a total of 4 weeks. After the program was developed, it was evaluated by three experts who specialized in developmental psychology and education. The results of this program showed an index of item-objective congruence (IOC) of 1.00. The experts also provided suggestions for improving the activities to make them more consistent and appropriate for the target group. The program was then revised based on the experts' suggestions and tested with a sample group of 20 sixth-grade students from an alternative school in Bangkok participated in activities twice a week for four weeks. Students took an Adversity Quotient Scales before and after an activity. The results showed that the students were able to complete all eight activities as planned. And after the program, the children's scores on the AQ test were significantly higher. Therefore, it can be concluded that the Psychological Immunity Program is effective in enhancing AQ in late childhood.

Keywords: Psychological Immunity, Adversity Quotient, Late Childhood

Introduction

Late childhood is a transitional stage from childhood to adolescence. During this stage, children experience significant developmental changes. They become more capable of critical thinking and problem-solving, and they place a high value on interpersonal relationships. However, they also face various changes in their physical, emotional, and social lives, such as new social environments, new schools, and new friends (Valentine, 2003). Additionally, they are expected to take on greater responsibilities appropriate for their age. As Kewali Nakviroj (2012) found that various problems faced by school-age children often stem from their own attitudes. Children who tend to avoid problems are more likely to struggle with enduring challenges and difficulties in life. Therefore, children should be encouraged to develop themselves to thrive in a constantly changing society. For children to live a quality life, they must be trained to acquire both knowledge and various skills. (Pitchuda Nuamnongboon, 2016). They should also be encouraged and developed to overcome obstacles on their own because it is the ability to respond to difficult situations and have the motivation and determination to overcome the obstacles that children face (Pailin Juntadit, 2020). And AQ can be developed, starting with the development of nerve in the brain around the age of 12 and increasing further. Therefore, late childhood, ages 9-12 is an appropriate time to start developing the AQ.

Adversity Quotient (AQ) according to Stoltz (1997) consists of 4 important components: Control, Ownership, Reach and Endurance. People with high AQ tend to view problems as challenges. They possess a strong spirit, remain unshaken, and do not falter in the face of any adversity. They consistently rise to the occasion, striving to achieve their goals. Developing Adversity Quotient (AQ) skills is crucial for navigating life in today's world. Expecting others to be problem solvers and improve the environment according to one's desires is often unrealistic or impossible. (Department of Mental

Health, 2000). To improve an AQ in our life, it can be developed in many ways such as building resilience, cultivating a positive mindset. And one of them is to build a strong mind to be prepared for the situations that come into life.

The researcher sees Psychological Immunity as a system comprising cognitive, behavioral, emotional, and environmental dimensions. This system equips individuals with the ability to endure both physical and psychological stress, to maintain good mental health. Psychological immunity is a modern concept in positive psychology. It contributes to individuals' ability to be self-reliant and mindful. It also helps individuals develop their thinking skills. People with psychological immunity can adapt and survive. Immunity acts as a tool to mitigate the severity of the impact (Apichai Puntasen, 2008). Having good psychological immunity leads to good quality of children and youth that including good mental and well-being, mindfulness, optimism, and the ability to solve problems in their life. And makes them to be positive people who are ready to solve problems and have the immunity to cope with changes in life. As can be seen, psychological immunity encompasses crucial components that cover aspects of thoughts, emotions, and actions. It is vital for effectively navigating life in society, enabling individuals to help themselves and fostering the development of their abilities to face and overcome challenges.

Based on the aforementioned background and rationale, the objective of this research is to develop a Psychological Immunity Program (PIP) using the psychological immunity's components of Dujduen Bhanthumnavin and Ngamta Vanindananda (2008), which include optimism, risk-taking (with mindfulness), mindfulness, and stress management. This program aims to enhance an AQ in late childhood. This is because the components of psychological immunity have a positive impact on the ability to confront and cope with challenges. Late childhood begin to seek out new experiences, face challenges in life, and entering a stage where they encounter various societal issues more frequently. Therefore, it is highly appropriate to develop skills in coping with and overcoming obstacles. It is also important to note that late childhood is often referred to as the age of peer groups. Most of the social interactions will be with friends of the same age. Activities in the PIP, which are mostly group activities will allow children to develop social skills with their peers, participate in different activities, exchange ideas, and enhance ability to face problems and overcome obstacles. The researcher saw that psychological immunity will help children to be aware and mindful of their actions, enabling them to appropriately manage various situations. It enhances their ability to use life skills and problem-solving skills in different contexts (Kantharat Lueang-on, 2020). It is a process of thinking, perceiving, and leading to the decision to do what is right (Kotchaniya Ninlawong, 2017). So, it is appropriate for developing in late childhood because children in this stage need immunity as a shield to protect themselves from various problems and the ever-changing environment. As Dolrudee Chomjungwat (2024) found that having good psychological immunity contributes to mental strength, which is an important skill that leads to the courage to face problems and obstacles. The program will also benefit children in their social adjustment and future life.

Research Objectives

To develop the Psychological Immunity Program to enhance Adversity Quotient in late childhood.

Samplings/Participants

20 students from an alternative school in Bangkok who are currently studying in grade 6 in the academic year 2023.

Research Tools/Instruments

1. Psychological Immunity Program
2. Adversity Quotient Scales

Procedure

In this research, the researcher divided the research into 2 parts as follows:

1. Development of a Psychological Immunity Program (PIP)

1.1 Studied the literature and theoretical concepts related to adversity quotient and psychological immunity as a guide for designing the program.

1.2 The researcher developed the program based on the Psychological Immunity Model by Dujduen Bhanthumnavin and Ngamta Vanindananda (2008), which consists of four components: 1. Optimism refers to an individual's mindset or expectations regarding their ability to adapt to challenging situations, obstacles, or problems in life. 2. risk-taking (with mindfulness) refers to a person's psychological trait that reflects their hope of positive outcomes in the future, their desire for excitement and challenge, while still maintaining a sense of caution. 3. Mindfulness refers to the practice of paying attention to the present moment without judgment and being aware of while doing anything. And 4. Stress management refers to the ability or mental readiness of an individual to adapt and deal with problems that arise in their life.

1.3 The researchers developed the program based on the concept of the Psychological Immunity theory to enhance Adversity Quotient. Each activity consists of objectives, media and equipment, activity procedures, and evaluation. The PIP consists of a total of 8 activities, each lasting 60 minutes and conducted twice a week. The 8 activities are aligned with the 4 components of psychological immunity as follows: Activities 1-2 are positive thinking, activities 3-4 are stress management, activities 5-6 are mindfulness and activities 7-8 are risk-taking (with mindfulness). Which each designed to enhance 4 components of AQ including Control, Origin and Ownership, Reach and Edurance.

1.4 The Psychological Immunity Program was submitted to 3 experts who specialized in developmental psychology and education to verify the accuracy, appropriateness, and effectiveness of the program for implementation. The program was found to have an Index of Item-Objective Congruence (IOC) of 1.00.

1.5 The program was revised and improved based on the experts' suggestions before being used for activities with the sample group

2. Try out Psychological Immunity Program (PIP)

2.1 Implement the revised psychological immunity program, based on expert suggestions with a sample group consisted of 20 students in 6th grade from an alternative school in Bangkok in the academic year 2023. Begin by fostering relationships through conversation, explaining the details of the activity program. Then proceed with the scheduled activities, completing all 8 of them. Here is an example of activities from the psychological immunity program:

Table 1
Example activities

Activity	Details of Activity
Look carefully	This is an optimistic activity. The researcher first provided knowledge about optimism. Then, divided the students into groups and gave them different problem situations. The students were then asked to work together to create a play that would solve the problems using an optimistic perspective. To develop analytical thinking, recognize causes, and endurance.
Emotion Wheel	This is a stress management activity. The researcher first provided knowledge about various stress management techniques. Then, gave the students a worksheet with an emotion wheel to help them explore their emotions of the day and design their own emotion wheel. To develop the ability to assess the recognition of causes, emotions, impacts, and management.
Spaghetti Model	This is a mindfulness activity. The researcher divided the students into groups. Each group was given 30 spaghetti strands, scotch tape, and marshmallows. The students were asked to plan and build a model using the spaghetti strands in any way they wanted, with the goal of making the marshmallow reach the highest point. To develop responsibility in duties and problem-solving.

2.2 After implementing the Psychological Immunity Program with the sample group. The researcher identified issues and made the following improvements to the program: 1. Adjust the

explanation of the situational topics used in playwriting to be clearer, to ensure that students truly understand the issues. 2. Adjust some video clips depicting everyday risk situations to have clearer content and ensure each clip is no longer than 5 minutes. 3. Adjust the time in some activities to be appropriate for the sub-content of the activity.

Data Analyses

The analysis of the data comparing the results of the Adversity Quotient before and after participating in the activity found that after the students participated in the Psychological Immunity Program (PIP), the students had a significantly higher Adversity Quotient ($M=3.51$) than before participating in the activities ($M = 3.34$) at a statistical significance level of .05. This shows that the PIP helps to develop the skills to face and solve problems effectively. In addition, the students also practiced other skills such as critical thinking and teamwork.

Discussion

In the development of the Psychological Immunity Program, the researcher followed various steps to develop the program to be as complete as possible. After revising the program according to the experts' suggestions and using it with sample group, it was found that students had a significantly higher Adversity Quotient than before participating in the activities at a statistical significance level of .05. And students were interested and cooperated in the activities. Since the activities were diverse, they were interested and did not feel bored. The activities are carried out according to the schedule in the activity plan. It starts with relaxing the body and meditating through the "flower and candle breathing" activity. Then, the activities are carried out according to different topics each time. So, it allows students to have the opportunity to face a variety of problem situations, leading to analytical thinking, planning, and finding ways to deal with problems in different ways. They also get to exchange ideas and develop teamwork skills. According to the developmental tasks of late childhood as proposed by Havighurst (1972, cited in Pranote Khaochim, n.d.). These tasks include learning the physical skills, learning to get along with peers, and developing the concepts necessary for everyday life. After each activity, the students will review what they have learned by writing it down in their notebook called "Immune Pass". This is consistent with Erikson's theory of psychosocial development (Erikson, 1985). According to Erikson's theory of psychosocial development, children in this age group are in the stage of industry vs. inferiority. This means that they are developing a sense of industry, or a sense of competence and pride in their accomplishments. They do this by planning, playing, and doing things with their friends. They also compare themselves to others around them (Lally & Valentine-French, 2019). During this stage, children are growing and becoming more curious about the world around them. They want to be active and do things, rather than sit still. They also try hard and feel proud when they succeed.

Therefore, the PIP is an activity that helps students develop their Adversity Quotient as Dolrudee Chomjungwat (2024) found that having psychological immunity contributes to mental strength, which is an important skill that leads to the courage to face problems and obstacles. This is because each activity in the program is designed to develop the four components of Adversity Quotient effectively.

Aspect of Adversity Quotient	
Control	Derived from attempting to regulate both body and mind throughout every step of the activity until it is successfully completed.
Origin and Ownership	Derived from recognizing the problem situations presented in each activity, identifying causes, and engaging in solutions.
Reach	Derived from being conscious of the issues in each activity and managing them while attempting not to affect other aspects.
Endurance	Derived from persistently managing the problems encountered in each activity until they are resolved.

Conclusion

The results of this study indicate that the Psychological Immunity Program contributes to the development of Adversity Quotient in late childhood, meeting the established objectives. The program can be effectively implemented in late childhood and serves as a skill-enhancing activity, allowing children to learn from diverse real-life experiences. It fosters skills in learning, exchanging opinions, working with others, and solving personal problems, thereby increasing their ability to face and overcome obstacles. Additionally, it aligns with the developmental principles of late childhood.

Suggestions

For Applying Research Findings

1. Teachers and parents can adapt Psychological Immunity Program for activities with children or use it as a guideline for organizing other relevant activities.
2. Each activity should involve changing the situational topics to be more diverse and up-to-date, encouraging children to analyze information in various ways.
3. After each activity, if time permits, engage in discussions with the children to review, share experiences, and reflect on what they have learned together.

For Future Research

1. Researchers can extend the duration of the activities if the children show interest in them.
2. The researcher can adjust the difficulty level of the activity to make it suitable for children of different ages.
3. The researcher can develop Psychological Immunity Program to promote other skills, such as critical thinking and growth mindset.

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THE IMPACT OF PSYCHOLOGICAL CAPITAL AND EMPLOYMENT ANXIETY ON CAREER DECISION AMONG FOURTH-YEAR STUDENTS IN CHINA

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ABSTRACT

This article aims to explore how to more effectively guide college students to establish correct career decision concepts through research. This article selecting college students from the School of Science and Technology of Hubei University of Automotive Technology as the research and research objects, Randomly select 300 students from a range of over 1000 students in mechanical design, manufacturing, automation, and product design majors as samples. The research purpose are 1) to study correlation between employment anxiety, psychological capital and students' career decision. 2) to study influence between employment anxiety, psychological capital and students' career decision. Collect data through questionnaire format. the questionnaire is divided into three parts: employment anxiety, psychological capital, and career decision.

The research results showed that: 1) Employment Anxiety (Pearson Correlation Coefficient = -0.069) and psychological capital (Pearson Correlation Coefficient = 0.946) are correlated with student career decision. 2) Employment anxiety shows a negative correlation with career decision ($B = -0.010$), while psychological capital shows a positive correlation with career decisions ($B = 0.946$). The positive influence of Psychological Capital is significantly greater than the negative influence of Employment Anxiety.

Keywords: career decision, employment anxiety, psychological capital, college students

Introduction

Employment anxiety refers to the anxious emotions that arise in an urgent employment situation, as well as an emotional response to employment outcomes and the unknown future (Fan, 2024).

With the continuous development and application of psychological capital theory, domestic scholars have introduced the concept of psychological capital into China and conducted localization and group processing. Ke Jianglin believes that positive and healthy psychological capital is necessary for improving work performance, and the identification, development, and management of employee psychological capital should be strengthened. (Ke, Sun, Li, 2009) Wang Kaili believes that psychological capital refers to a person's psychological state and quality. For college students, the state of psychological capital is crucial for learning efficiency or future career planning. (Wang, 2019) Psychological capital has a correlation with employment psychology. As regulating employment psychology is a very abstract and complex project, utilizing psychological capital can play a good mediating role. (Wang, 2021)

contemporary college students are full of employment challenges and pressures. This article is based on this foundation Selecting college students from the School of Science and Technology of Hubei University of Automotive Technology as the research and research objects, with a focus on the impact of anxiety and psychological capital on college students' employment decision-making as the research goal, exploring and thinking about how to improve college students' self-awareness and employment cognition, as well as how to build a more scientific employment planning guidance system, and more effectively guide college students to establish correct employment concepts and value orientations.

Definition of Terms

Career decision: Refers to strategies or methods for employment decision. It is the process of people coming up with ideas and making decisions for various events. It is a complex process of thinking and operation, which involves information collection, processing, and ultimately making judgments and conclusions (Che, 2001). From a psychological perspective, decision-making is a product of the combination of people's thinking process and willpower action process. Without the participation of

these two psychological processes, no one can make a decision. Therefore, decision-making is not only a psychological activity process for people, but also a plan of action for people (Song,1989).

Employment Anxiety: The earliest theory of anxiety was proposed by Danish philosopher Kerkigor, who pointed out in his book "The Concept of Fear" that anxiety is a psychological experience that must exist when facing free choices, and the generation of anxiety is related to the formation and development of one's self-awareness (Kerkigor,1994).Employment anxiety refers to the anxious emotions that arise in an urgent employment situation, as well as an emotional response to employment outcomes and the unknown future(Fan,2024).

Psychological capital: The term "psychological capital" was proposed by Luthans in 2004 from the perspectives of positive psychology and positive organizational behavior. It is a positive psychological element that can be effectively developed and managed, and can have a significant impact on individual performance. In 2007, Luthans et al. further revised the definition of psychological capital, stating that psychological capital refers to a positive psychological state exhibited by individuals during their growth and development, including self-efficacy, optimism, hope, and resilience.

Research Objectives

- 1) to study correlation between anxiety, psychological capital and students' employment decision.
- 2) to study influence between anxiety, psychological capital and students' employment decision.

Research Hypothesis

- 1) The Employment Anxiety, psychological capital will correlate on the employment decision psychology of college students.
- 2) The anxiety, depression, psychological capital will influence on the employment decision psychology of college students.

Methodology

This article uses a questionnaire survey method to test and collect data from participants. Survey students who will soon graduate in 2024. The survey questionnaire is divided into three parts: Employment anxiety, psychological capital, and career decision. Analyze whether anxiety and psychological capital have an impact on career decision-making through multiple regression analysis.

Samplings/Participants

This article selected fourth year undergraduate students from the School of Science and Technology of Hubei University of Automobile Industry as the research subjects, distributed 320 questionnaires, and collected 300 valid questionnaires

Research Tools/Instruments

This paper uses scales as research tools, and these three scales are: Employment Anxiety Questionnaire for College Graduates ($\alpha=0.987$) 、 Psychological Capital Scale ($\alpha=0.982$) 、 Career Decision Scale ($\alpha=0.982$). The reliability and validity of the above questionnaire are both good and usable

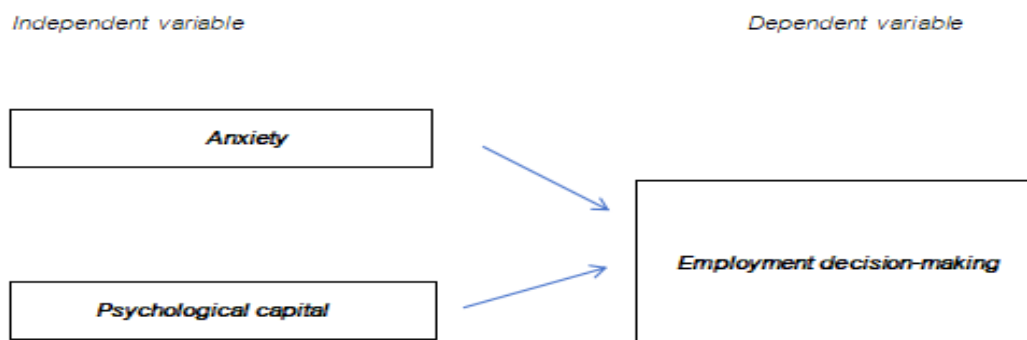
Procedure

Utilize the school's information collection system to uniformly distribute questionnaires for surveys at designated times. After the survey is completed, a unified survey questionnaire will be collected. After the collection is completed, delete the invalid questionnaire. Classify and organize anxiety、 psychological capital and career decision, to obtain the final research results.

Data Analyses

Through Pearson correlation analysis, determine whether Employment Anxiety and psychological capital have an impact on employment decision. Then, through linear regression analysis and regression results analysis, What is the impact of employment anxiety and psychological capital on employment decision.

Figure 2



Results

The correlation coefficient between Career Decision and Employment Anxiety is -0.069, indicating a negative correlation between Career Decision and Employment Anxiety. The correlation coefficient between Career Decision and Psychological Capital is 0.946 and shows a significant positive correlation at the 0.01 level, indicating a significant positive correlation between Career Decision and Psychological Capital.

Table 1

Pearson correlation analysis

Pearson Correlation		
		Career Decision
Employment Anxiety	Coefficient	-0.069
	<i>p</i> value	0.235
	sample size	300
Psychological Capital	Coefficient	0.946
	<i>p</i> value	0.000
	sample size	300

$p < 0.05$

From the table below, Using Employment Anxiety and Psychological Capital as independent variables and Career Decision as the dependent variable for linear regression analysis, it can be seen from the above table that the model formula is: Career Decision = $7.430 - 0.010 * \text{Employment Anxiety} + 0.946 * \text{Psychological Capital}$. The R-squared value of the model is 0.895, which means that Employment Anxiety and Psychological Capital can explain 89.5% of the changes in Career Decision. When conducting an F-test on the model, it was found that the model passed the F-test ($F = 1271.487$, $p = 0.000 < 0.05$), indicating that at least one item in the Employment Anxiety and Psychological Capital will have an impact on Career Decision.

The regression coefficient value of Employment Anxiety is -0.010 ($t = -0.283$, $p = 0.777 > 0.05$), indicating that Employment Anxiety will have a negative impact on Career Decision.

The regression coefficient value of Psychological Capital is 0.946 ($t = 50.295$, $p = 0.000 < 0.01$), indicating that Psychological Capital has a significant positive impact on Career Decision.

Summary analysis shows that Psychological Capital has a significant positive impact on Career Decision. However, Employment Anxiety will have a negative impact on Career Decision. The positive influence of Psychological Capital is significantly greater than the negative influence of Employment Anxiety.

Table 2

Results of the linear regression analysis

Parameter Estimates ($n=300$)

	Unstandardized Coefficients		Standardized Coefficients	t	p	Collinearity diagnosis	
	B	Std. Error				VIF	Tolerance
Constant	7.430	3.136	-	2.369	0.018	-	-
Employment Anxiety	-0.010	0.034	-0.005	-0.283	0.777	1.005	0.996
Psychological Capital	0.946	0.019	0.946	50.295	0.000	1.005	0.996
R^2	0.895						
Adj R^2	0.895						
F	$F(2,297)=1271.487, p=0.000$						
D-W值	2.306						

Dependent Variable: Career Decision

$p < 0.05$

According to the table 3, the average value of Employment Anxiety is 4.459, the average value of Psychological Capital is 3.443, and the average value of Career Decision is 3.535, all of which are higher than the median. Especially, if Employment Anxiety > 4 , it indicates that the degree of Employment Anxiety among students is relatively high, and the average value of Psychological Capital and Career Decision is > 3 , indicating that the situation of Psychological Capital and Career Decision among students is relatively good.

independent variable	mean value	median
Employment Anxiety	4.459	3
Psychological Capital	3.443	3
Career Decision	3.535	3

Discussion

This paper is based on the actual situation in China and has certain reference value in terms of sample selection, questionnaire setting, etc. However, this paper only focuses on the employment anxiety and psychological capital of college students, and does not consider other factors such as family factors, age, gender, etc., so there are still certain limitations.

Conclusion

The research conclusion shows that:

1. Employment Anxiety and psychological capital are correlated with student career decisions.
2. Employment anxiety shows a negative correlation with career decisions, while psychological capital shows a positive correlation with career decisions. The positive influence of Psychological Capital is significantly greater than the negative influence of Employment Anxiety.

Acknowledgment

My two-year academic career is about to come to an end. Although my two years of graduate studies were brief, I have gained a lot along the way. Two years have passed quickly, and I have been constantly growing. There are too many memories left for me here. I am grateful to Srinakharinwirot University for their education, especially to Professor Patcharaporn and Professor Monthira for their guidance. I also thank other professors for their help. Thank you.

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THE IMPACT OF INTERPERSONAL RELATIONSHIP, SELF EFFICACY AND EMOTIONAL REGULATION ON PSYCHOLOGICAL WELL - BEING AMONG CHINESE COLLEGE STUDENTS SRINAKHARINWIROT UNIVERSITY

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Abstract:

The objectives of this study were 1) to investigate the correlation between interpersonal relationships, self-efficacy and emotion regulation factors and psychological well-being among Chinese college students; and 2) to investigate the effects of interpersonal relationships, self-efficacy and emotion regulation factors on psychological well-being among Chinese college students. The study sample was 194 college students from Jiuquan Institute of Vocational Technology - College of Electronic and Information Engineering. The research instrument was the Psychological Well-Being Influence Factor Scale with a reliability coefficient of 0.931. For this study, descriptive statistics, Pearson correlation, and multiple regression analysis statistical methods were used. The results of the study showed that: 1) the correlation coefficients of each factor with the psychological well-being of college students were positive and statistically significant at the 0.05 level, with interpersonal relationship (X₁) having the highest correlation coefficient with psychological well-being (Y) at 0.64; self-efficacy (X₂) having a correlation coefficient with psychological well-being (Y) at 0.59; and the lowest correlation coefficient between emotional regulation (X₃) and psychological well-being (Y) was 0.54. 2) Interpersonal relationships (X₁), self-efficacy (X₂), and emotional regulation (X₃) can describe psychological well-being. Interpersonal relationships and self-efficacy were significant at the 0.05 level, with linear regressions of 0.43 and 0.18, which predicted psychological well-being, but the relationship of emotional regulation (X₃) was not significant at the 0.05 level.

1. Background

The pursuit of happiness is the instinctive and ultimate need of human beings, and everyone pursues happiness after their basic survival needs are satisfied. With the arrival of the information age, ecological age, intelligent age and post-material society, people's pursuit pays more attention to the quality of life and happiness. When the rapid progress and development of the times also make college students face more pressure and challenges, different levels of psychological well-being of college students have different impacts on their mental health. When affected by the pace of life, financial crisis and sudden public events, college students have experienced excessive academic pressure, increased negative emotions, and inharmonious interpersonal relationships. Facing the diversified world and rich material life, college students show strong utilitarianism, are excessively self-centered which leads to various kinds of interpersonal conflicts, are uninterested in many things in life, have nothing to do, waste their time, and are wrapped up in negative emotions such as helplessness, anxiety, emptiness, and bewilderment all the day long (Meng & Rui, 2023).

Some studies have shown that the psychological well-being of college students of different grades in China is greatly influenced by the three aspects of "controlled environment", "self-growth" and "positive relationships" (Jin, 2018). Psychological resilience has a positive effect on the psychological well-being of college students, and a good level of self-esteem among college students is conducive to an increase in psychological well-being (Wang et al., 2019). The relationship between emotional regulation, psychological capital and adolescent psychological well-being is a significant positive correlation between the two, the more emotional regulation strategies are used, the higher the level of psychological capital, and the higher the level of adolescent psychological well-being (Zhang et al., 2020). There is a significant positive correlation between stress coping styles, social support and psychological well-being (Zhang & Zhang, 2020). There is a significant positive correlation between college students' self-efficacy and psychological well-being (Yu & Yu, 2015). Psychological well-being

receives the influence of the individual's own internal factors, the stronger the ability to insight their own emotions, the more harmonious they are inside, and the higher the level of psychological maturity, the more happiness they obtain (Luo & He, 2023). Synthesizing scholars' views, the current factors affecting college students' psychological well-being mainly focus on the aspects of interpersonal relationships, emotion regulation, self-growth, and self-efficacy.

Research on psychological well-being in China is still in its infancy, and not only is there a big gap between the number of research results and subjective well-being, but also most of the empirical research is to validate the conclusions of existing research abroad, and there are not many innovative research results. The research results of subjective well-being are more mature than those of psychological well-being (Jiang, 2020). In the content of previous research on psychological well-being, most scholars have studied 1-2 factors as mediators or independent variables, and my study is a comprehensive analysis of 3 factors as independent variables to explore the relationship and influence of interpersonal relationships, self-efficacy, emotion regulation and psychological well-being. This type of study is also very rare, especially with college students in higher vocational schools who are in the process of being promoted to undergraduate institutions.

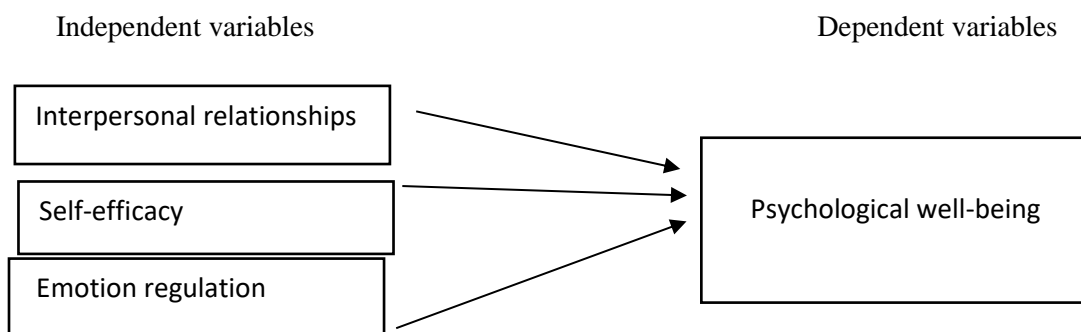
Students in higher vocational colleges differ in their study content and academic years relative to students in ordinary undergraduate colleges, so it is necessary to understand the current status of the well-being of the higher vocational student population, which is conducive to the improvement of ways and means of mental health education for higher vocational students, and provides effective data support on how to improve their level of well-being (Huang et al., 2021). Higher vocational colleges and universities occupy half of China's higher education, and students may suffer from psychological frustration and self-denial due to their failure in the college entrance examination, and their sense of acquisition and achievement in learning and life is even lower, and the causes of psychological problems are complicated and diverse, so it is more urgent and necessary to conduct research on improving the sense of well-being and sense of acquisition of higher vocational colleges and universities (Gao & Shen, 2022). When I teach classes or do group and individual counseling, students generally show that they have no confidence in the future, are full of uncertainty, have strong negative emotions and self-denial, and have strained interpersonal relationships (intimate relationships).

The enhancement of college students' sense of well-being contributes to the improvement and perfection of college students themselves, the stability and development of colleges and universities, and the harmony and prosperity of Chinese society (Zhang & Zhang, 2020). Psychological well-being pays more attention to individual self-improvement, self-achievement and the realization of self-potential, which I think is especially important for contemporary college students. Because the university stage is an important transition period for individual growth, college students in this period are experiencing or seeking life transitions, for them, how to better adjust themselves, grasp growth opportunities, resolve crises, promote personal growth, find life goals, gain a sense of significance and ultimately realize their self-potential is an important topic in this stage, which is also the significance of my doing this study. The purpose of this study is to analyze the influence and relationship between the individual's interpersonal relationship, self-efficacy, and emotion regulation and psychological well-being, and to explore how to improve the psychological well-being of college students. I hope that my research can provide a reference basis for improving college students' psychological well-being and mental health, and can contribute to the improvement of related educational theories and methods.

2. Scope of the study

This study uses quantitative methods to explore the relationship and influence of interpersonal relationships, self-efficacy, emotion regulation and psychological well-being of Chinese college students. The subjects of the study were college students of Jiuquan Institute of Vocational Technology - College of Electronic and Information Engineering. The researcher used a simple random sampling method to select respondents from 2 grade populations. After that, the sample group of 194 students was formed. Simple random sampling is a widely used sampling method in scientific surveys. Based on the existing literature, the researcher created a framework and modified it to form 4 questionnaires in order to investigate the correlation and impact of interpersonal relationships, self-efficacy, and emotion regulation factors with psychological well-being.

3. Research Conceptual Framework



4. Research design

This study used quantitative research methods in order to understand the psychological well-being of Chinese college students.

This study utilized a quantitative research methodology in order to conduct a study among Chinese college students. The researcher drew from previous literature to develop a research framework. Within this framework, the researchers modified and designed a 4-point questionnaire to explore the relationship and influence of interpersonal relationships, self-efficacy, emotion regulation, and psychological well-being. The independent variables in this study were: interpersonal relationships (Wen, 2022), self-efficacy (Luszczynska et al, 2005) and emotion regulation (Gross, 1998; Gross, 2015), and the dependent variable was psychological well-being (RYff, 1995).

5. Literature Review

Psychological well-being is the process of seeking the realization of the potential of an individual based on happiness and satisfaction, the higher emotional experience of the meaning of life, etc. (Yang, 2021). According to the different objects of interaction, interpersonal relationship can be divided into peer relationship, teacher-student relationship, classmate relationship, parent-child relationship, superior and subordinate relationship and so on (Wei, 2017). When a person faces various environments and stressful scenarios, there is a broad and stable personal ability, which is general self-efficacy (Wang, 2000). Emotional regulation refers to an individual's ability to regulate the potency, intensity, duration, and behavioral response to a certain emotional experience, which is a process of interaction between emotions and cognition. The process of first reaction to emotional events reflects emotional sensitivity, and the process of second reaction to emotional events reflects emotional regulation (Zhu, 2019).

Psychological well-being has a positive impact on an individual's subjective well-being (Wan et al., 2010). Students' psychological well-being can be improved with self-efficacy (Du & Chen, 2022). Factors such as life events and interpersonal relationships can have an impact on the psychological well-being of college students (Shang, 2019). College students who have negative emotions for a long time will reduce their well-being level (Zhang et al., 2019).

6. Population and Sample

The population of the study was the students of Jiuquan Institute of Vocational Technology - College of Electronics and Information Engineering. The sample group consisted of 194 college students in their first year of study in the College of Electronics and Information Engineering, which was selected by simple random sampling method.

Sample size determination using Krejcie and Morgan table (1970).

7. Research variables

7.1 Independent Variables:

Interpersonal relationships, self-efficacy, emotion regulation

7.2 Dependent Variable:

Psychological well-being

8. Research instrument

The research instrument used in this study was a revised questionnaire based on the established research framework. The researcher developed the questionnaire with the aim of exploring the factors related to and influencing psychological well-being. These factors include interpersonal relationships, self-efficacy, and emotion regulation. The IOC scores for all variables ranged from 0.66 to 1.00. The results showed that the questionnaire passed the content validity test, indicating that the items in the questionnaire were suitable for use in the study. The Cronbach's alpha value for all items was 0.931, indicating high reliability. The items of the survey on psychological well-being of undergraduate students 49 items were categorized into 5 levels.

Research instrument	Reliability
Psychological well-being	0.763
Interpersonal relationships	0.770
self-efficacy	0.855
emotion regulation	0.858

9. Data Analysis

Data were processed and statistically analyzed using Excel, SPSS software. All data were processed and statistically analyzed using Excel and SPSS software. Descriptive and statistical analyses were performed:

1. descriptive statistics: mean, standard deviation, percentage
2. study correlation using statistics: Pearson's correlation
3. study effects were analyzed using multiple regression analysis

10. Data collection

In consultation with the school, the questionnaires were distributed and answered on January 3, 2024 from 19:00 to 22:00 hours. The questionnaires were edited and completed using the web-based "Questionnaire Star" system, which is a professional online platform for questionnaire surveys, exams, assessments, and polls, and all questionnaires were completed and answered, and 100% of them were valid.

11. Research Result

11.1 A study on the relationship between the factors influencing the psychological well-being of Chinese college students.

Researcher study relationship between factors and psychological well-being of college students by Pearson Product-Moment Correlation Coefficient as table.

Table 1 : The study relationship between factors and psychological well-being of college students had positive correlation coefficient between 0.54 to 0.64 significantly at .05 levels. Interpersonal relationships (X_1) and psychological well-being (Y) had the highest correlation coefficient to 0.64 in descending order as follows: self-efficacy (X_2) and psychological well-being (Y) had the correlation coefficient to 0.59, emotion regulation (X_3) and psychological well-being (Y) had the lowest correlation coefficient to 0.54.

Table 1 Table Correlation Coefficient of the factors and psychological well-being of college students (n=194)

Factors	X_1	X_2	X_3	Y
X_1	1.00			
X_2	0.71*	1.00		
X_3	0.60*	0.74*	1.00	
Y	0.64*	0.59*	0.54*	1.00

*p< .05

11.2 Research on the Influencing Factors of Chinese College Students' Psychological Well-Being

Before researcher analyzed factors affecting of psychological well-being of college students. Researcher had verified relationships between factors affecting of psychological well-being of college students by Tolerance and VIF. After that researcher analyzed multiple regression analysis by enter method as table.

Table 2 The factors affecting of psychological well-being of college students had Tolerance to 0.35-0.48 which has not exceeded 3 and VIF to 2.08-2.87 which has not exceeded 10. The table show that Tolerance and VIF had consistency can summary the factors affecting of psychological well-being of college students not Collinearity. Researcher analyzed multiple regression analysis.

11.3 Research on the Influencing Factors of Chinese College Students' Psychological Well-being

Before researcher analyzed factors affecting of psychological well-being of college students. Researcher had verified relationships between factors affecting of psychological well-being of college students by Tolerance and VIF. After that researcher analyzed multiple regression analysis by enter method as table 2.

Table 2 : The verified relationships between analyzed factors affecting of psychological well-being of college students (n=194)

The Factors Affecting	Tolerance	VIF
Interpersonal relationships (X_1)	0.48	2.08
Self-efficacy (X_2)	0.35	2.87
Emotion regulation (X_3)	0.44	2.25

Table 2 The factors affecting of psychological well-being of college students had Tolerance to 0.35-0.48 which has not exceeded 3 and VIF to 2.08-2.87 which has not exceeded 10. The table show that Tolerance and VIF had consistency can summary the factors affecting of psychological well-being of college students not Collinearity. Researcher analyzed multiple regression analysis.

Table 3 Multiple regression analysis the factors affecting of psychological well-being of college students (n=194)

The Factors Affecting	b	SE	β	t	p
(Constant)	1.41	0.16	-	8.55*	.00
Interpersonal relationships (X_1)	0.37	0.07	0.43	5.54*	.00
Self-efficacy (X_2)	0.12	0.06	0.18	1.98*	.05
Emotion regulation (X_3)	0.10	0.05	0.15	1.88*	.06

$$R = 0.68 \quad R^2 = 0.46 \quad R^2_{adj} = 0.45 \quad F = 51.16 \quad df = 3, 190 \quad p = .00$$

* $p < .05$

Table 3: Multiple regression analysis of factors affecting of psychological well-being of college students had significantly at .05 levels ($F = 51.16$ $df = 3, 190$ $p = .00$) showed that Interpersonal relationships (X_1) Self-efficacy (X_2) and emotion regulation (X_3) can descriptive psychological well-being to 45.00.

The factors affecting of psychological well-being of college students had significantly relationships at .05 levels in descending order as follows: Interpersonal relationships (X_1) had the highest standard scores linear regression to 0.43 and Self-efficacy (X_2) had the lowest standard scores linear regression to 0.18 had relationships significantly at .05 levels except that emotion regulation (X_3) had not significantly at .05 levels.

Therefore, researcher build equation predict factors affecting of psychological well-being of college students.

Equation Predict Raw Score

$$Y = 1.41 \text{ (Constant)} + 0.37 \text{ Interpersonal relationships } (X_1) + 0.12 \text{ Self-efficacy } (X_2) + 0.10 \text{ Emotion regulation } (X_3)$$

Equation Predict Standard Score

$$ZY = 0.43 \text{ Interpersonal relationships } (X_1) + 0.18 \text{ Self-efficacy } (X_2) + 0.15 \text{ Emotion regulation } (X_3)$$

12. Discussion

Based on the results of data analysis, the results are discussed as follows

12.1 Correlation between independent variables and psychological well-being

There is a significant correlation between interpersonal relationship and psychological well-being with $p < 0.05$, the correlation coefficient between interpersonal relationship and psychological well-being is 0.64, the correlation degree is at a high level. This means that the psychological well-being of college students has a greater relationship with their good interpersonal relationships Jin (2018). Psychological well-being is also influenced by factors such as social support, coping strategies, interpersonal relationships, and life events (Shang, 2019). Adolescents' peer relationships, parent-child relationships, and teacher-student relationships play a significant role in influencing psychological well-being (Huang, 2023). There is a significant correlation between self-efficacy and psychological well-being with $p < 0.05$, and the correlation coefficient of self-efficacy and psychological well-being is 0.59, which indicates that self-efficacy is significantly related to psychological well-being at a high level. The results are consistent with the findings of other scholars. There is a significant positive correlation between college students' self-efficacy and psychological well-being (Yu & Yu, 2015), and self-efficacy is significantly and positively correlated with college students' psychological well-being, and it plays a partially intermediary role between the relationship between physical exercise and college students' psychological well-being (Wang & Zhao, 2021). There is a significant correlation between emotion regulation and psychological well-being, $p < 0.05$, and the correlation coefficient between emotion regulation and psychological well-being is 0.54, indicating that the influence of emotion regulation on psychological well-being is at a moderate level. It is basically consistent with the findings of other scholars. Cognitive reappraisal and expression inhibition are significantly positively correlated with both psychological capital and psychological well-being, and there is a significant positive correlation between the two of emotion regulation, psychological capital and adolescent psychological well-being (Zhang et al., 2020). Emotion regulation and psychological well-being of middle school students are significantly positively correlated (Wei, 2022). Psychological well-being is positively correlated with self-emotion regulation. (Shang et al., 2023).

12.2 Influence between independent variables and psychological well-being

Multiple regression analysis of the influencing factors of psychological well-being of college students shows that interpersonal relationships (X_1), self-efficacy (X_2) and emotion regulation (X_3) can describe psychological well-being to the extent of 45.00, and the difference is statistically significant ($F = 51.16$ $df = 3, 190$ $p = 0.05$). The factors affecting psychological well-being of college students in descending order are: interpersonal relationships (X_1) has the highest standardized score with linear regression of 0.43, self-efficacy (X_2) has the lowest standardized score with linear regression of 0.18, and the factors are significantly correlated at the 0.05 level except for the standardized score of emotional regulation (X_3), which is not significant at the 0.05 level. In other words, interpersonal relationship, self-efficacy and emotion regulation affect students' psychological well-being, and interpersonal relationship and self-efficacy have a more significant effect on psychological well-being, while emotion regulation has a relatively insignificant effect.

Interpersonal relationship and self-efficacy have a significant effect on college students' psychological well-being, which is consistent with the results of other scholars at home and abroad. Good social relationships with peers, parents and teachers can well and positively predict the level of individual well-being. Chinese students have a higher level of intimacy with their teachers, and a good teacher-student relationship can predict students' psychological well-being. (Huang, 2023). College students with a high level of peer trust are able to obtain better peer relationships, which can improve an individual's peer status in the class, which in turn leads to a higher level of psychological well-being (Shi et al., 2020). Individuals with a high sense of self-efficacy have a higher evaluation of their own potential and ability, a higher sense of self-worth, an optimistic attitude towards their future achievements as well as their personal development, grades close to the target directed down, and the students' own psychological pressure is reduced, which will be conducive to the rise of psychological well-being (Yu & Yu, 2015). Participants of physical exercise activities can achieve the goal of enhancing psychological well-being by enhancing self-efficacy (Wang & Zhao, 2021).

The standardized score of emotion regulation (X_3) is not significant at the 0.05 level, implying that emotion regulation does not have a very significant effect on psychological well-being. Inconsistent with the results presented by national researchers, Zhang et al. (2020) suggested that emotion regulation positively predicts adolescent psychological well-being. Shang et al. (2023), argued that individuals

with strong self-emotion regulation usually have high self-esteem and good interpersonal relationships, believe in their ability to positively cope with a variety of emotions in their lives, can express positive emotions, and effectively manage and regulate negative emotions, which plays a moderating role in the relationship between college students' online shopping addiction and psychological well-being. Wei pointed out (2022) that middle school students' emotion regulation ability can predict psychological well-being.

In the current study college students' emotion regulation ability did not have a significant impact and predictive effect on psychological well-being, mainly due to the following reasons: 1) College students' emotion regulation strategy level will be affected by their own family's economy, and the more favorable the family's economic conditions are, the higher the level of the students' emotion regulation strategy will be. In this test, students with monthly expenses of more than 1200 yuan accounted for 23.71% of the total sample size, and more students in the monthly expenses is less than 1200 yuan. This indicates that the family income or economic conditions are average; 2) 175 of the tested group are from rural areas, accounting for 90% of the total sample size. Rural students have less social support than their urban counterparts, have fewer ways to vent their negative emotions, and are prone to a sense of loss and loneliness, all of which may lead to the fact that rural students use significantly more negative strategies than their urban counterparts and have poorer emotional regulation skills. 3) Among the tested group, 109 students, or 55% of the total sample size, come from secondary schools, where they have weaker motivation to learn and improve themselves, and therefore overall quality of life is weaker than their urban counterparts. Their motivation for learning and self-improvement is weaker, so their overall quality is lower than that of other colleges and universities or student groups who entered the school with college entrance exams. In the course of group counseling with some of the student groups of this type, I learned that the number of students who had given up their studies in their growing up experience under the influence of different intimate relationships reached 100%, which reflected that they did not have certain experience in regulating their coping with negative emotions, and that they did not have the ability to be aware of their emotions or the awareness of their emotions.

13. Recommendations

13.1 Practical suggestions

Schools should strengthen contact with social employers and provide students with more opportunities to participate in social practice activities in addition to graduation internships. Through theme class meetings, guide students to treat virtual interpersonal communication reasonably, recognize themselves from multiple perspectives, and treat interpersonal communication in the virtual world correctly. Provide some specialized emotional education courses, such as emotional training or psychological counseling courses, etc., and infiltrate emotional education in daily education and teaching. Promote students to master the methods of self-regulation of emotions, learn to cope with stress, and reduce unnecessary sources of stress. Targeted counseling on emotion regulation is provided to higher vocational students, especially students from single-parent families and rural students, to help them recognize, accept and grasp their own emotions, and to teach them the skills of seeking external help when experiencing emotional discomfort, as well as the skills of rationally regulating and sublimating negative emotions.

Teachers guide students to develop a sense of self-efficacy. With an understanding of their own developmental and individual potential, students are able to remain motivated to learn even when faced with more difficult learning tasks.

Parents need to emphasize communication, emotional response, emotional expression, emotional involvement with their children, praise each other more for doing something interesting, support their children's positive needs, and constantly children's enhanced self-efficacy. There is no psychological problem that can not be solved with love, through good listening, understanding, empathy for the child's negative emotions, interpersonal relationship distress, and guide them to build confidence and courage to face problems and solve problems.

13.2 Vision for future research

In future studies, more influencing factors, such as personal traits and social support, are considered to gain a comprehensive understanding of the influencing mechanisms of college students' psychological well-being. Factors such as parents' education level and family parenting styles are

included to further explore the relationship with psychological well-being, enriching the breadth of the whole study, and the results will be more convincing.

Explore the correlation between psychological well-being and outcome variables such as college students' academic performance, job-seeking behaviour, job performance, personal values, and the use of self-media platforms, so that psychological well-being can produce substantial research value in a broader field.

Conducting positive intervention research on psychological well-being of college students. The purpose of conducting research on psychological well-being is to enhance the experience of happiness and satisfy the desire for a better life. Overseas studies have been conducted to intervene in the psychological well-being of clinical and non-clinical samples. Some scholars in China have also begun to explore how to enhance the level of college students' happiness through group counselling. Focusing on special professions or special groups, such as medical, military, police and other professions, college students can reduce anxiety through happiness interventions, enhance college students' psychological well-being, and cultivate sound personalities and positive psychological qualities.

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THE ENHANCEMENT OF SOCIAL SKILLS OF PRIMARY STUDENTS THROUGH EXPRESSIVE ART IN GROUP COUNSELING

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ABSTRACT

This study aims to the enhancement of social skills of primary students through expressive art in group counseling. The sample was 12 fourth-grade students from Chiwan School, Nanshan District, Shenzhen, who were randomized into experimental and control groups. The experimental group received expressive art group counseling, and the control group adopted traditional teaching. The research tools were social skills questionnaire and expressive art in group counseling program. Data were analyzed using Mann-Whitney Test and Wilcoxon Signed Ranks Test. The research results found that After participating expressive art in group counseling program, the experiment group had higher social skills mean than before participating in those at .05 significantly level. As well, after participating expressive art in group counseling program, the experiment group had higher social skills mean than control group at .01 significantly level. The results showed that the students in the experimental group who received the expressive art group counseling improved significantly in their social skills, while the students in the control group made limited progress. Therefore, the expressive art group counseling can effectively improve the social skills of primary school students.

Keywords: expressive art in group counseling; social skills; primary school students

Introduction

According to the survey results released by the World Health Organization (WHO), mental disorders among children will continue to grow rapidly by 50% globally by 2020, and will be the leading cause of illness, disability and death among children (Li, 2021). Whereat in China, a large number of survey results of domestic scholars also show that the detection rate of Chinese children's problem behavior has increased year by year. The 2018 China Youth Development Report, a survey of 73,992 children aged 6 to 16 in 15 Chinese cities, which jointly released by China Youth Research Center and the International Liaison Department of the Central Committee of the Communist Youth League, showed that the incidence of emotional and behavioral problems among children was 17.6 percent, and the incidence is increasing year by year. This data means that every year about 30 million children under the age of 17 often suffer from a variety of emotional and behavioral problems. For another example, a large sample survey of children's problem behavior in 22 Chinese cities found that, the detection rate of problem behavior among children aged 4 to 16 is as high as 12.97% (Liu & Zhang, 2021). Children's problem behavior not only affects their own personality development and academic achievement, but also brings negative impact on the successful development of teachers' teaching and classroom management. What's more, a large number of studies at home and abroad have shown that the development of children's problem behaviors has a certain stability, and without timely and effective intervention, it will continue to affect children's physical and mental development. For example, in a 22-year follow-up study of more than 600 children, Huesman and other scholars (2003) found that children who exhibited obvious aggressive behavior at age 8 continued to show more aggressive behavior as adults (around age 30) compared to typical adults. This characteristic showed no gender differences, indicating that children's mental health problems cannot be ignored (Li&Liu,2019 citing Huesman,2003 p297–309). Children child social skills are associated with a range of mental health problems, including anxiety, depression, and behavioral problems. A lack of effective social skills was found to cause poor peer relationships, which in turn negatively affects children's emotions and behaviors (Ladd, G. W., & Troop-Gordon, W. 2003. Children with inadequate social skills are more likely to experience mental health problems such as social anxiety and depression during adolescence and early adulthood (Bornstein, M. H., & Zlotnik, D. 2008).

Since the 1970s, social skills have attracted the attention of researchers and have become one of the hot topics in developmental psychology research today. With the increasing theoretical construction and research results in western psychology, China's basic education also pays more and more attention to the cultivation of students' social skills. Education in the 21st century is based on all-round development. While cultivating students' knowledge and professional skills, we should also pay attention to the improvement of their social skills (Zhang & Wang, 2018). Good social skills are the basic need of the development of primary school students, which helps them to conduct interpersonal communication smoothly. Primary school students undergo rapid psychological changes while engaging with others, and they begin to form friendships during this period. Good peer relationship helps to enrich their emotional experience and improve their cognitive ability, so as to promote their social behavior in a more positive direction. In recent years, the social skills of primary school students has become a trending research field concerning children's social development, which has been widely explored by psychologists at home and abroad. Success scientist Carnegie once said, "A person's success is 20% depends on his knowledge, education and ability, and 80% depends on his interpersonal relationships." Among these factors, professional skills are mainly acquired by IQ, while positive interpersonal relationships required by emotional intelligence. Therefore, everyone should have basic social skills, which is an essential part of a sound, normal personality. Although primary school students have not yet entered the society, social skills are equally important for them. Austrian psychologist Adler once said that if a child does not learn how to cooperate, they will be lonely, develop a lifelong inferiority complex, and their overall life development will be seriously affected (Zhang & Wu, 2019). Therefore, social skills help children learn to interact in a more civilized and kind manner, gradually forming from a well-behaved set of self-regulate rules to their automatic knee-jerk responses. The qualities of being appropriate, caring, and contributing to the community should be rooted from an early age, as these good qualities will directly, and positively affect the primary school students' overall psychological development and growth.

Social skills refer the appropriate behavior of a person while doing some work about interacting with others. Such as obedience, cooperation, communication skills and games, including their own performance skills, such as emotional expression, attitude towards people, etc (Yang, 2020). Positive social skills established during childhood can predict later academic achievement. Without social skills, students lose the opportunity to interact with others and achieve academic goals. The ability of students to engage with appropriately engaged social experiences in school is critical to their success. In order to interact effectively with others in groups, students need to master listening and sharing skills with their peers, as well as the skills to give or adopt constructive criticism. To be successful in school and society, children and their peers practice social skills together. Children entering school should have a basic knowledge that can apply social skills, such as (a) raising hands, (b) taking turns, and (c) listening and not disturbing others. (Wang & Li, 2020)

Group counseling can effectively improve the social skills of primary school students, which has been proved among many researchers. Group counseling started earlier abroad, originally is the American physician plain to treat patients with lung disease and established treatment team, through team members to encourage and support between to enhance the courage and perseverance, this is the earliest and the most primitive group therapy, but was praised as "the father of group psychotherapy". In 1919, psychiatrist Lazar continued and innovated this method. He organized patients into a class, and regularly conducted group counseling and discussion to patients to create a relaxed and harmonious atmosphere, which was conducive to the rehabilitation and treatment of patients. It was followed in 1921, when the famous Vienna psychiatrist, Molinot, opened up the form of psychological drama. With the rise of humanistic psychology, maslow and Rogers "people-oriented" thought gradually into people's vision, group counseling as a kind of humanistic treatment into People's Daily life and popular in western Europe, the United States, Japan and other countries popular sheng, various psychological counseling institutions also rise, evolved into different patterns of group counseling (wang & huang & zhou, 2018). Expressive art in group counseling is a form of counseling using painting as the medium. With the help of artistic expression, it can promote children to vent their negative emotions, expand the perspective of seeing problems and correct bad behaviors, which is very suitable for application in the school situation (zhang, 2018). Educators can use the expressive art to carry out interpersonal communication group psychological counseling, help students to establish a harmonious and friendly relationship, learn

social skills in cooperation, develop interpersonal skills, and then promote self-growth(Ma,2018). Chen (2018) studied the impact of expressive art in group counseling on the improvement of students' social skills. The experimental results indicated that students who expressive art in group counseling showed significant improvement in social interactions and emotional expression Ma (2018) studied the application of expressive art group counseling in the mental health education of primary and middle school students. The results indicated that students who participated in expressive art in group counseling showed improvements in both mental health and social skills.

To sum up, combined with different research backgrounds at home and abroad, we can find that most of the research uses group counseling to improve students' social skills, and less research uses expressive art in group counseling to improve social skills. Therefore, it is important to explore improving the social skills of primary school students through expressive art group counseling.

Study hypothesis

Two assumptions were made in this study 1) after expressive art in group counseling, the social skills of the experimental group will has higher the social skills than before 2) after expressive art in group counseling, the experimental group will has higher the social skills than in those control group.

Research Objectives

The purpose of this study is to 1) comparison of social skills between before and after participating expressive art in group counseling of the experimental group and 2) comparison of social skills between the experimental group and the control group after participating expressive art in group counseling.

Methodology

The study used a quasi-experimental design, with the independent variable being expressive art in group counseling, and the dependent variable being social skills. Study design divided the samples into experimental and control groups. In the experimental group, the results of the test before and after the experimental group were compared and were compared with the control group. The aim is to explore how to improve the social skills of samples. In this study, the experimental group was guided for 8 times by the expressive art in group counseling.

Samplings/Participants

grade students from Nanshan District Second Foreign Language-The research subjects are fourth SSI was :The Social Skills Inventory .The sample of this study was 240 students .School in Shenzhen conducted on 240 students in the early stage, and 12 students with low scores in the social skills scale .(6) and control group (6) were selected and randomly divided into experimental group Gerald Corey (2016), in his book "Theory and Practice of Group Counseling," points out that the size of a group significantly affects its function and member participation, recommending that the number of group counseling members should be between 6 and 12.

The experimental group was conducted 8 times of expressive art in group counseling, and the control group not give the expressive art group counseling, they acquire social skills according to the social way in normal life and learning. There was no significant difference between the two groups in ,gender, age, conversation, making friends, heterosexual interaction and interpersonal relationship .which ensured the comparability and reliability of the experiment

Research Tools/Instruments

1.Expressive Art in Group Counseling Program

Expressive art in group counseling Program is the use of the art form of expressive in group counseling activities to help participants express their inner feelings, explore personal problems and establish a mutually supportive environment. Throughout the group counseling, the tool was used 6 times, each taking 150 minutes. The leader introduced the meaning represented by the color and shape of the mandala painting, and asked the group members to create a mandala painting. In the creation process, the leader should actively guide the group members to release their emotions. The theme of each creation corresponds to 6 different dimensions, and the group members promote self-exploration, emotional release and group cohesion through creative expression in the process of creation. The scale was examined by 3 experts, and the IOC values after examination ranged from 0.67-1.00, indicating good validity.

2. Social Skills Inventory (SSI)

The scale used in this paper was adapted from Cao Zhongping's scale, and the Cronbach's Alpha of the questionnaire was 0.844. This version of SSI is suitable for fourth grade students in our country and has good reliability. The scale was examined by 3 experts, and the IOC values after examination ranged from 0.67-1.00, indicating good validity. SSI is a self-aging scale consisting of 18 questions, including six subscale: Emotional Expressivity, Emotional Sensitivity, Emotional Control, Social, Expressivity, Social Control, Social Sensitivity, and 3 questions for each of the subscale. Each dimension can be scored, with 2 points for each "yes" response, 1 point for each "sometimes" response, and 0 points for each "no" response. Total scores for emotional expression, emotional perception, emotional control, social expression, social sensitivity, and social control were calculated separately.

data analysis

In this study, the statistical software was used for data analysis. Quantitative data were analyzed using Mann-Whitney Test, Wilcoxon Signed Ranks Test, by comparing and analyzing social skills data from the experimental and control groups.

Procedure

Step1: pre-test

The Social Skills Inventory: SSI was conducted on 240 students in the early stage, and 12 students with low scores in the social skills scale were selected and randomly divided into experimental group (6) and control group (6). Then the experimental and control groups were asked to take a social skills inventory to keep their pre-test.

Step 2: Intervention for the experimental group students using expressive art in group counseling

Step 3: post-test

Use the social skills inventory to test the students in the experimental group and the control group again, and draw the conclusion by comparing the test data and the test data of the experimental group and the control group. If the post -test data of the experimental group is higher than that of the pretest data, and the post -test data is higher than that of the control group, it shows that the expressive art group counseling can improve students' social skills.

Data Analyses

First, the researcher performed an the Mann-Whitney Test of the pretest data of the experimental and control groups to confirm whether there are differences in Social Skills between the experimental and control groups. After the experiment, the two groups were re-examined and the data. The researchers compared the social skills scores of the two groups. Meanwhile The researcher also compared the pre-test and post-test scores of the experimental group utilized the Wilcoxon Signed Ranks Test.

Results

In this study, we collected data from 12 fourth-grade students from Chiwan School, Nanshan District, Shenzhen, who were randomized into experimental and control groups. The researcher would like to present the research results according to the research objectives as follows:

1. The comparison of social skills between before and after participating expressive art in group counseling of the experimental group as Table 1.

2. The comparison of social skills between the experimental group and the control group after participating expressive art in group counseling as Table 3.

Table 1: Results of comparison of the experimental groups pre-test and post-test scores (n=6)

variable		Mean Rank	.SR.	Z	P
social skill	Negative Ranks	0.00	0.00	-*2.207	0.027
	Positive Ranks	3.50	21		

P<0.05

To demonstrate the effectiveness of the experimental activity, it was necessary to compare the differences before and after participation for the experimental group. The study utilized the Wilcoxon Signed Ranks Test, a non-parametric test for related samples. The analysis results, as shown in Table

1. indicate a significant difference in Social Skills for the experimental group before and after the experiment, with rank means of 0 and 3.5, respectively ($Z=-2.207$, $p<0.05$).

2. The comparison of social skills between the experimental group and the control group after participating expressive art in group counseling.

Initially, I compared pre-test social skill scores between the experimental group and the control group which is found as shown in Table 2

Table 2: The comparison of social skills between the experimental and control groups before the experiment ($n = 12$)

variable	group	n	Mean Rank	.SR.	Z	P
social skill	experimental group	6	5.83	35.00	-0.659	.0589
	control group	6	7.17	43.00		

Before conducting "EXPRESSIVE ART IN GROUP COUNSELING," it is necessary to confirm whether there are differences in Social Skills between the experimental and control groups, in order to eliminate interference from factors outside the experiment. The study employed the Mann-Whitney Test, a non-parametric test for independent samples. The test results, as shown in Table 2, indicate that there were no significant differences in Social Skills between the experimental and control groups before the experiment. Specifically, the Mean Rank for Social Skills was 5.83 for the experimental group and 7.17 for the control group ($Z=-0.659$, $p>0.05$).

Afterwards, I compared post-experiment social skill scores between the experimental group and the control group. which is found as shown in Table 3.

Table 3: The comparison of social skills between the experimental and control groups after the experiment ($n = 12$)

variable	group	n	Mean Rank	.SR.	Z	P
social skill	experimental group	6	9.50	57.00	-2.898	0.002
	control group	6	3.50	21.00		

$P<0.01$

After conducting the "EXPRESSIVE ART IN GROUP COUNSELING" experiment, the comparison between the experimental and control groups in terms of Social Skills is presented in Table 3. The post-experiment Mean Rank for Social Skills was 9.5 for the experimental group and 3.5 for the control group. There was a significant difference in Social Skills between the two groups after the experiment ($Z=-2.898^*$, $p<0.01$ with the experimental group having a significantly higher Mean Rank than the control group).

Discussion

As an educational tool, expressive art in group counseling is of great significance to the improvement of primary school students' social skills. This study aims to explore the influence of expressive art in group counseling on pupils' social skills and conduct detailed analysis with practical research. Through the expressive art in group counseling, the students showed a significant improvement in their social skills. They have made remarkable progress in six aspects: emotional expression, emotional feelings, emotional control, social expression, social sensitivity and social control.

The researcher applied the techniques of listening, self-exploration, and emotional expression, combining expressive art in group counseling skills to improve students' social skills. Based on theoretical guidance, a series of painting art group consultation activities are designed, allowing students to express their inner feelings and emotions through painting. In practice, this non-verbal expression reduces the barriers of verbal communication and makes it easier for students to express their true feelings. In the process of painting, students better capture and perceive their own emotions, and they transform their abstract emotions into concrete images, they thus have a clearer understanding of their own inner world. This study results are in agreement with previous studies. Wang and Wang

(2020) said the importance of expressive art in group counseling activities lies in its effectiveness to enhance students' emotional expression. This method offers a non-verbal, creative, and collaborative outlet, facilitating better exploration, identification, management, and expression of emotions. It fosters the development of students' emotional intelligence and promotes them improved social skills.

The researcher applied humanistic theory, which emphasizes providing positive feedback and supportive counseling skills, to design a series of expressive art activities for group counseling. During the counseling process, the researchers actively affirmed the strengths, efforts, and achievements of the members. This positive affirmation helps members build self-confidence and self-esteem and enhance students' recognition of their own skills and values. Researchers gave their members supportive feedback and encouraged them to face the challenges and difficulties bravely. The supportive feedback enhanced the courage and determination of the members, helping them overcome their difficulties and achieve their personal goals. Researchers listened to the needs and feelings of the members, and tried to understand their emotions and experiences. Patient listening and understanding made members feel understood and accepted, as well as feeling emotionally safe and built trust. Expressive art in group counseling activity provides a platform for sharing emotion. Students share their feelings and experience with others here, and establish emotional resonance and connection with others, the resonance and connection make students feel understood and supportive. Such a approach promotes emotional communication and sharing, thereby enhancing students' emotional perceiving skills. This study results are in agreement with previous studies. Xie and Wang (2015) said expressive art in group counseling activities holds significant value in enhancing students' emotional experiences. It fosters emotional expression and understanding, deepens emotional connections, promotes emotional exploration and growth, facilitates emotional adjustment and self-expression, and cultivates emotional competence and social skills. Overall, it contributes to improving students' social skills.

The counseling skills such as emotional guidance in humanistic theory were used to help students to better understand and express their emotional experience, and promote their emotional self-cognition and emotional self-resolution. Through emotional guidance, students pay attention to their current emotional state and explore the root, meaning and influence of these emotions. In the consultation process, students expressed their emotions through painting, whether positive or negative emotions are expressed by color, lines and shape, and adjust the intensity and expression of emotions by adjusting the composition and color of the picture. This is a process aimed at enhancing their emotional cognition. Through this creative process, students can better understand their own emotions and learn how to express and deal with them. This is also a process through which students gradually acquire self-regulation skills for their emotions. It helps students manage their emotions effectively and enhances their emotional control ability. This study results are in agreement with previous studies. Sun and Wang (2016) said the expressive art in group counseling activity provides students with a safe, supportive environment where they can freely express their emotions and enhance emotional control through creation and sharing. By participating in such activities, students can not only improve their emotional cognition and emotional expression skills, but also learn to manage and regulate their emotions more effectively.

The counseling techniques such as guidance and reflection and personalized guidance in humanistic theory were used. During the tutoring process, researchers provided guidance and advice to help students better understand their emotions, values, and goals, while offering support for their growth and development. Reflection is a more self-oriented process, in which individuals think, explore and reflect on their own behaviors, feelings and thoughts, so as to enhance their own understanding and awareness. Personalized guidance is usually a non-directed, student-centered approach to help students explore themselves, solve problems, and achieve personal goals by listening, understanding, and respecting students. During the counseling process, students used painting, a highly intuitive form of expression, to help them better understand and articulate their feelings. Through their artworks, they are able to convey their inner emotions and experiences, ultimately enhancing their social expressive skills. In painting expression, students need to cooperate with others, communicate and share ideas. This cooperation and communication promote the development of communication skills among the students, including the skills to listen to others' opinions, express their own ideas and solve problems through consultation. In this case, students' social expression skills is thus improved. This study results are in agreement with previous studies. Sun and Wang (2016) said expressive art in group counseling can

help students improve social expressiveness and other social skills by providing a creative and cooperative environment. Such activities can not only promote individual artistic development, but also bring positive effects on personal emotional health and interpersonal relationships. By participating in such group activities, students can express their emotions, ideas and opinions through painting, thus improving their social expression skills.

In this study, counseling techniques like teamwork and interactive case discussion in cognitive behaviorism theory were utilized. Teamwork fosters the development of active communication and problem-solving skills, which are essential for improving team performance in collaborative settings. Cognitive restructuring, as well as a part of teamwork, helps change the members' negative thoughts and behaviors, thus beneficial for building a positive team atmosphere. Whereat in the interactive case discussion, the researchers guided students to participate in the discussion of a specific case. By analyzing situations, students' reactions, and potential solutions, students are able to recognize their own thinking and behavior patterns, as well as identifying possible cognitive biases or behavioral habits. Throughout the counseling process, team members learn to collaborate with students from various family backgrounds with diverse ideas. They share their perspectives, experiences, and emotions, fostering greater tolerance and respect for diverse viewpoints, backgrounds, and experiences. Through this, they develop an understanding and appreciation for others' ideas and opinions, thereby enhancing their social sensitivity. This study results are in agreement with previous studies. Shen and Yang (2019) said expressive art in group counseling help to build good interpersonal relationships, improve the efficiency of teamwork, and help individuals to better adapt to social changes and deal with interpersonal interactions.

In this study, teamwork and conflict resolution skills in cognitive behavior theory were utilized. In teamwork, reward and punishment mechanisms can be established between team members to encourage and reinforce cooperative behavior. In terms of conflict resolution, team members can help each other learn to handle conflict through positive communication and resolution brain-storming. Rewards for positive conflict resolution can reinforce their adoption of teamwork to address conflicts. During the consultation process, the members cooperate with each other to complete the work together. This promotes the team cooperation and communication skills. Meanwhile, team members gradually achieve effective coordination and leadership within the team, learning to adapt to different environments and situations. They interact and cooperate effectively with others, develop rational thinking and expression skills, and learn self-management. This enables individuals to better control their emotions and behavior, facilitating improved communication and cooperation with others, and enhancing social control skills. This study results are in agreement with previous studies. Chen (2018) said, By expressive art in group counseling, students can learn and practice social control skills in a structured environment, which is essential for building good interpersonal relationships and improving social skills .

In general, through the expressive art in group counseling, primary school students have been significantly improved in their social skills, cooperative spirit, emotional expression, self-cognition and comprehensive skills. These results suggest that expressive art in group counseling plays a positive and indispensable role in the social development of pupils. This study results are in agreement with previous studies. Qiu (2018) said through the expressive art in group counseling activities, participants learned to cooperate, share, understand and respect others in the teamwork setting, which are considered important parts of social skills. At the same time, artistic creation also provides them with a platform to express their feelings and ideas, and promotes the development of self-cognition and emotional management. In conclusion, this study deeply analyzes the influence of expressive art in group counseling on pupils' social skills, and reveals the potential mechanism and action path of improving students' social skills. This research has made some progress in theoretical exploration and empirical research, providing useful enlightenment and reference for educational practice and future research

Conclusion

This study aims to explore the influence of expressive art group counseling on the social skills of primary school students. The aim of this study was firstly to learn the social skills of primary school students. Secondly, compare the social skills before and after participating in expressive art in group counseling. Finally, the social skills of experimental and control pupils after participating in expressive

art in group counseling was compared. Through the practice results, it can be seen that the expressive art in group counseling cultivates the social skills of primary school students, improves the students' mental health quality, improves the students' academic performance, and improves the peer relationship of primary school students. It has improved the tense learning atmosphere of the school, helped the school to establish friendly contacts with families and communities, and promoted the communication and cooperation between home and school. In future studies, it is hoped that multi-level analysis methods can be used to explore the influence mechanism of the expressive art in group counseling on pupil social skills from different levels such as individual, family, school and community.

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THE RESILIENCE ENHANCEMENT OF VOCATIONAL STUDENTS THROUGH GROUP COUNSELING SRINAKHARINWIROT UNIVERSITY

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ABSTRACT

The purpose of this study is to improve the psychological resilience of vocational college students through group counseling. The psychological resilience of vocational college students who participated in group counseling was improved. There were differences in social skills between the experimental group and the control group. Using CD-RISC scale, 20 students were divided into experimental group and control group, with 10 students in each group. The experimental group received 8 group counseling sessions to improve mental resilience, while the control group received no group counseling. Data were collected using a self-designed, expert-reviewed social skills rating scale. The data were analyzed by descriptive analysis and t test. According to the data analysis, the mean value of the experimental group was 44.25, and the mean value of the control group was 45. After the group counseling intervention, the mean value of the experimental group was 55.1 and that of the control group was 45.6 The T test difference between the pre-test group and the post-test group was statistically significant, and the T test difference between the post-test group and the post-test control group was statistically significant. The results showed that the students in the experimental group had an obvious improvement in psychological resilience, while the students in the control group had no obvious change. Therefore, group counseling can effectively improve the psychological resilience of vocational college students.

Keywords: group counseling, Resilience, Vocational college student

1.Introduction

1.1 Research Background

Psychology resilience not only focuses on illness, stress and defects, but also focuses on the positive factors shown by individuals in the face of difficulties, especially the growth after trauma, which can guide individuals to find their own advantages and tap their own potential. The quality of psychology resilience is helpful for individuals to maintain good emotions, contribute to the formation of harmonious interpersonal relationships, contribute to the enhancement of tolerance to handle setbacks(Shengliang, Liping, 2018.), and contribute to the enhancement of vocational students' self-efficacy .

Vocational college students occupy a fairly high proportion of college students, psychology and environment, and bear more pressure from study, employment and interpersonal relations than students in key universities and ordinary undergraduate colleges. Multiple pressures often cause their psychological confusion and obstacles, especially students with poor mental endurance are prone to psychological problems (Chen Qishan, 2005).

The adversity faced by vocational students is, the negative experiences of vocational students, such as the difficulties they encounter in their studies or life, such as inability to adapt to higher vocational education, inability to understand professional knowledge, anxiety about academic performance, lack of support from friends, family and teachers, confusion about the future, and pressure from employment situation. Cassidy(2017) found that students are cyberbullied by other students, which negatively impacts their physical and mental health, self-perception, personal and professional life, and personal safety. Kumaraswamy(2013) points out that students' responses to the stress of entering university vary.

Participating in groups is an essential part of how we interact with the world. Groups are present in all aspects of our lives, including participation in family, work, social and community group relationships. Without groups, we would not know the full meaning of our humanity (Trotzer, J. P, 2013).

Group counseling to intervene in psychology resilience measures is very suitable for students, because in the school, the community naturally exists. Compared with individual counseling, group counseling has the advantages of saving consulting time, utilizing teachers' resources, improving work efficiency, and focusing on solving some urgent common psychological problems (Xiaoou, 2012).

The purpose of this study was to explore the effect of group counseling on mental resilience and to provide new methods and ideas for improving the psychology health of Tongren Early Childhood Normal College. At the same time, this study will also help promote the application of group counseling in other psychological factors, and promote the innovation and development of education.

1.2 Definition

1.2.1 Resilience

Definition of resilience

Resilience is the process of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress. After experiencing trauma, the individual did not appear pathological state, but also showed better psychological quality to adapt to the environment.

Resilience is both the process and outcome of successfully adapting to difficult or challenging life experiences, particularly through strength, tenacity, and optimism in response to external and internal demands.

Component of Resilience

Embodiment of psychology resilience. Including Tenacity: Facing challenges, calm, firm, quick, sense of control. Strength: Can not only recover but also develop and grow through setbacks. Optimism: Have the confidence to overcome adversity and look at things from a positive perspective.

1.2.2 Group Counseling

Definition of group counseling

Group counseling is the contact between counselor and counselee to help clients find, understand and propose solutions when facing difficulties in life or certain uncontrollable situations. The counselor should develop trust, acceptance, respect, warmth and communication atmosphere among the group (Trotzer, 1972).

Technique In group counseling

1. Person-centered therapy: Unconditional respect and acceptance to the client, shows complete positive concern, accepts the full presence of the client, and does not judge its behavior and feelings. To understand the hearts of visitors, empathy to experience their feelings and experiences, and through verbal and nonverbal feedback shows that understanding. Be honest in the process of consultation and truly show their feelings and reactions, not to hide or disguise, in order to establish a relationship of trust and openness.

2. Cognitive Behavioral Therapy (CBT): Help clients identify automatic negative and distorted thoughts. Guide review and challenge the authenticity and rationality of negative thinking. Cultivating and practicing more positive and realistic way of thinking, to replace the original negative thinking. Encourage clients to engage in positive and meaningful activities to improve mood and reduce depression. In safety and control environment gradually exposed to cause anxiety situation or stimuli, reduces avoidance behavior and fear responses. Specific skills such as social skills, stress management, time management, etc. are taught to help clients cope more effectively with life's challenges. Identify and understand their emotions, learn to health to express and manage emotions.

3. Solution-Focused Brief Therapy (SFBT): To help client externalize their goals and expectations. Break big goals down into concrete, manageable steps that can be achieved gradually. Encourage visitors to take specific small steps, gradually close to the target. Periodically assess the progress of the client and adjust the action plan to ensure continuous improvement.

1.2.3 CD-RISC Scale

The CD-RISC scale developed by Connor and Davidson (2003), which originated from the study of PTSD. The scale shows effectiveness relative to other measures of stress and hardness, and reflects the different levels of resilience shown by the general population and people, and can distinguish between strong and weak resilience, with good psychometric characteristics (Connor, & Davidson, 2003).

1.3 Study significance

1.3.1 For the school, this study can be carried out in the school, from the perspective of psychology to provide a new vision for the school to educate students, help the school to cultivate talents, improve the school atmosphere, and build an excellent campus.

1.3.2 For teachers, this study can help teachers better grasp the methods of improving students' psychological resilience through group counseling, better use of various counseling techniques, more effective intervention, and improve teachers' educational quality.

1.3.3 For students, this study can help students better adapt to adversity, improve students' tenacity, strength and optimism, cultivate students' self-efficacy, and better face life and study.

1.3.4 For other researchers, this study provides insight into the effects of group counseling on psychological resilience.

1.4 Study hypothesis

1.4.1 There will no difference in resilience between the experimental group and control group before group counseling.

1.4.2 The resilience of experimental group will improve after group counseling.

1.4.3 There will difference in resilience between the experimental group and control group after group counseling.

2. Research Objectives

2.1 To study resilience of vocational students

2.2 To compare resilience of vocational students in the experimental group before and after participation of group counseling.

2.3 To compare difference of resilience of vocational students in the control group and experimental group before and after participation of group counseling.

3. Methodology

In this study, quantitative quasi-experimental research design was adopted to explore the influence of group counseling intervention on the psychological resilience of vocational students. The psychological resilience of the experimental group was measured before and after intervention, and the control group was also measured twice at the same time node. Get the change of psychological resilience of vocational students before and after intervention and the change of psychological resilience of control group in a period of time without intervention.

X1	O	X2	Intervention group
Y1	-	Y2	Control group

X1 refers to the resilience level of participants in the intervention group prior to receiving the resilience counseling intervention.

X2 refers to the resilience level of participants in the intervention group following the resilience counseling intervention.

O refers to the resilience intervention or counseling program.

Y1 refers to the resilience level of participants in the control group at the outset of the study.

Y2 refers to the resilience level of participants in the control group after the 4-week interval without the resilience counseling intervention.

4. Samplings/Participants

Population: This study is mainly aimed at grade one to grade three students in Tongren Early Childhood Normal College, Guizhou Province, with a total of 150 students.

Sample: The subjects of this study are grade 1 to Grade 3 students, including the experimental group and the control group, with a total of 20 students, including 10 in the experimental group and 10 in the control group. The 20 students were selected from a preliminary test of 150 students with similar levels of mental resilience. In order to ensure the reliability of the research results, there was no significant difference between the two groups of students in terms of gender and age, and the psychological resilience was at a low level.

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5. Research Tools/Instruments

The material of this study is the 8-session resilience enhancement group counseling program. This program is developed on the basis of an extensive review of the history of psychology resilience, its definition, protective factor models for the development of psychology resilience, and psychology mental resilience enhancement programs for vocational students. After a comprehensive review of psychological resilience, tenacity, strength and optimism were the influencing factors of psychological resilience in this study. Therefore, the psychological resilience enhancement project was developed around these three factors, and the traditional counseling model was adopted in this group counseling.

6. Procedure

Prediction: Use the CD-RISC Scale to predict all students' levels of mental resilience.

Post-test: CD-RISC Scale was used to test the students in the experimental group and the control group again, and the test data was compared with the test data in the experimental group and the control group to draw a conclusion. If the post-test data of the experimental group is higher than the pre-test data, and the post-test data is higher than the control group, it indicates that group counseling can improve the psychological resilience of students.

7. Data Analyses

First, the researcher conducted independent sample T-test analysis on the pre-test data of the experimental group and the control group, and obtained the average value and T-value of the two groups. After the experiment, the two groups were re-examined, and the data of the two groups were T-tested to obtain the average values of the control group and the experimental group. The researchers compared the mean before and after tests of the two groups, and found that after the experiment, the mean of the experimental group was higher than that of the control group, and the mean of the post-test was higher than the mean of the predicted test in the experimental group. Through the paired sample t test analysis, it is concluded that the experimental group has significant differences before and after the test, and the experimental group and the control group have significant differences in post-test scores.

8. Results

In this study, we collected the data of 40 students from Tongren Early Childhood Teachers College, who were randomly divided into experimental group and control group. Descriptive statistics for both groups are as follows: Data description: Pre-test results

experimental group

test value	sample size	average value	standard deviation	t	P
45	20	44.25	2.673	-1.255	0.225

control group

test value	sample size	average value	standard deviation	t	P
45	20	45	2.956	0.000	1.000

Table 1: Analysis of differences in resilience between the experimental group and the control group before the experiment It can be seen from Table 1 that the average value of the experimental group was 44.25 and that of the control group was 45. The significance was greater than 0.05, indicating that the

mental resilience of the experimental group and the control group showed consistency before the experiment, and there was no difference. In this study, the mental resilience score of 45 was considered as low mental resilience.

Results of the experimental groups before and after the experiment

Paired Variables	Mean \pm standard deviation		Pairing difference (Pair 1-Pair 2)	t	df	P
	Pair 1	Pair 2				
Experimental pre-test paired experimental post-test	44.25 \pm 2.67	55.1 \pm 6.48	-10.85 \pm 3.807	-12.324	190	0.000

Table 2: The results of the paired samples T-test show that based on the variables of the experimental group pre-test paired experimental group post-test, the significance P value is 0.000***, showing a level of significance, rejecting the null hypothesis, so there is a significant difference between the experimental group pre-test paired experimental group post-test. The absolute value of t is 12.324, indicating that the difference is very large.

Results for the controls before and after the experiment

Paired Variables	Mean \pm standard deviation		Pairing difference (Pair 1-Pair 2)	t	df	P
	Pair 1	Pair 2				
Control group pre-test paired control group post-test	45 \pm 2.95	45.6 \pm 4.946	-0.6 \pm 1.99	-0.979	190	0.340

Table 3: The results of the paired sample T-test show that the P-value of significance is 0.340 based on the variable control group's pre-test and the paired control group's post-test, which is not significant at the level and cannot reject the null hypothesis. Therefore, there is no significant difference between the pre-test and the paired control group's post-test. The absolute value of t value is 0.979, and the difference is small.

9. Discussion

Chen (2020) group psychological counseling intervention for poor students has played an effective role in psychological assistance to them, improved their mental health, enhanced their interpersonal communication level, enhanced their self-confidence, and better helped students to establish a good interpersonal relationship model. Shen (2020) found that the catharsis of the negative emotions of the members in group psychological counseling can help them establish a sense of acceptance and identity of learning and environment in the process of group mutual assistance, and effectively improve the depression and improper behavior of college students, and the influence is very stable and lasting. Li (2022) research on group psychological counseling for self-development of poor college students focuses on students' positive cognition, optimism and problem-solving ability in the process of group counseling, so that group members can talk to each other and discuss the confusion encountered, and understand, find and solve problems from multiple perspectives. So as to eliminate some psychological suppression behavior, improve the level of self-esteem and psychological stress resistance of students.

Enhancing psychological resilience is of great significance to the construction of good mental health of vocational college students. Mental health is a potential factor that can affect the present and future development of a person. To a certain extent, it can change the inner environment of a person's growth, and it also plays a positive role in the formation of students' "three views" (Jingting, 2023). For

educators, it is an important task to master the psychological characteristics of higher vocational students in different stages, pay attention to their mental health, regularly provide psychological counseling for problems, and actively prevent and intervene in psychological crisis, so as to ensure that higher vocational students have a healthy and sustainable development of the best state.

10. Conclusion

Group counseling provides a platform for collective support and shared experiences, enabling higher vocational students to feel understood and supported by each other. This shared experience can help reduce loneliness and stress and increase mental resilience.

Group counseling provides a safe environment for higher vocational students to express their feelings and emotions freely. By sharing their experiences and feelings with others, vocational college students can learn to regulate their emotions more effectively and cultivate a positive mindset, thereby enhancing mental resilience.

Group counseling promotes higher vocational students' self-awareness and self-recognition, helping them better understand their own needs, values and goals. At the same time, through interaction and feedback with others, they are also able to develop cognitive flexibility and better adapt to change and challenges.

Group counseling can not only improve the psychological resilience of vocational college students in the short term, but also have a long-term effect, helping them to establish a healthy psychological mechanism and a positive lifestyle.

Moreover, regular group counseling sessions and an ongoing support network can further enhance this effect.

This study provides some directions for thinking about the possible effects of group counseling on improving the mental resilience of vocational college students, but it is worth noting that the specific effects may vary depending on individual differences, group Settings, and counseling methods. Therefore, it is essential to continue research and practice to verify the validity of these ideas.

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