



ISSN 2822-0323 (Online)

ADVANCE KNOWLEDGE FOR EXECUTIVES

VOL 3 NO 2

APRIL - JUNE 2024

Social Sciences, such as Education, Business, Healthcare,
Contemporary Management Research, Languages

Google Scholar

SSRN

ISI
INTERNATIONAL
SCIENCE INDEX
INTERNATIONAL CENTRE

ISSN
PORTAL
The Global Index
for Continuing
Resources

ADVANCED SCIENCE INDEX

ADVANCED SCIENCE INDEX
CENTRAL EUROPEAN SCIENCE ARCHIVE AND EVALUATION

INTERNATIONAL
Scientific Indexing

R⁶
ResearchGate

A
ACADEMIA

EuroPub

INDEX
INTERNATIONAL
COPERNICUS

DRJI

Directory of Research Journals Indexing

Contact Us



WA+66-838-899-271



<https://so11.tci-thaijo.org/index.php/AKE>
advanceknowledgeforexecutives@gmail.com



Advance Knowledge for Executives

ISSN: 2822-0323 (Online)

Focus and Scope

The Journal aims to publish high-quality articles in management, behavioral analytics, and social science research (such as education, business, healthcare, languages, and contemporary management research). Its target audience includes lecturers, students, institution researchers, and independent researchers.

Peer Review Process

At least two expert reviewers review the article in a double-blinded procedure.

Types of articles

Research Article

Academic Article

Format and Language

English (Choose only one for American or British English)

Time New Roman 12, Single Space

Using AKE's Template (Word Document) and Copyright Form

Citations and references using the APA style

Maximum of 7,000 words (including references)

Publication Frequency

Advance Knowledge for Executives is an open-access international refereed research journal focused on management, behavioral analytics, and social science research that will be released every three months.

January - March

April - June

July - September

October - December

The Journal follows a peer review process to ensure the quality of articles before publication. Each published article has been reviewed by at least two experts in a double-blind peer-review process, where the reviewers and authors remain

anonymous. Articles submitted by internal authors are reviewed by external experts outside the journal's organization. All reviewers possess expertise in the relevant field and have no conflicts of interest with the authors.

The papers frequently appear on the SSRN, ResearchGate, Academia.edu, EuroPub, and Google Scholar.

Publisher

Advance Knowledge for Executives

FEE

No Article Processing Charges (No APC)

Plagiarism Checking

Plagiarism and AI writing results should be less than 15% using CopyCat, Turnitin, or Grammarly.

Editorial Team

Advisory Board Committee

Prof. Dr. Juana Maria Arcelus-Ulibarrena, Parthenope University of Naples, Italy

Prof. Dr. Dachel Martínez Asanza, National School of Public Health (ENSAP), Cuba.

Prof. (Assoc.) Dr. Pramila Thapa, Purbanchal University, Nepal

Prof. (Assoc.) Dr. Ratneswary Rasiyah, SEGi University, Malaysia

Prof. (Assoc.) Dr. Khalid Hussain, Albukhary International University, Malaysia

Prof. (Assoc.) Dr. Syamsul Hadi, Universitas Sarjanawiyata Tamansiswa, Indonesia

Prof. (Assoc.) Dr. Noelah Mae Dimayuga Borbon, National University, Philippines

Prof. (Assoc.) Dr. Marisennayya Senapathy, Wolaita Sodo University, Ethiopia

Prof. (Assist.) Dr. Chok Nyen Vui, Manipal GlobalNxt University, Malaysia

Prof. (Assist.) Dr. Andi Asrifan, Universitas Negeri Makassar, Indonesia

Prof. (Assist.) Dr. Muthmainnah, Universitas Al Asyariah Mandar, Indonesia

Prof. (Assist.) Dr. Belal Mahmoud AlWadi, Al-Zaytoonah University of Jordan, Jordan

Prof. (Assist.) Dr. Waqar Ahmad, University of Central Punjab Lahore, Pakistan

Prof. (Assist.) Dr. Mansoor Ali Darazi, Benazir Bhutto Shaheed University, Pakistan

Editorial Board Member

Prof. (Assoc.) Sorasun Rungsiyanont, Srinakharinwirot University, Thailand

Prof. (Assist) Dr. Pareeyawadee Ponanake, Burapha University, Thailand

Prof. (Assist) Dr. Amnat Iamsumang, Rajamangala University of Technology Phra Nakhon, Thailand

Prof. (Assist) Dr. Siriporn Praesri, University of Phayao, Thailand

Dr. Yaowapha Neeyakorn, Mahasarakham University, Thailand

Dr. Phantiga Wattanakul Nakhon Pathom Rajabhat University Thailand

Dr. Vilasinee Khemapany, University of Phayao, Thailand

Dr. Nuttharin Pariwongkhuntorn, University of Phayao, Thailand

Dr. Siwaporn Soontreewong, Public Health and Environment Division, Trang Municipality, Thailand

Dr. Yarnaphat Shaengchart, International College, Pathumthani University, Thailand

Dr. Chaiwut Chairerk, Rajamangala University of Technology Phra Nakhon, Thailand

Dr. Lalita Pholpong, Garden International School, Thailand

Dr. Saranchana Asanprakit, Independent Researcher, Thailand

Editor-in-Chief

Dr. Maythika Puangsang, Rajamangala University of Technology Phra Nakhon, Thailand

Co-Editor-in-Chief

Col. Dr. Wandee Tosuwan, The Defence Science and Technology Department, Thailand

Dr. Napat MATTHIEU Pattaradechakul, MEE FAH Language School (TOEFL ITP & IELTS Testing Center), Thailand

Content

The Relationship between Engagement, Motivation, Cognitive Process, Student Satisfaction, and Effectiveness of Distance Education among a Higher Education University's Students	1-16
Tourist Behavior in Cultural Tourism: A Case Study of Tourism Routes in Phetchaburi, Thailand	1-12
Knowledge, Attitude, and Practice (Behaviour) Among Health Promotion School Students	1-9
Modelling of Social Influence, Electronic Word-of-Mouth, Previous Experience and Abroad Tour Service Purchase Intentions Among Thai Tourists	1-10
Social Media and Its effect on Higher Education: A Review Article	1-11



The Relationship between Engagement, Motivation, Cognitive Process, Student Satisfaction, and Effectiveness of Distance Education among a Higher Education University's Students

Supaprawat Siripipatthanakul

Manipal GlobalNxt University, Malaysia

Bangkokthonburi University, Thailand

supaprawat.siripipatthanakul@campus.globalnxt.edu.my

supaprawat.sir@bkkthon.ac.th

ORCID ID 0000-0001-6671-2682

(Corresponding Author)

Pongsakorn Limna

Rangsit University, Thailand

pongsakorn.l65@rsu.ac.th

ORCID ID: 0000-0002-7448-5261

Penpim Phuangsuwan

University of Phayao, Thailand

penpim.ph@up.ac.th

ORCID ID: 0000-0003-2371-7998

ABSTRACT

Objective: With the sudden COVID-19 shift away from the classroom in many parts of the world, some question whether adopting online learning or distance education will persist post-pandemic and how such a shift would affect the global education sector. This study explains how distance education (online learning) effectiveness can be improved by focusing on engagement, motivation, and cognitive processes by enhancing student satisfaction among higher education students at a university in Thailand.

Method: A qualitative approach was used, with six respondents being interviewed. Purposive sampling was used to select university students who had completed distance education and online learning at a Thai university. The data was analysed using content analysis.



Result: Online learning effectiveness is influenced by student satisfaction with online learning methods related to student engagement, motivation, and cognitive process. Moreover, student satisfaction is very crucial in distance education (online learning) and learning effectiveness.

Conclusion and Recommendation: The implications could be applied to increase online learning effectiveness by focusing on student engagement, motivation, and cognitive processes and enhancing student satisfaction. The recommendation is to consider focus group discussions, which could provide insightful findings for future research. Moreover, a quantitative study, such as online questionnaires, should be considered.

Keywords: *Engagement, Motivation, Cognitive Process, Student Satisfaction, Effectiveness*

INTRODUCTION

COVID-19 has disrupted most of the world's industries. In most countries, education is the only sector that has been entirely digitised. During the pandemic, online education was the best option for continuing education, particularly in higher education (Mahyoob, 2020; Ashour, 2024). Digitised learning is the result of digital advancement and widespread Internet access. Online learning and other forms of digitised education have advantages for enhancing knowledge and skills (Walther et al., 2021). E-learning is a virtual education system supported by Information Technology (IT). It has become the dominant learning channel. Due to its educational value, there has been a substantial increase in online courses (Hoq, 2020). The university's current efforts are to provide all requirements for education via eLearning and virtual classes, including the necessary infrastructure and technical support. In addition, there is a need for a continuous update of teaching and learning platforms in line with instructors' and students' ongoing development and training (Malkawi et al., 2020). Information and communication technology (ICT) is used to enhance and support learning in online education. It is a method of teaching and learning that uses the Internet to facilitate communication and collaboration in an educational setting. The technology augments traditional classroom instruction with web-based components and online learning environments. The COVID-19 pandemic has impacted educational systems worldwide. Efforts to prevent the spread of COVID-19 through nonpharmaceutical interventions and preventive measures such as social distancing and self-isolation have led to the near-total closure of schools, universities, and colleges worldwide (Yahaya et al., 2020).

Thus, educators in higher education are acquiring digital skills because of online instruction. The main obstacles identified for the success of these training programs are the teachers' lack of time for training, their negative attitudes toward technology, and their lack of innovative teaching skills. Among the positive outcomes, the universities opt for programs with varied course content to cover a broader range of skills. They offer courses at various development levels so all staff members, from absolute beginners to experts, can improve their skills. By



identifying the challenges and success factors underlying the best practices analysed in this study, the lessons gleaned from this research can serve as benchmarks for other universities seeking to develop effective multimedia training programs for university staff (de Juana Espinosa et al., 2022). Given its significance, it is critical to explore how distance education (online learning) effectiveness can be improved by focusing on engagement, motivation, and cognitive processes by enhancing student satisfaction among higher education students.

Research Objective

This study explains how distance education (online learning) effectiveness can be improved by focusing on engagement, motivation, and cognitive processes by enhancing student satisfaction among higher education students at a university in Thailand.

Research Question

How could educators and teachers improve the effectiveness of distance education (online learning) by increasing engagement, motivation, cognitive process, and student satisfaction among Thai Higher Education Students?

LITERATURE REVIEW

Online Learning and Distance Education During the COVID-19 Pandemic

To prevent the spread of the coronavirus, all activities must be conducted at home during the COVID-19 pandemic. Professional educators and scientists play a crucial role in successfully implementing higher education. Professors must demonstrate exemplary performance in the delivery of higher education. During the pandemic, lecturers can develop their skills by participating in webinars and online training (Novita & Mochklas, 2021). Virtual conferences became the norm throughout the pandemic. A global cross-sectional study was conducted to evaluate dermatologists' responses to virtual conferences and e-learning program attendance and to discuss the status of such events during the pandemic (Bhargava et al., 2021). Distance education can be synchronous, which occurs in real-time and involves online studies and chat rooms, or asynchronous, which occurs through online channels without real-time interaction. Virtual classrooms have now replaced physical classrooms. Hybrid learning can be significantly more effective and easier to use (Kaup et al., 2020). Educational institutions are transitioning to emergency E-learning, while their unprepared teachers are confronted with several unanticipated difficulties of emergency remote teaching. Teachers are not fully prepared and professionally trained to teach online. They struggle with the difficulties of an unprepared transition from a traditional to an online-based curriculum (Toquero et al., 2020; Barbour & Hodges, 2024). The social distancing measures required a new online blended pedagogy in which traditional face-to-face instruction is replaced by synchronous online learning (facilitated by technologies such as Zoom, Cisco Webex, Google Class, Panopto,



etc.). Moreover, webinars and innovative performance projects were launched based on outcome-based education to provide students with opportunities for cognitive participation to process their learning and be reflective (Li et al., 2021). Therefore, online learning or distance education during the COVID-19 adopted Zoom, Cisco Webex, Google class, etc. are crucial for online learning or distance learning in this study in a relationship between the methods of engagement, motivation, cognitive process to increase student satisfaction and learning effectiveness via online learning or distance education.

Student Engagement

Student engagement comprises four perspectives: student motivation, teacher-student interactions, institutional support, and engagement for active citizenship. It is vital to increase student participation in higher education (Zepke & Leach, 2010). Student engagement has been about increasing achievement, positive behaviours, and belonging among all students. However, student engagement focuses on students, where disengagement typically becomes a concern (Finn & Zimmer, 2012). Engagement is multifaceted with behavioural and psychological components; engagement and disengagement are developmental and occur over time, and student engagement can be modified by educational institution policies and practices to improve the prognosis of at-risk students (Carini et al., 2006). Student engagement refers to student behaviours highly correlated with desirable college learning and personal development outcomes. These behaviours include faculty-student interactions and participation (Axelson & Flick, 2010). Several issues and concerns relating to student engagement's meaning, justification, or goals necessitate a philosophical investigation. Student engagement and the criteria, standards, and norms used to measure its quality and degree (McMahon & Portelli, 2004; Hall et al., 2024). Thus, student engagement in this study is multifaceted with behavioural and psychological components; it has been about increasing achievement, positive behaviours, and a sense of belonging among all students.

Student Motivation

Several motivational theories were described, with emotions' influence as a unifying theme. Emotions and beliefs elicit distinct behavioural patterns, such as the pursuit of mastery, failure avoidance, learned helplessness, and passive aggression. As the catalysts for developing adaptive, constructive learning, classroom environments that foster feelings of competence and meaning emerged as implications (Seifert, 2004). Educators can improve learning by focusing on motivation more than any other factor. Even though each of these theories contains some truth, no single theory appears capable of explaining all human motivation. Students, and humans in general, are complex creatures with complex needs and desires. Unless students are consistently motivated, very little, if any, learning can occur regarding students. The five primary factors influencing student motivation are the student, the teacher, the content, the method/process, and the environment (Williams & Williams, 2011). Motivation has been described as the "forgotten heart" of instruction. As educators, they filter all learning activities through the students' motivation. In this way, students control the



classroom's flow. Without student motivation, the classroom has no pulse and no life. Teachers who learn to incorporate direct approaches to generating student motivation into their lessons will be happier and more successful (Rost, 2006). Student motivation in this study is the catalyst for learning in the classroom, and it may be related to student satisfaction and learning effectiveness via online learning (distance education).

Cognitive Process

Decision-making is one of the fundamental cognitive processes of human behaviour, in which a preferred alternative or course of action is selected from a set of alternatives based on a set of criteria. Numerous disciplines use decision theories extensively, including cognitive informatics, computer science, management science, economics, sociology, psychology, political science, and statistics (Wang & Ruhe, 2007). Problem-solving is one of the fundamental cognitive processes of humans. As a higher-order cognitive process, problem-solving interacts with numerous other cognitive processes, including abstraction, searching, learning, decision-making, inference, analysis, and synthesis. Problem-solving is a cognitive process of the brain that searches for a solution to a problem or a path to a goal. Once a problem object has been identified, problem-solving can be viewed as a memory-based search for a relationship between a set of solution goals and alternative paths (Wang & Chiew, 2010). Therefore, the cognitive process is based on problem-solving in learning and decision-making. The cognitive process could be considered a factor in student satisfaction and learning effectiveness via online learning (distance education).

Student Satisfaction

It has been demonstrated that student satisfaction positively correlates with the quality of learning outcomes. Understanding the factors influencing student satisfaction with online learning in a particular context can inform the design of learning environments and the provision of targeted student support to influence student satisfaction positively (Palmer & Holt, 2009). Satisfaction is a person's emotional state when a performance or outcome meets expectations. Satisfaction is proportional to the relative level of expectations and how performance is perceived. The expectation may extend as far back as before the students enter higher education, indicating that researchers must determine what students anticipate enrolling in college. Contrary to popular belief, satisfaction encompasses the perceptions and experiences of college students. Student satisfaction necessitates selecting and modifying customer satisfaction theory to explain the meaning of student satisfaction. Given the current climate of the higher education marketplace, there is a new moral prerogative that students have become "customers" and can, therefore, as fee payers, reasonably demand that their opinions be heard and acted upon (Hasan, 2008). Thus, student satisfaction in this study is reflected in online learning (distance education) because education methods relate to student engagement, motivation, and cognitive process determinants and may influence learning effectiveness via online learning (distance education).



Online Learning (Distance Education) Effectiveness

Learning effectiveness means that learners who complete an online program receive an education that represents the distinctive quality of the institution. The goal is that online learning is at least equivalent to learning through the institution's other delivery modes, such as traditional face-to-face, classroom-based instruction (Swan, 2003). Online learning is a type of distance learning or distance education that has been a part of the American education system for decades, and it has become the largest sector of distance learning in recent years. There are many purported benefits and applications of online learning, which is why there is so much discussion surrounding online learning. Its effectiveness in educating students, its use as professional development, its cost-effectiveness in combating the rising cost of education, credit equivalency at the postsecondary level, and its potential to provide a world-class education to anyone with a broadband connection are among the most significant advantages (Nguyen, 2015; Adeniyi et al., 2024). The effectiveness of online learning (distance education) in this study refers to the learning outcome regarding online learning (distance education) due to student satisfaction with online learning determinants (engagement, motivation, and cognitive process).

METHODOLOGY

Research Method

Purposeful sampling requires researchers to select the most beneficial sample based on their knowledge. This technique is commonly employed in qualitative research to understand a particular phenomenon or population. A qualitative approach was used to conduct the research. Qualitative research seeks to elucidate the contexts in which individuals or groups make decisions, behave in particular ways, and explain why the observed phenomenon occurred. Throughout the interview, bidirectional communication facilitates the acquisition of additional data, and in-depth knowledge is required. It permits the researcher to ask questions beyond the parameters of the semi-structured surveys, facilitating more efficient data collection and follow-up. While semi-structured interviews are widely used in research, their diversity, underlying structure, and wide range of applications in qualitative research receive little consideration. Three academic experts in education demonstrated the instrument's content validity (Siripattanakul et al., 2022; Jaipong et al., 2022). Consequently, semi-structured interviews were used to collect data from six respondents. The interview questions were based on Sitthipon et al. (2022) and Limna & Siripatthanakul (2021).



Population and Sample

This study's sample consisted of six key informants from a private university in Thailand. The data was collected using purposive sampling. The study's participants met the following criteria: 1) Thai higher education students in Thailand; 2) they were over 18 years old; 3) they had online learning (distance education) experiences during the COVID-19 pandemic; and 4) they spoke well in English. This selection aimed to ensure that the informants were capable of providing detailed insights into their experiences and perspectives on distance learning during a significant period of educational disruption.

Data Collection

The researchers conducted an in-depth review of secondary data (documentary method) for appropriate key survey questions to obtain the primary data results. The data was collected between August 20th and October 8th, 2022. The interview questions were based on reliable and valid sources. The following is a list of the survey interview questions.

- Question 1: Could you explain your opinion about the satisfaction with online learning regarding student engagement?
- Question 2: Could you explain your opinion about the satisfaction with online learning regarding student motivation?
- Question 3: Could you explain your opinion about the satisfaction with online learning regarding the process of learning?
- Question 4: Could you explain your opinion about the effectiveness of online learning regarding student engagement?
- Question 5: Could you explain your opinion about the effectiveness of online learning regarding student motivation?
- Question 6: Could you explain your opinion on the effectiveness of online learning regarding the learning process?

Data Analysis

Six Thai higher education students from a private university participated in this study. Three males and three females were chosen through systematic sampling. Content analysis is a qualitative technique for describing and quantifying phenomena objectively by drawing valid inferences from verbal and written data (Limna et al., 2022). This study analysed the qualitative data collected via in-depth interviews using content analysis.



RESULTS

Student Engagement and Learners' Effectiveness

Student engagement is about the physical, cognitive, and emotional presence of the learners in online or distance learning and is a psychological state that influences learners' engagement behaviour. Learner engagement is the students' efforts to remain engaged in learning online.

"I believe online teaching and distance learning materials could help me improve my learning effectiveness. The contents are crucial; visual and textual content improve my skills using the valuable materials".

a-20 Male Student, September 28th, 2022

"The learning methods are desirable. Compared to before learning, I have more confidence and could understand through video meetings as I can learn anytime."

a-21 Female Student, September 29th, 2022

Student Motivation and Learners' Effectiveness

Student motivation is the intensity and course of human behaviour. Consequently, motivation specifies why students decide to do something, how long they are willing to engage in the activity, and how vigorously they will pursue it. The magnitude and direction of online learning or distance learning with the online learning platform are determined by motivation.

"Motivation in learning using a learning material platform is essential for learners. For example, teachers motivate me in and outside the classroom by giving suggestions."

a-19 Male Student, September 30th, 2022

"Learners' effectiveness could be evaluated by examination. But when teachers used videos, or various materials, you could participate with friends and teachers, meaning you can successfully learn online or in a distance learning environment. And for sure, improving your knowledge online is essential during the COVID-19 pandemic."

a-20 Female Student, October 1st, 2022



Cognitive Process and Learners' Effectiveness

Four cognitive systems are fundamental to reasoning and play a role in explaining cognitive processes: (1) attention, (2) long-term memory, (3) working memory, and (4) metacognition. The cognitive process is about attention and memory for students in decision-making or problem-solving in learning and focusing on these four systems, particularly in online learning or distance learning,

"Compared to the traditional classroom, online learning or distance learning via webinars and learning platforms during the COVID-19 pandemic benefits from assisting the teacher could encourage students to improve their knowledge in learning, especially in writing, and I can remember the content easily."

a-19 Female Student, October 2nd, 2022

"If asked about the learning style that compares traditional, online learning could be learned from any online material such as via the Internet, videos, movies, or any online materials. I like to learn via online platforms during the COVID-19 pandemic. It is practical and effective."

a-21 Male Student, October 3rd, 2022

Student Satisfaction and Learner's Effectiveness

Student satisfaction is about the positive subjective evaluation of various educational outcomes and experiences by a student. Students are the primary customers in higher education because higher education institutions provide the most direct services. As students are increasingly viewed as consumers of higher education services, institutions wishing to recruit new students should prioritise student satisfaction.

"From my viewpoint, online learning platforms are suitable materials for learners during the COVID-19 pandemic. I like them because they could help me to understand while I could distance and avoid infection."

a-20 Female Student, October 1st, 2022

"Videos, movies, and online learning platforms are very attractive to teenagers. I learned how to search for anything using Google. It is convenient for me."

a-19 Male Student, September 30th, 2022



Online learning simultaneously solves problems and cultivates learners because its simple rules require participants in student engagement, student motivation, the cognitive process, and student satisfaction with online learning or distance learning via learning platforms and webinars. Online learning or distance learning during the COVID-19 pandemic is beneficial for solving seemingly impossible complex issues. It raises the group's standard in student engagement, motivation, cognitive process, and student satisfaction related to learner effectiveness. Participants in the webinar and online learning platforms become influential factors of determinants (student engagement, motivation, cognitive process, and student satisfaction). Therefore, this study aims to explain the effectiveness of learners adopting online learning materials and webinars. Digital Task-Based learning could be improved through these determinants (student engagement, motivation, cognitive process, and student satisfaction) for educational development.

DISCUSSIONS

Online Learning and Distance Education During the COVID-19 Pandemic

The findings support Novita and Mochklas (2021) that during the COVID-19 pandemic, all activities must be conducted at home to prevent the spread of the coronavirus. Professional educators and scientists are essential to the successful implementation of higher education successfully. Professors must demonstrate exemplary performance in the provision of higher education. Participating in webinars and online training can help lecturers improve their skills during the COVID-19 pandemic. Moreover, the results confirm Bhargava et al. (2021)'s assertion that virtual conferences became commonplace during the pandemic. A global cross-sectional study was conducted to assess dermatologists' responses to virtual conferences and e-learning program attendance and to assess the status of such events during the pandemic. The findings support Kaup et al. (2020) that asynchronous distance education takes place through online channels without real-time interaction. Virtual ones have replaced physical classrooms. Hybrid learning can be considerably more efficient and user-friendly. In addition, The results confirm the study of Toquero & Talidong (2020), which found that educational institutions are transitioning to emergency E-learning while their unprepared teachers are confronted with unforeseen challenges of emergency remote teaching. Teachers need to be adequately prepared and professionally trained to teach online. They also need help with the challenges of an unprepared transition from a traditional to an online-based curriculum. The findings support Li et al. (2021) that the social distancing measures necessitated a new online blended pedagogy that replaces traditional face-to-face instruction with synchronous online learning (facilitated by technologies such as Zoom, Cisco Webex, Google Class, Panopto, etc.). In addition, webinars and innovative performance projects based on outcome-based education were launched to provide students with cognitive participation opportunities that allow them to process their learning and be reflective.



Student Engagement

The findings support Zepke and Leach (2010) about four perspectives that comprise student engagement: student motivation, teacher-student interactions, institutional support, and engagement for active citizenship. It is crucial to boost student enrolment in higher education. The results confirmed Finn and Zimmer (2012) that increasing achievement, positive behaviours, and a sense of belonging among all students have been the focus of student engagement. Nonetheless, student engagement focuses on students, whereas disengagement is typically a cause for concern. Moreover, the findings support Carini et al. (2006) 's assertion that engagement is multifaceted and has behavioural and psychological components, that engagement and disengagement are developmental and occur over time, and that educational institution policies and practices can modify student engagement to improve the prognosis for at-risk students. The results support Axelson and Flick (2010), along with McMahon and Portelli (2004), who state that student engagement refers to student behaviours highly correlated with numerous desirable learning and personal development outcomes in higher education. These behaviours include interactions between faculty and students, participation in collaborative learning experiences, and the number of weekly hours spent on homework. Several issues and concerns regarding the significance and justification of student engagement and its objectives necessitate a philosophical investigation of—the engagement of students and the criteria, standards, and norms used to determine its quality and degree.

Student Motivation

The results support Seifert (2004), who states that the influence of emotions serves as the unifying theme in the description of several motivational theories. Emotions and beliefs elicit distinct behavioural patterns, such as the pursuit of mastery, failure avoidance, learned helplessness, and passive aggression. As the impetus for developing adaptive, constructive learning, classroom environments that foster feelings of competence and significance have emerged as ramifications. The findings confirm Williams and Williams (2011) that educators can improve student learning by emphasising motivation above all else. Even though each of these theories contains some truth, it appears that only some theories can adequately explain all human motivation. Students have complex needs and desires. If students are not consistently motivated, it is unlikely that they will learn anything. The student, the teacher, the content, the method/process, and the environment are the five primary factors influencing student motivation. The results confirm Rost's (2006) claim that motivation has been called the "forgotten heart" of education. Teachers filter all learning activities by motivating the students, who control the classroom flow in this manner. Without student motivation, there is no pulse or life in the classroom. Happier and more successful teachers learn to incorporate direct approaches to generating student motivation into their lessons.



Cognitive Process

The findings confirm Wang and Ruhe (2007) that decision-making is one of the fundamental cognitive processes of human behaviour, involving the selection of a preferred alternative or course of action from a set of alternatives based on a set of criteria. Numerous disciplines, such as cognitive informatics, computer science, management science, economics, sociology, psychology, political science, and statistics, employ decision theories extensively. Additionally, the results support Wang and Chiew (2010) that human problem-solving is one of the most fundamental cognitive functions. As a higher-order cognitive process, problem-solving interacts with various other cognitive processes, including abstraction, searching, learning, decision-making, inference, analysis, and synthesis. The cognitive process of problem-solving is the search for a solution to a problem or a path to a goal. Once a problem object is identified, problem-solving can be viewed as a memory-based search for a connection between a set of solution goals and alternative paths.

Student Satisfaction

The results confirm Palmer and Holt's (2009) observation that student satisfaction has been shown to be positively correlated with the quality of learning outcomes. Understanding the factors that influence student satisfaction with online learning in a specific setting can inform the design of learning environments and the provision of targeted student support, which can positively impact student satisfaction. Furthermore, the findings confirmed Hasan et al. (2008) that when a performance or outcome meets a person's expectations, he or she experiences satisfaction. Satisfaction is proportional to the level of relative expectations and the perception of performance. The expectation may extend as far back as before the students enter higher education, indicating that it is essential for researchers to determine what college courses students anticipate enrolling in. Contrary to popular belief, college student satisfaction encompasses their perceptions and experiences. The selection and modification of customer satisfaction theory are required. Given the current state of the higher education marketplace, there is a new moral prerogative that students have become "customers" and can demand that their opinions be heard and acted upon to explain the meaning of student satisfaction.

Online Learning (Distance Education) Effectiveness

The findings support Swan (2003) and Nguyen (2015) that effective learning means that students who complete an online program receive education that reflects the institution's distinctive quality. The objective is for online learning to be equivalent to learning through the institution's other delivery modes, namely its traditional classroom-based instruction. Online learning is a type of distance learning or distance education that has been a part of the American education system for decades; in recent years, it has become the largest sector of distance learning. There are many purported benefits and applications of online learning, which is why online learning is the subject of so much discussion. Among the most significant advantages of online education are its effectiveness in educating students, its use in



professional development, its cost-effectiveness in combating the rising cost of education, credit equivalency at the postsecondary level, and its potential to provide a world-class education to anyone with a broadband connection.

CONCLUSIONS

Online learning or distance education during the COVID-19 adoption of Zoom, Cisco Webex, Google Class, etc., is crucial for online learning or distance education in this study in a relationship between the methods of student engagement, student motivation, and cognitive process to enhance student satisfaction and learning effectiveness via online learning or distance education. Student engagement in this study is multifaceted, with behavioural and psychological components, and has focused on enhancing achievement, positive behaviours, and a sense of belonging among all students. Student motivation is the impetus for classroom learning, which may be related to student satisfaction and the effectiveness of online learning (distance education). Problem-solving underlies the cognitive process of learning and decision-making. The cognitive process could be considered the determinant of online student satisfaction and learning effectiveness (distance education). Student satisfaction reflects online learning (distance education) because education methods are related to student engagement, motivation, and cognitive process and can influence learning effectiveness via online learning (distance education). The effectiveness of online learning (distance education) is about the learning outcome regarding online learning (distance education) because of student satisfaction with online learning determinants (engagement, motivation, and cognitive process). This research may aid educational administrators, program directors, and teachers in enhancing learning methods to meet students' needs and expectations better, resulting in superior learning effectiveness. This research also contributes to the existing literature on student engagement, motivation, cognitive process, and satisfaction. The findings of this study may help academics broaden the scope of their research by incorporating additional potential factors. In addition, the questionnaires from this study can guide future research on the learning effectiveness of online or distance education by enhancing student satisfaction.

LIMITATIONS AND RECOMMENDATIONS

This study adopted qualitative interview research to explain the learning effectiveness of higher education students at a private Thai university. It is imperative to focus solely on student engagement, motivation, cognitive process, and satisfaction; other determinants cannot be explained. It is suggested that the researchers conduct additional sampling for the quantitative study. The results may explain a large scale. The self-administered questionnaire could also be considered for further research. Therefore, a statistical analysis, such as a structural equation model (SEM), could provide a general explanation for future research.

Declaration

There is no conflict of interest.



REFERENCES

- Adeniyi, I. S., Al Hamad, N. M., Adewusi, O. E., Unachukwu, C. C., Osawaru, B., Chilson, O. U., Omolawal, S. A., Aliu, A. O., & David, I. O. (2024). Reviewing online learning effectiveness during the COVID-19 pandemic: A global perspective. *International Journal of Science and Research Archive*, 11(1), 1676-1685.
- Ashour, S. (2024). How COVID-19 is reshaping the role and modes of higher education whilst moving towards a knowledge society: The case of the UAE. *Open Learning: The Journal of Open, Distance and e-Learning*, 39(1), 52-67.
- Axelson, R. D., & Flick, A. (2010). Defining student engagement. *Change: The magazine of higher learning*, 43(1), 38-43.
- Barbour, M. K., & Hodges, C. B. (2024). Preparing teachers to teach online: A critical issue for teacher education. *Journal of Technology and Teacher Education*, 32(1), 5-27.
- Bhargava, S., Negbenebor, N., Sadoughifar, R., Ahmad, S., & Kroumpouzou, G. (2021). Virtual conferences and e-learning in dermatology during COVID-19 pandemic: Results of a web-based, global survey. *Clinics in Dermatology*, 39(3), 461-466.
- Carini, R. M., Kuh, G. D., & Klein, S. P. (2006). Student engagement and student learning: Testing the linkages. *Research in higher education*, 47(1), 1-32.
- de Juana Espinosa, S. A., Brotons, M., Sabater Sempere, V., & Stankevičiūtė, Ž. (2022). An analysis of best practices to enhance higher education teaching staff digital and multimedia skills. *Human Systems Management*, (Preprint), 1-15.
- Finn, J. D., & Zimmer, K. S. (2012). Student engagement: What is it? Why does it matter? *Handbook of research on student engagement* (pp. 97-131). Springer, Boston, MA.
- Hall, T., Millar, M., & O'Regan, C. (2024). Designing futures through student engagement: A policy futures perspective. *Policy Futures in Education*, 22(4), 677-691.
- Hasan, H. F. A., Ilias, A., Rahman, R. A., & Razak, M. Z. A. (2008). Service quality and student satisfaction: A case study at private higher education institutions. *International Business research*, 1(3), 163-175.
- Hoq, M. Z. (2020). E-Learning during the period of pandemic (COVID-19) in the Kingdom of Saudi Arabia: An empirical study. *American Journal of Educational Research*, 8(7), 457-464.
- Jaipong, P., Nyen Vui, C., & Siripipatthanakul, S. (2022). A case study on talent shortage and talent war of True Corporation, Thailand. *International Journal of Behavioral Analytics*, 2(3), 1-12.
- Kaup, S., Jain, R., Shivalli, S., Pandey, S., & Kaup, S. (2020). Sustaining academics during COVID-19 pandemic: The role of online teaching-learning. *Indian Journal of Ophthalmology*, 68(6), 1220.
- Li, Q., Li, Z., & Han, J. (2021). A hybrid learning pedagogy for surmounting the challenges of the COVID-19 pandemic in the performing arts education. *Education and Information Technologies*, 26(6), 7635-7655.
- Limna, P., Kraiwanit, T., & Siripipatthanakul, S. (2022). The growing trend of digital economy: A review article. *International Journal of Computing Sciences Research*, 6, 1-11.



- Limna, P., & Siripipatthanakul, S. (2021). A Conceptual Review on the Mediating Role of Student Satisfaction Between Twenty-First Century Learning Style and Student Performance-Effectiveness. *Journal of Management in Business, Healthcare, and Education*, 1(1), 1-16.
- Mahyoob, M. (2020). Challenges of e-Learning during the COVID-19 Pandemic Experienced by EFL Learners. *Arab World English Journal (AWEJ)*, 11(4).
- Malkawi, E., Bawaneh, A. K., & Bawa'aneh, M. S. (2020). Campus off, education on: UAEU Students' satisfaction and attitudes towards e-learning and virtual classes during COVID-19 pandemic. *Contemporary Educational Technology*, 13(1), ep283.
- McMahon, B., & Portelli, J. P. (2004). Engagement for what? Beyond popular discourses of student engagement. *Leadership and policy in schools*, 3(1), 59-76.
- Nguyen, T. (2015). The effectiveness of online learning: Beyond no significant difference and future horizons. *MERLOT Journal of Online Learning and Teaching*, 11(2), 309-319.
- Novita, D., & Mochklas, M. (2021). Performance of Private Universities Lecturers During Covid-19 Pandemic: Webinars and Online Training. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, 12(9), 3005-3017.
- Palmer, S. R., & Holt, D. M. (2009). Examining student satisfaction with wholly online learning. *Journal of Computer Assisted Learning*, 25(2), 101-113.
- Toquero, C. M., & Talidong, K. J. (2020). Webinar technology: Developing teacher training programs for emergency remote teaching amid COVID-19. *Interdisciplinary Journal of Virtual Learning in Medical Sciences*, 11(3), 200-203.
- Rost, M. (2006). Generating student motivation. *WorldView*, 1-4.
- Seifert, T. (2004). Understanding student motivation. *Educational research*, 46(2), 137-149.
- Siripipattanakul, S., Siripipatthanakul, S., Limna, P., & Auttawechasakoon, P. (2022). Marketing mix (4Cs) affecting decision to be an online degree student: A qualitative case study of an online master's degree in Thailand. *International Journal on Integrated Education*, 5(4), 31-41.
- Siripipatthanakul, S., Jaipong, P., Limna, P., Sitthipon, T., Kaewpuang, P., & Sriboonruang, P. (2022). The impact of talent management on employee satisfaction and business performance in the digital economy: A qualitative study in Bangkok, Thailand. *Advance Knowledge for Executives*, 1(1), 1-17.
- Sitthipon, T., Phayaphrom, B., & Siripipattanakul, S. (2022). The influence of e-government information and social media engagement on the intention to introduce tourist attractions among Thai tourists. *International Journal of Trend in Scientific Research and Development*, 6(3), 358-369.
- Swan, K. (2003). Learning effectiveness online: What the research tells us. *Elements of quality online education, practice and direction*, 4(1), 13-47.
- Walther, L. E., Blödown, A., Volkenstein, S., Dazert, S., & Löhler, J. (2021). Webinar-based continuing medical education in otorhinolaryngology during the COVID-19 pandemic in Germany: A longitudinal study. *BMJ open*, 11(12), e049687.
- Wang, Y., & Ruhe, G. (2007). The cognitive process of decision making. *International Journal of Cognitive Informatics and Natural Intelligence (IJCINI)*, 1(2), 73-85.



- Wang, Y., & Chiew, V. (2010). On the cognitive process of human problem-solving. *Cognitive Systems Research*, 11(1), 81-92.
- Williams, K., & Williams, C. (2011). Five key ingredients for improving motivation. *Research in Higher Education Journal*, 11, 1-23.
- Yahaya, N., Isyaku, I., Lawal, M., Ismail, M., Kumar, A., & Barik, M. (2020). Online education during COVID-19 periods. *A Text Book of The SARS-CoV-2: Guidelines and Protocol Development.*—2020.—PP, 147-165.
- Zepke, N., & Leach, L. (2010). Improving student engagement: Ten proposals for action. *Active Learning in Higher Education*, 11(3), 167-177.



Tourist Behavior in Cultural Tourism: A Case Study of Tourism Routes in Phetchaburi, Thailand

Yutthapoom Suwannavej

College of Management, University of Phayao, Bangkok, Thailand

yutthapoom.s@rmutp.ac.th

(Corresponding Author)

ORCID ID: 0009-0003-5523-9326

Seri Wongmontha

College of Management, University of Phayao, Bangkok, Thailand

seri.wong@yahoo.com

ORCID ID: 0009-0007-4065-899X

Chawalee Na Thalang

College of Management, University of Phayao, Bangkok, Thailand

ajarnchawalee@gmail.com

ORCID ID: 0009-0003-9801-9059

Chusana Techakana

King Mongkut's University of Technology North Bangkok, Thailand

chusana.t@kmutnb.ac.th

ORCID ID: 0009-0009-3728-8013

ABSTRACT

Objective: The study's purposes were to 1) examine the behaviour of Thai tourists who visited the cultural destinations in the Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi, Thailand and 2) study their viewpoints towards these destinations.

Methods: Four hundred Thai tourists with experience in cultural tourism travelling to Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi responded to a questionnaire. Through a quantitative approach, the data were analysed using descriptive and inferential statistics, including frequencies, percentages, means, and standard deviations.

Results: It was found that 1) with an average travel expense per trip of under 15,000 baht, the tourists visited the province with their families primarily by car for 2-4 days more than twice a year. Besides, some of the decisions to travel were made based on the province's breathtaking natural sights, and thus, natural tourism received considerable attention from tourists, with merit-making activities are another major factor contributing to such decisions. 2) Phetchaburi encompasses several sacred sites and historical and cultural landscapes, including some of the country's most famous attractions, making the tourists feel inclined to embrace and appreciate the province's artistic treasures. In addition, the increasing number of tourists whose age, education, and occupation varied enormously, interested in cultural tourism in the province was attributed to the fact that they found it intrinsically valuable to be exposed to different cultures and traditions to enrich themselves.

Keywords: *Tourist Behaviour, Cultural Tourism, Phetchaburi, Tourism Route, Thai Tourist*



INTRODUCTION

The tourism industry was of considerable significance to the Thai economy due to its crucial contribution to both direct and indirect advantages to the economy, society, environment, and culture. Mainly, it was considered the country's prominent source of income, initiating inbound foreign currency, currency in circulation, additional employment, and shared prosperity to diverse areas of the region. Tourism enacted the development of transportation infrastructure, commercial trades, and investments, which encouraged Thailand's economic expansion and acceleration (*The Third National Tourism Development Plan*, 2022). Several dynamic factors influenced tourism, including internal factors such as precarious political situation, government regulation, private sector adjustment and cooperation from relevant institutions; external factors concerned tourism competitiveness, behavioural changes, needs and expectations of the tourists, a vast shift in the world population structure which was undergoing demographic upheaval into ageing societies, and the development of technology and innovation affecting the tourism industry along with regional and international collaboration. The COVID-19 pandemic also hastened transformation in economic and social activities, resulting in the "New Normal", where tourists expressed higher consideration of safety and hygiene standards. Therefore, the Ministry of Tourism and Sports, as a secretariat of the Committee on National Tourism Policy and the leading institution to promote and support the tourism industry in Thailand, had prepared the Third National Tourism Development Plan (2023-2027) to holistically outline the strategic directions of Thailand tourism development and integrate all associated sectors to prepare for possible challenges in the future tourism situation (*The Third National Tourism Development Plan*, 2022).

Interestingly, in 2021, Thailand was ranked in the top five of the "World's Best Countries for Cultural Heritage Influence 2021" (Ireland, 2021). As of 2020, during the pandemic, the cities that generated most income in Thailand were Bangkok, Chiangmai, Chonburi, Phuket, Songkhla, Prachuap Khiri Khan, Kanchanaburi, Krabi, Phetchaburi and Nakhon Ratchasima, with Phetchaburi bringing a remarkable amount of approximately 13,549 million Thai Baht (Puttanont, 2021). Located in the southwest of Bangkok, Phetchaburi was an important border town between the South and the Central regions. The city was also well known for its bountiful natural sights with sea coasts adjacent to the Gulf of Thailand (Phetchaburi Provincial Development Plans, 2018). In the interest of enhancing the popularity of the attractions, literary tourism has recently become more marketable among tourists as it offers enthusiasts the opportunity to follow in the footsteps of captivating literature or novels in the existing places. This approach, therefore, concretely improved the local economy, creating higher revenue while carrying cultural heritage. To illustrate, numerous verses from 'Nirat Mueang Phet' (Journey to Phetchaburi) were implemented as a marketing tool to expand Phetchaburi's potential as a cultural city to travel to. Subsequently, it inspected tourist behaviour in cultural tourism, precisely the routes in Phetchaburi. The study had recently advanced seamlessly with tangible results, leading to advertising campaigns targeting Thais and international tourists. The allure of this tourism highly corresponded with the goals of success in Phetchaburi's economic systems and revenue.



RESEARCH OBJECTIVES

1. To examine the behaviour of tourists who visited the cultural destinations in the Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi
2. To study the viewpoints of tourists who visited the cultural destinations in the Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi

LITERATURE REVIEW

Tourism Industry in Thailand

The Master Plan for Tourism Issues emphasises maintaining Thailand's status as a world-class tourist destination. Therefore, it is crucial to develop the entire tourism system by focusing on quality tourists, diversifying tourism offerings to meet tourist demands, and enhancing tourism sectors with potential. The plan aims to preserve the country's unique traditions, customs, culture, and Thai identity, while also valuing natural resources and the environment. The specific goals are:

1. Increasing the Gross Domestic Product (GDP) contribution from tourism.
2. Raising tourism revenue from secondary cities.
3. Improving Thailand's competitiveness in tourism.

These objectives support the national strategy to enhance competitiveness and achieve the set targets. Thai tourism offers diverse and sustainable tourism experiences by integrating culture, traditions, wisdom, and Thai identity to create unique experiences for tourists, promoting travel across various regions. (Tourism Authority of Thailand, 2022)

Tourist Behaviour

Thanaphet (2013) stated that tourist behaviour means every action of tourists, whether consciously or unconsciously, noticeable or unnoticeable to fulfil their needs depending on each condition. Thanaphet (2013) also said that the main objective of the study on tourist behaviour was as follows: 1) to estimate the number of tourists in each season 2) to use the data in planning potential development to promote tourism and services 3) to plan marketing promotions 4) to plan problem prevention 5) to plan and lead to further development in information technology. Studying the various behaviours of tourists is using the principle of reasoning. Examples of tourist behaviour; instances of tourist conduct, and desire to revisit religious locations can be observed through their preferences for food and beverage establishments. These tourists prioritise cleanliness, safety, and hygiene, and are presented with a wide range of options to pick from. Additionally, we see the presence of food shops or restaurants on the site, which attract respondents to visit the religious site due to the appeal of local culinary cuisines and products. Food establishments and eateries are conveniently located near religious locations (Tao-Ing, 2022).



Cultural Tourism

The term “cultural tourism” was clearly defined at a meeting of the International Council on Historic Sites. (International Council on Monuments and Sites: ICOMOS) at Oxford in the year 1969 or 1969 (Moulin: 1989, cited in Koster, 1996: 231) the meaning of tourism culture means a form of tourism in which tourists are inspired or motivated to travel to a destination to observe, learn, have shared experiences, and recognize the cultural value of the community in that destination including creative work, traditions, customs and various activities of the destination community. Tourists and people in the community must respect, learn, and understand each other's cultures to have friendships. Historical tourism means travelling to archaeological and historical attractions to admire and enjoy that destination. In addition, historical tourism is to gain knowledge and understand basic local history and archaeology to have responsibility and awareness towards preserving cultural heritage and the value of the environment by local people participating in tourism management. (Thianhaworn, 2016). The example of cultural tourism related to faith and beliefs, such as in Phatthalung were divided into three categories: 1) religious beliefs about sacred items like the Nokararongkru and Tha Kae Temple have become soft power for Phatthalung province, producing significant money. 2) Guru-related rituals and beliefs, such as Wat Khao Or's magical powers and Pol. Lt. Col. Khun Phan Rak Chatched's legend of a strong magician. These ideas and faith have made Wat Khao a pilgrimage site of power, mystery, and wonders. 3) Religious beliefs, like the revered Phra Borom That Chedi at Wat Khian Bang Kaew. These ideas and religion have made Wat Khian Bang Kaew a popular tourist attraction in Khao Chaison District, Phatthalung. The beliefs and faith in these three categories promoted "Mutelu"—belief-based tourism—which might boost Phatthalung province's economy. Religion-related activities attract more tourists each year. Religious places should be physically developed and tourist routes improved by relevant institutions. In addition to personal beliefs and faith that influence travel decisions, belief-based tourism provided tourists with knowledge about the history of these areas, which attracted historical buffs (Puangsang & Phuangsuan, 2024).

RESEARCH METHODOLOGY

Research Design

The present study employed a questionnaire survey to collect data from tourists visiting the Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi for cultural tourism.

Population and Sampling

The study's population was tourists coming for cultural tourism in the Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi. Cochran's formula was used owing to unknown or infinite population size (Cochran, 1953, cited in Silpcharu, 2010). Indefinite population: Determine the sample size using the following formula. (Cochran, 1953)

$$n = \frac{P(1-P)Z^2}{d^2}$$



Formula for Sample Size Calculation:

n = Sample Size

p = Population proportion (0.5)

z = Confidence level of 0.05 at 1.96 level of significance and 95% level of confidence

d = Margin of error (0.05), with p being determined higher than 50% of the sample size to strengthen credibility

$$\begin{aligned}
 n &= \frac{0.5(1-0.5)1.96^2}{0.05^2} \\
 &= \frac{(0.5)(0.5)(3.8416)}{0.0025} \\
 &= \frac{0.9604}{0.0025} \\
 &= 384.16
 \end{aligned}$$

All in all, the present study must include a minimum of 384 participants, with a margin of error of less than 5% and a confidence level of 95%. Thus, 400 participants, complying with the criteria of 384, were identified to facilitate data evaluation and analysis.

The study's sampling technique was convenience sampling. Using this technique, 400 tourists who happened to be at the site at the time of data collection responded to a questionnaire designed to gain insight into their travel characteristics and perspectives on cultural tourism sites in the Khlong Krachaeng Sub-district in Mueang District of Phetchaburi.

Research Instrument

A quantitative survey methodology was carried out to thoroughly cover the study of the following aspects of Thai tourists who travelled to the Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi, Thailand. Part 1 studied the behaviour of tourists coming to cultural routes in the Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi. Part 2 investigated the perspectives of tourists coming to cultural routes in the Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi.

Data Collection

The data were collected from tourists visiting cultural routes in the Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi. The quantity gathered depended on the tourists in the Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi.

Data Analysis

The statistics used to analyse data were 1) descriptive statistics, which describe basic features of the data, including frequencies, percentages, means, and standard deviations, and 2) inferential statistics, which test the research hypothesis, comprising the chi-square test, t-test, and one-way analysis of variance (One-way ANOVA or F-test).



RESULTS

The study's results were from a questionnaire comprising two separate self-rating scales, one examining the tourists' travel characteristics and the other tourists' perspectives on cultural tourism sites in Khlong Krachaeng Sub-district in Mueang District of Phetchaburi.

Table 1: Respondents' Travel Characteristics (n=400)

Travel Characteristics	Frequency	Percentage (%)
1. Travel Frequency per Year		
1.1 Once	107	26.75
1.2 Twice	114	28.50
1.3 More Than Twice	179	44.75
Total	400	100.00
2. Travel Types		
2.1 With Family	211	52.75
2.2 With Friends	121	30.25
2.3 Solo	43	10.75
2.4 On a Business Trip	20	5.00
2.5 On a Guided Tour	5	1.25
Total	400	100.00
3. Length of Stay		
3.1 2 - 4 days	204	51.00
3.2 1 day	156	39.00
3.3 More than 4 days	40	10.00
Total	400	100.00
4. Travel Modes		
4.1 By personal car	312	78.00
4.2 By rental car/van	49	12.75
4.3 By tour bus	15	3.75
4.4 By fixed-route transit	11	2.75
4.5 Other	13	3.25
Total	400	100.00
5. Travel Expense per Trip		
5.1 15,000 Baht or less	198	49.50
5.2 15,001 - 20,000 Baht	160	40.00
5.3 20,001 - 25,000 Baht	30	7.50
5.4 25,001 - 30,000 Baht	12	3.00
Total	400	100.00
6. Travel Motivators		
6.1 Natural Wonders	162	40.50
6.2 Historical and Cultural Sites	88	22.00
6.3 The Locals' Lifestyle	64	16.00
6.4 Lodging	42	10.50
6.5 Local Dishes and Desserts	28	7.00
6.6 Local Festivals and Events	16	4.00
Total	400	100.00



7. Tourist Objects		
7.1 Natural Tourism	176	44.00
7.2 Gastronomic Tourism	58	14.50
7.3 Religious Tourism	52	13.00
7.4 Cultural Tourism	39	9.75
7.5 Recreational Tourism	26	6.50
7.6 Creative Tourism	25	6.25
7.7 Wellness Tourism	16	4.00
7.8 Sports Tourism	8	2.00
Total	400	100.00
8. Tourist Activities		
8.1 Making Merit and Praying for Blessings	112	28.00
8.2 Playing in the Waves and Walking Along the Beach	108	27.00
8.3 Tasting Local Delicacies and Practicing Pastry Skills	66	16.50
8.4 Taking Photos and Engaging With the Locals	34	8.50
8.5 Visiting Filming / Featured Locations	26	6.50
8.6 Visiting Historical and Cultural Sites	19	4.75
8.7 Going Trekking and Forest Hiking	15	3.75
8.8 Engaging in Creative Activities	20	5.00
Total	400	100.00
9. Tourist Attractions		
9.1 Natural Attractions	152	38.00
9.2 Religious Attractions	90	22.50
9.3 Gastronomic Attractions	64	16.00
9.4 Local Attractions	24	6.00
9.5 Cultural Attractions	26	6.50
9.6 Wellness Attractions	23	5.75
9.7 Creative Attractions	21	5.25
Total	400	100.00

Table 1 shows that most informants (44.75%) reported having travelled more than twice each year. They preferred travelling by car (78.00%) with their family (52.75%), going on a 2-4-day trip (51.00%), and making merit and praying for blessings (28.00%). Most informants (49.50%) reported spending 15,000 baht or less on a single trip. Considering travel motivation, one of the critical psychological influences of tourist behaviour, the informants were mainly drawn by nature-related motivations (i.e., 'Natural Tourism' (44.00%), 'Natural Attractions' (38.00%), and 'Natural Wonders' (40.50%).



Table 2: Mean, Standard Deviation, and Descriptive Equivalent Regarding Tourists' Perspectives on Cultural Tourism Sites in Khlong Krachaeng Sub-district in Mueang District of Phetchaburi

Variables & Questionnaire Items	$\bar{x}$	S.D.	Interpretation
1. Destination Image			
1.1 I am drawn to cultural tourism sites in Phetchaburi via various platforms, either digital or conventional.	4.40	0.593	High
1.2 I am drawn to cultural tourism sites in Phetchaburi via the work of Thailand's best-renowned poet, Sunthorn Phu, entitled 'Nirat Mueang Phet' (Journey to Phetchaburi).	4.45	0.752	High
1.3 I am drawn to cultural tourism sites in Phetchaburi via some of the lessons learned in school.	4.35	0.670	High
1.4 I am drawn to cultural tourism sites in Phetchaburi via oral storytelling.	4.42	0.650	High
1.5 It is safe to travel to cultural tourism sites in Phetchaburi.	4.43	0.635	High
Overall	4.45	0.584	High
2. Local Culture & Lifestyle			
2.1 The culture and society as a whole are unique and captivating.	4.35	0.671	High
2.2 The locals' lifestyle is appealing.	4.34	0.517	High
2.3 The locals' costumes have been well-preserved.	4.28	0.584	High
2.4 The heritage buildings and structures have been well-preserved.	4.25	0.692	High
2.5 The locals are friendly and generous to the tourists.	4.26	0.446	High
Overall	4.40	0.642	High
3. Value & Artistic Legacy			
3.1 Cultural tourism sites in Phetchaburi have historical value.	4.50	0.512	High
3.2 Cultural tourism sites in Phetchaburi have architectural value.	4.40	0.501	High
3.3 Cultural tourism sites in Phetchaburi consist of a variety of art forms.	4.35	0.589	High
3.4 Cultural tourism sites in Phetchaburi are home to some of the most elegant, admirable temples in the country.	4.45	0.684	High
3.5 Cultural tourism sites in Phetchaburi add value to the society and country.	4.46	0.680	High
Overall	4.45	0.546	High



4. Psychological Benefit				
4.1	Visiting cultural tourism sites in Phetchaburi promotes a sense of relaxation.	4.55	0.609	Highest
4.2	Visiting cultural tourism sites in Phetchaburi offers me new and unique experiences.	4.48	0.647	High
4.3	Visiting cultural tourism sites in Phetchaburi makes me more knowledgeable.	4.45	0.600	High
4.4	Visiting cultural tourism sites in Phetchaburi infuses me with a sense of happiness and good fortune.	4.47	0.662	High
4.5	The locals of cultural tourism sites in Phetchaburi are friendly and generous to the tourists.	4.40	0.684	High
Overall		4.45	0.514	High
Summary		4.40	0.506	High

$\bar{x}$ = mean, and S.D.= Standard Deviation

As presented in Table 2, the tourists perceived cultural tourism sites in Phetchaburi to be high. When considering each category, it was apparent that:

1. The 'Destination Image' category was generally perceived at a high level, with an overall mean score of 4.45. Specifically, in terms of cultural tourism sites in Phetchaburi via the work of Thailand's best-renowned poet, Sunthorn Phu, entitled 'Nirat Mueang Phet' (Journey to Phetchaburi), the highest mean score of 4.45, followed by safe to travel to cultural tourism sites in Phetchaburi at 4.43, and drawn to cultural tourism sites in Phetchaburi via oral storytelling 4.42, at thus being ranked third, while 'oral storytelling' and 'some of the lessons learned in school' shared received the lowest mean score of 4.35.

2. The 'Local Culture & Lifestyle' category was generally perceived at a high level, with an overall mean score of 4.40. Based on the percentage responses in each category, in descending order of agreement, the tourists perceived that '*the culture and society as a whole are unique and captivating*' at 4.35, '*the locals' lifestyle is appealing*' at 4.34, '*the locals' costumes have been well-preserved*' at 4.28, '*the locals are friendly and generous to the tourists*' at 4.26, and '*the heritage buildings and structures have been well-preserved*' at 4.25.

3. The 'Value & Artistic Legacy' category was generally perceived at a high level, with an overall mean score of 4.45. When considering each category, the results indicated that cultural tourism sites, arranged in descending order of agreement, '*have the historical value*', '*add value to the society and country*', '*have the architectural value*', '*consist of a variety of art forms*', and '*are home to some of the most elegant, admirable temples in the country*', obtaining mean scores of 4.50, 4.46, 4.45, 4.40, and 4.35, respectively.

4. The 'Psychological Benefit' category was generally perceived at a high level with an overall mean score of 4.45. In each category, it was found that visiting cultural tourism sites in Phetchaburi '*promotes a sense of relaxation*' at 4.55, offers the tourists '*new and*



unique experiences' at 4.48, infuses them *'with a sense of happiness and good fortune'* at 4.47, and makes them *'become more knowledgeable'* at 4.45. The statement scoring the lowest ($\bar{x} = 4.40$), yet still considered high in absolute terms, was the one read, *'The locals of cultural tourism sites in Phetchaburi are friendly and generous to the tourists.'*

DISCUSSIONS

Significant aspects of the findings can be discussed as follows:

Tapping into the informants' differences, it was found that differences in age, education level, and occupation directly influenced how they perceived the concept of cultural tourism. This is in agreement with the study titled 'Adaptive Use of "Sin-Sai" Literature for Supporting Cultural Tourism' conducted by Onlamai & Suttipisan (2015) which documented that the respondents answered 'Strongly Agree' to the statements involving tourism promotion ($x = 4.33$) and managing tourism's impacts ($x = 4.27$) and that they responded 'Agree' to the statements concerning community engagement in tourism development ($x = 4.17$), the use of "Sin-Sai" literature to support cultural tourism ($x = 4.15$), the practical value of "Sin-Sai" literature ($x = 3.98$), and managing tourism activities ($x = 3.82$). Even so, using "Sin-Sai" to promote cultural tourism in the region could not come to fruition without a consensual agreement between the concerned parties. More importantly, in addition to being actively involved in the planning, decision-making, and implementation processes, such parties had to be equipped with the knowledge and transferable skills to tackle tourism challenges.

The tourists mentioned that Phetchaburi encompasses several sacred sites and historical and cultural landscapes, including some of the country's most famous attractions, thus making them inclined to embrace and appreciate the province's artistic treasures. The result is supported by Piamdontree's (2015) study. Their research work, titled 'The Use of Literature Khunchang Khunphaen for Promoting Cultural Tourism in Suphan Buri Province', revealed that using the story of *The Tale of Khun Chang Khun Phaen* could potentially enhance and promote cultural tourism in Suphan Buri since the province has distinctive advantages of cultural tourism resources associated with the tale. Visitors can experience the real-life locations behind this Thai epic poem in this province. Moreover, this result is in concert with the study entitled 'Thai Tourist Expectation and Perception to the Tourism Management of Amphawa Floating Market in Samut Songkhram Province', carried out by Asavapromptada (2007), which indicated that tourists' occupation and income had a significant impact on their perspectives regarding the concept of cultural tourism in Samut Songkhram ($p < .05$).

CONCLUSIONS

The primary purposes of this study were to examine the behaviour of Thai tourists who visited the cultural destinations in the Khlong Krachaeng Sub-district in the Mueang District of Phetchaburi, Thailand and to study their viewpoints towards these destinations. The study revealed that 1) the tourists, on average, spent less than 15,000 baht per trip and predominantly travelled to the province with their families by car. They often stayed for 2-4 days and made this trip more than twice a year. In addition, confident travel choices were



influenced by the province's awe-inspiring natural landscapes. As a result, natural tourism garnered significant interest from tourists. Engaging in merit-making activities is an important aspect that influences such decisions. 2) Phetchaburi contains numerous religious places and historical and cultural landscapes, including some of the most renowned attractions in the country. This entices tourists to embrace and enjoy the province's artistic assets. Furthermore, the growing influx of tourists with diverse ages, education, and career backgrounds drawn explicitly to cultural tourism in the province can be linked to their recognition of the inherent worth of immersing themselves in various cultures and traditions for personal enrichment. The increasing number of tourists, whose age, education, and occupation varied enormously, interested in cultural tourism in Phetchaburi was attributed to the fact that they found it intrinsically valuable to be exposed to different cultures and traditions to enrich themselves.

RECOMMENDATIONS

Based on the insights gathered from this study, a series of recommendations are proposed to enhance and support the development of cultural tourism in Phetchaburi. It is essential that relevant stakeholders—including local entrepreneurs, community leaders, and community members—collaborate effectively to foster and implement strategies that specifically promote the unique cultural tourism offerings of the region. Utilising digital platforms such as Facebook pages and Line Official accounts to disseminate information and engage with potential tourists can be particularly effective. These channels should be leveraged to showcase engaging and insightful events, thus drawing greater attention and interest from tourists. This targeted approach can help maximise the visibility and appeal of Phetchaburi's cultural tourism experiences.

REFERENCES

- Asavapromtada, T. (2007). *Thai tourist expectation and perception to the tourism management of Amphawa Floating Market in Samut Songkhram province*. Unpublished minor thesis, Srinakharinwirot University, Bangkok, Thailand.
- Cochran, W.G. (1953). *Sampling Techniques*. New York : John Wiley & Sons.
- Ireland, S. (2021, January 31). *Revealed: World's best countries for cultural heritage influence, 2021*. Ceoworld. Retrieved October 20, 2021, from <https://shorturl.at/gIzxY>
- Koster, Emlyn H. (1996). *Science Culture and Cultural Tourism*. In Mike Robinson, Nigel Evans and Paul Callaghan, eds. *Tourism and Cultural Change: Tourism and Culture towards the 21st Century*, pp. 227–238. Sunderland: The Center for Travel and Tourism and Business Education.
- Onlamai, W. & Suttipisan, S. (2015). Adaptive Use of “Sin–Sai” Literature for Supporting Cultural Tourism. *International Thai Tourism Journal*, 11(2), 64-77.
- Phetchaburi provincial development plans, 2018-2022 (revised edition)*. (2018). Phetchaburi Provincial Governor's Office. Retrieved October 29, 2021, from https://phetchaburi.go.th/phet2/CODE/files/1558496349_plan6165.pdf



- Piamdontree, A. (2015). *The use of literature Khunchang Khunphaen for promoting cultural tourism in Suphan Buri province*. Unpublished master's thesis, Chulalongkorn University, Bangkok, Thailand.
- Puangsang, M., & Phuangsuan, P. (2024). Beliefs and Faith Encouraging Tourism in Phatthalung Province. *Journal of Liberal Arts RMUTT*, 4(2), 58-71.
<https://doi.org/10.60101/jla.2023.4.2.3287>
- Puttanont, W. (2021, March 11). *Thailand suffers biggest tourism revenue loss due to COVID in 2020*. Thebangkokinsight. Retrieved October 20, 2021, from <https://www.thebangkokinsight.com/news/business/569972/>
- Silpcharu, T. (2010). *Research and statistical analysis with SPSS* (11th ed.). Business R&D, Bangkok, Thailand.
- Tao-Ing, R. (2022). *Tourist behavior and intention to revisit the religious sites: the case of Cagayan Valley Region, Philippines*. SSRN.
- The Third National Tourism Development Plan, 2023–2027. The National Tourism Policy Committee. (2022). Retrieved October 11, 2022, from <https://shorturl.at/KPOJR>
- Thanaphet, P. (2013). *Behavior of Thai tourists in Buddhist tourism, a case study of Wat Pa Tham Utthayan, Mueang District, Khon Kaen Province*. Khon Kaen University.
- Thianthaworn, Y. (2016). *Guidelines for developing historical tourist attractions for tourists. Thais and foreigners, case study of Phra Nakhon Si Ayutthaya Historical Park*. Rajamangala University of Technology Phra Nakhon.
- Tourism Authority of Thailand. (2022). *Tourism service development plan 2023 – 2027*. Bangkok: Tourism Authority of Thailand.



Knowledge, Attitude, and Practice (Behaviour) Among Health Promotion School Students

Somboon Chaiprakarn

Faculty of Engineering, Science and Technology
Suvarnabhumi Institute of Technology, Thailand

s.chaiprakarn@gmail.com

(Corresponding Author)

ORCID ID: 0000-0001-5357-5201

Chirapat Kaewnaknaew

Independent Researcher, Thailand

chirapat.nuch@gmail.com

ABSTRACT

Objective: This study aims to review knowledge, attitude, and practice (behaviour) among students in the health promotion school

Methods: This qualitative systematic article was based on scholarly papers in the Google Scholar, Scopus, and Web of Science databases. Content analysis was adopted in this study.

Results: The findings show that schools have implemented all health promotion school (HPS) components, including health policy, physical school environment, psychosocial school environment, health education, health services, nutrition services, counselling/mental health, physical exercise, staff health promotion, and family and community outreach. These components have been tailored to local conditions.

Conclusions: Changes in attitudes, knowledge, and behaviour were documented and essential. Examples of changes included paying more attention to health, improving psychological well-being and confidence, forming teacher-student friendships, feeling more relaxed, increasing knowledge about various health issues, broadening health knowledge, and understanding the HPS concept and impact on increasing knowledge, attitude, and practice (behaviour) among students in the health promotion school.

Recommendation: The recommendation for further studies is to continue questionnaires and interviews to gain more insights into respondents' perceptions.

Keywords: *Knowledge, Attitude, Practice, Health, Promotion, Schools, Behaviour*



INTRODUCTION

Scientific research indicates a significant occurrence of health risk behaviour among students. This necessitates the development of educational initiatives that foster a greater understanding of health. However, mere knowledge acquisition is insufficient to induce behavioural change; additional elements, such as attitudes toward health, must be considered. A correlation exists between knowledge acquisition, attitudes, and engagement in health risk behaviours among students. There is a relationship between knowledge about health, a scale measuring attitudes towards health, and engaging in health risk behaviours. Students demonstrated a lack of understanding of health, as they could not answer correctly. Health knowledge and health attitudes were strong predictors of risky behaviours, with a statistically significant relationship. Moreover, it was suggested that attitudes towards health play a role in moderating the relationship between health knowledge and health risk behaviours. Public health and education policy should encourage healthy behaviours among students, including their knowledge and the cultivation of favourable attitudes toward behaviours that jeopardise health (Al-Gburi et al., 2023; Liu et al., 2023; Alves, 2024). Students who regularly visited dentists had better oral hygiene knowledge and practices, possibly due to customised oral health education and motivation. The profession and authorities are responsible for informing and motivating the public. With its fundamental ideals of justice, equality, empowerment, and advocacy, health promotion offers an innovative but challenging approach to improving oral and general health. It transfers health responsibility to individuals, communities, and decision-makers at all levels. Dental health should be taught in schools. Dental health education and other didactic activities should engage students and prioritise social acceptance. The goal should be lifetime acceptability for the student. Thus, education programs should be engaging, vivid, and tailored to each child's learning style. Communities can also support oral health programs. Long-term remuneration requires school, dental, and parent collaboration. More state-level and national surveys should be conducted to improve our dental health services (Siripipatthanakul, 2022; Blaggana et al., 2016; Baptista et al., 2023). Thus, education programs should be engaging, vivid, and tailored to each child's learning style and integrated with healthcare promotion and prevention. Communities can also support health and oral health programs. Long-term remuneration requires school, dental, and parent collaboration. More state-level and national surveys should be conducted to improve health and dental health services and education to improve school students' knowledge, attitude, and practice to ensure school health promotion.

LITERATURE REVIEW

Public Health Education and Promotion

The world is now in the third decade of the 21st Century. The recent gains in public health produced by scientists have been remarkable, particularly in the fast-growing public health education and promotion field. Emphasising the most recent breakthroughs in public health science and illuminating the achievements of the past decade is crucial. Furthermore, it is necessary to identify future difficulties to provide a comprehensive assessment of the current state of the public health education and promotion sector. Health education, such as reproductive health, is incorporated into different disciplines, such as Science, Biology, Sports, and Health Education, in schools throughout many countries, such as Thailand and



Indonesia, including both primary and secondary levels. Health education materials about scientific information published in medical journals or textbooks, as well as schoolbooks targeting children between the ages of 5 and 12. School textbooks should advocate for healthy lifestyles, discourage high-risk sexual behaviours, foster an environment of openness and dialogue regarding reproductive health within families, enhance self-assurance in rejecting and avoiding sexual harassment, promote positive sexual behaviours, and raise awareness about seeking treatment (Thakur & Meadors, 2023).

Health Promotion Schools

Schools have incorporated all components of health promotion schools (HPS), including school health policy, physical school environment, psychosocial school environment, health education, health services, nutrition services, counselling/mental health, physical exercise, health promotion for staff, and outreach to families and communities. These components have been adjusted to fit the specific conditions of the local area. Participants reported various changes in attitudes, knowledge, and behaviour. These changes included paying more attention to health, attaining better psychological well-being and confidence, forming friendships between teachers and students, feeling more relaxed, increasing knowledge about various health issues, developing a broader understanding of health, gaining a better understanding of the HPS concept, actively participating, increasing physical activity, improving sanitary habits, reducing or quitting smoking, eating more nutritious food, increasing safety behaviour, experiencing fewer injuries, and improving parent-child communication (Aldinger et al., 2008). There is a shortage of scientific information regarding the architecture of effective school-based health promotion interventions (HPIs), despite their ubiquitous usage in schools. The study identified and described three primary categories of interventions: (1) comprehensive and enduring interventions, (2) interventions that focus on modifying school policies, and (3) interventions that have proven to be very effective. Efficient school-based health promotion interventions (HPIs) involve engaging several target groups, utilising different providers, including external experts, and implementing timely and appropriate follow-ups. This paper presents the consequences for educational research and school practice (Zurc & Laaksonen, 2023).

Students' Knowledge, Attitude, and Practice (Behaviour)

The two main factors influencing students' hygiene are their attitude towards hygiene and hygiene behaviours. To promote education or knowledge on hygiene, foster a positive attitude towards hygiene, and encourage the adoption of proper hygiene practices. Education and knowledge are social media platforms, online platforms, and websites (Wungtungkum, 2022). The example study examines the level of COVID-19 knowledge, attitude, and practice among students at educational institutions in Malaysian Borneo, encompassing both urban and rural areas. The scarcity has revealed the disparity in COVID-19 knowledge, attitude, and behaviour among students in Sabah, who come from varied ethnic, social, and belief backgrounds, which requires further investigation. Furthermore, this study exhibited a high response rate, bolstering the capacity to generalise and ensure precise outcome measurement. The primary constraint of this study is its cross-sectional design, which means that the relationship between determinants and outcome variables cannot be interpreted as indicative of causality (Sazali et al., 2021). It is essential to acknowledge that the COVID-19 pandemic is just one of several public health risks, and its trajectory is unknown. While there is a



consistent decrease in new cases in Thailand, there is a potential for additional transmission waves, particularly as the country approaches the annual flu season in October. The pandemic has increased the vulnerability of the population due to the potential worsening of physical inactivity and unhealthy lifestyles. This can amplify the effects of future epidemics and contribute to the development of non-communicable diseases such as obesity, hypertension, and diabetes. These conditions are also risk factors for complications arising from COVID-19 infection. Hence, the declining occurrence among Thai adults should be a matter of concern for the government and policymakers as they deliberate on methods to safeguard the health of the people in the following months and years (Siripipatthanakul, 2022).

A health-promoting school is a school that consistently enhances its ability to serve as a healthy environment for living, learning, and working—an institution that actively promotes and supports its students' and staff's well-being and health. Promotes health and facilitates learning using all available resources. Collaborates with health and education authorities, educators, teacher unions, students, parents, healthcare professionals, and community leaders to promote a healthy environment within the school. The goal is to create a conducive student environment by offering comprehensive school health education and services. This includes engaging in school and community projects, implementing health promotion programs for staff, ensuring nutrition and food safety programs, providing opportunities for physical education and recreation, and offering counselling and social support programs for mental health promotion. Enforces regulations and procedures that uphold an individual's welfare and honour, offer numerous chances for accomplishment, and recognize sincere efforts and personal accomplishments. Seeks to enhance the well-being of school staff, families, community members, and students. Collaborates with community leaders to foster their comprehension of how the community supports or hinders health and education (World Health Organization, WHO, 2024). Thus, the concept of a health-promoting school is related to improving students' knowledge, attitude, and practice (behaviour) in healthcare promotion and prevention of mental and physical individuals, including healthcare and oral care.

RESEARCH METHODOLOGY

A systematic review is a comprehensive and trustworthy evaluation of current evidence using objective, rigorous, and replicable research methods. Data analysis is a systematic approach used to derive meaning from extensive amounts of information, providing insights into the effectiveness or ineffectiveness of many factors. Systematic reviews aim to delineate areas of ambiguity and pinpoint the absence of pertinent information while highlighting the necessity for new investigations. Before commencing the review, following the systematic review procedure is advisable. To accomplish this, other systematic reviews can be searched for to serve as exemplars, familiarise oneself with a dictionary of often employed terminology, and acquire the ability to differentiate between various types of systematic reviews. This study employed qualitative methodologies. Qualitative research seeks to understand how individuals or groups make decisions and take specific actions. Also, it explains why specific phenomena occur. The study explained why qualitatively, to achieve research aims quickly, accurate data provides comprehensive insights into specific situations (Siripipatthanakul et al., 2022; Limna, 2023; Kok & Siripipatthanakul, 2023; Lim & Siripipatthanakul, 2023; Siripipatthanakul et al., 2024; Phuangsuan et al., 2024, a & b; UOW Library, 2024). This systematic review study employed purposive sampling by selecting scholarly papers from



DISCUSSIONS

According to Blaggana et al. (2016), Wungtongkum (2022), Al-Gburi et al. (2023), Liu et al., (2023), Siripipatthanakul (2022), Baptista et al. (2023), Masson et al. (2024) and Alves (2024), scientific research demonstrates a notable prevalence of health risk behaviour among students. This requires the creation of educational programs that promote a more profound comprehension of health. However, simply gaining knowledge is not enough to change behaviour; other factors must also be considered, such as attitudes toward health. There is an association between knowledge acquisition, attitudes, and engagement in health risk behaviours among students. A correlation exists between one's level of health information, a metric assessing one's attitudes towards health, and the likelihood of engaging in health risk activities. Students had a deficiency in their comprehension of health, as they could not provide accurate answers. Health knowledge and health attitudes were robust indicators of dangerous behaviours, exhibiting a statistically significant correlation. Furthermore, it has been proposed that attitudes towards health have a moderating effect on the link between health knowledge and health risk behaviours. Public health and education policy should promote healthy behaviours among students, encompassing their knowledge and the development of positive attitudes towards behaviours that pose a health risk. Regularly attending dental appointments was associated with improved oral hygiene knowledge and practices among students, potentially because of tailored oral health instruction and increased motivation. The profession and authorities are responsible for disseminating information and inspiring the public. Health promotion presents a novel yet challenging method to enhance oral and overall health based on fundamental justice, equality, empowerment, and advocacy principles. It delegates the responsibility for health to individuals, communities, and decision-makers at all levels. It is imperative to incorporate dental health education into schools' curricula. Health promotion has flourished for many years, offering frameworks and tools and discussing how to achieve success and effectively limit the risk of counterproductive treatments, as stated by the World Health Organization (WHO).

CONCLUSIONS

Health-promoting schools improve their ability to provide a healthy living, learning, and working environment. A school that actively promotes student and staff wellness. Uses all resources to promote health and learning. Works with health and education officials, educators, teacher unions, students, parents, healthcare experts, and community leaders to promote school health. Provide comprehensive school health instruction and services to provide a suitable atmosphere for children. This includes school and community initiatives, staff health promotion programs, nutrition and food safety programs, physical education and recreation, mental health counselling and social support programs. Students should actively participate in dental health education and other instructional activities, prioritising promoting social acceptance. The objective should be to ensure that the student's acceptability lasts throughout their lives. Therefore, educational programs must be captivating, vibrant, and customised to suit the unique learning style of each child. Communities can also support health and oral health programs. Long-term compensation necessitates the cooperation of educational institutions, dental professionals, and parents. Additional state-level and nationwide surveys should be undertaken to enhance the quality of our oral healthcare services. Therefore, education programs must be designed to be captivating, vibrant, and



customised to suit the unique learning style of each kid. Additionally, these programs should be seamlessly interwoven with healthcare promotion and prevention efforts. Communities can also facilitate and promote health and oral health activities. Long-term compensation necessitates the cooperation of educational institutions, dental professionals, and parents. Additional state-level and national surveys should be undertaken to enhance health and dental health services and education, enhance knowledge, attitude, and practice among school students, and ensure school health promotion. Researchers have focused extensively on school-based health promotion, leading to diverse perspectives on the most effective methods for enhancing students' health and well-being. Frequently, school-based health promotion projects or interventions focus on schools without actively engaging school stakeholders in the design process. Although this presents a great chance to initiate change and enhance certain aspects of students' health and wellbeing, one drawback identified in the literature is that the school, as the recipient of the intervention, may misconstrue the actual needs and have limited stakeholder participation due to its setting to ensure knowledge, attitude, and practice (behaviour) of school students can be enhancing.

LIMITATION AND RECOMMENDATIONS

This study is a systematic review article and may not include respondents. Thus, questionnaires or interviews are recommended for further studies for in-depth insights and more understanding of the knowledge, attitude, and practice (behaviour) of students in health-promoting schools.

REFERENCES

- Aldinger, C., Zhang, X. W., Liu, L. Q., Pan, X. D., Yu, S. H., Jones, J., & Kass, J. (2008). Changes in attitudes, knowledge and behavior associated with implementing a comprehensive school health program in a province of China. *Health Education Research*, 23(6), 1049-1067. <https://academic.oup.com/her/article/23/6/1049/555616>
- Al-Gburi, G., Al-Shakarchi, A., Al-Dabagh, J. D., & Lami, F. (2023). Assessing knowledge, attitudes, and practices toward sexually transmitted infections among Baghdad undergraduate students for research-guided sexual health education. *Frontiers in Public Health*, 11, 1017300. <https://doi.org/10.3389/fpubh.2023.1017300>
- Alves, R. (2024). The relationship between health-related knowledge and attitudes and health risk behaviours among Portuguese university students. *Global Health Promotion*, 31(1), 36-44. <https://doi.org/10.1177/17579759231195561>
- Baptista, A., Gavinha, S., & Conceição Manso, M. (2023). Oral health knowledge and attitude among healthcare professionals of long-term care units: a cross-sectional survey. *Special Care in Dentistry*. <https://onlinelibrary.wiley.com/doi/abs/10.1111/scd.12948>
- Blaggana, A., Grover, V., Kapoor, A., Blaggana, V., Tanwar, R., Kaur, H., & Haneet, R. K. (2016). Oral health knowledge, attitudes and practice behaviour among secondary school children in Chandigarh. *Journal of clinical and diagnostic research: JCDR*, 10(10), ZC01. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5121785/>



- Kok, S. L., & Siripipatthanakul, S. (2023). Change Management Model in Corporate Culture and Values: A Case Study of Intel Corporation. *Advance Knowledge for Executives*, 2(1), 1-30.
- Lim, L. & Siripipatthanakul, S. (2023). A Review of Artificial Intelligence (AI) and ChatGPT Influencing the Digital Economy. Proceeding of 3rd International Conference on Research and Development (ICORAD 2023), Indonesia, December 02-03, 2023, 29-42. DOI: 10.47841/icorad.v2i2.139
- Limna, P. (2023). The Digital Transformation of Healthcare in the Digital Economy: A Systematic Review. *International Journal of Advanced Health Science and Technology*, 3(2), 127-132.
<https://www.ijahst.org/index.php/ijahst/article/view/244>
- Liu, R., Dong, X., Ji, X., Chen, S., Yuan, Q., Tao, Y., ... & Yang, Y. (2023). Associations between sexual and reproductive health knowledge, attitude and practice of partners and the occurrence of unintended pregnancy. *Frontiers in Public Health*, 10, 1042879.
- Masson, J., Darlington-Bernard, A., & Darlington, E. J. (2024). Promoting wellbeing within the Health Promoting Schools framework: Could life skills be a means rather than an end?. *Journal of Epidemiology and Population Health*, 72(3), 202748.
<https://doi.org/10.1016/j.jep.2024.202748>
- Moussi, C., Tahan, L., Habchy, P., Kattan, O., Njeim, A., Abou Habib, L., ... & Chahine, M. N. (2024). School-Based Pre-and Post-Intervention Tests Assessing Knowledge about Healthy Lifestyles: A National School Health Awareness Campaign on Children Aged between 3 and 12 Years Old. *Children*, 11(2), 213.
- Phuangsuwan, P., Siripipatthanakul, S., Limna, P., & Siripipattanakul, S. (2024, a). Grammar and Plagiarism Checking Using Grammarly for English Learners: A Systematic Review. *Journal of Wisdom Political Science and Multidisciplinary Sciences*, 7(3), 1-20.
- Phuangsuwan, P., Siripipatthanakul, S., Suttipong, R., Praesri, S., & Wadpong, S. (2024, b). Development of Higher Education Institutions Based on Education Criteria for Performance Excellence (EdPEX) in Thailand. *Advance Knowledge for Executives*, 3(1), 1-14.
- Sazali, M. F., Rahim, S. S. S. A., Mohamed, M. H., Omar, A., Pang, N. T. P., Jeffree, M. S., ... & Ibrahim, M. Y. (2021). Knowledge, attitude and practice on COVID-19 among students during the early phase of pandemic in a university in Borneo, Malaysia. *Journal of public health research*, 10(3), jphr-2021.
- Siripipatthanakul, S. (2011). Development of a Model for Administration of Student Dental Health Promotion Work for Basic Education Schools in Thailand. *International Journal of Learning*, 17(12).
- Siripipatthanakul, S. (2022). The Influence of COVID-19 Perceptions and COVID-19 Worries on Individuals' Intentions to Postpone Dental Visits. *Open Access Journal of Dental Sciences*, 7(1), 000327.
- Siripipatthanakul, S., Muthmainnah & Al Yakin, A. (2022). Student-Centered Learning Strategies for English Foreign Learning (EFL) During the COVID-19 Pandemic. In *The Proceedings of International Conference: Ronggolawe English Teaching Conference (RETCO)* (Vol. 11, No. 1, pp. 11-16).



- Siripipatthanakul, S., Nyen Vui, C., & Phuangsuwan, P. (2024). Strategic Management Adopting Digital Intelligence (Business Intelligence) for Dentistry and Dental Clinics. *Open Access Journal of Dental Sciences*, 9(1), 000388.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4073109
- Thakur, H., & Meadors, A. C. (2023). Insights in public health education and promotion: 2022. *Frontiers in Public Health*, 11, 1280357.
<https://doi.org/10.3389/fpubh.2023.1280357>
- UOW Library (UOW Library, 2024). Systematic Review.
<https://uow.libguides.com/systematic-review/what-is-a-systematic-review>
- Wungtongkum, P. (2022). Factors associated with hygiene behavior among high school students in Chiangmai, Thailand. *Factors associated with hygiene behavior among high school students in Chiangmai, Thailand.*, 111(1), 7-7.
<https://ijrp.org/paper-detail/3976>
- World Health Organization (WHO, 2024). Health Promoting Schools.
https://www.who.int/health-topics/health-promoting-schools#tab=tab_1
- Zurc, J., & Laaksonen, C. (2023, June). Effectiveness of Health Promotion Interventions in Primary Schools—A Mixed Methods Literature Review. In *Healthcare* (Vol. 11, No. 13, p. 1817). MDPI. <https://www.mdpi.com/2227-9032/11/13/1817>



Modelling of Social Influence, Electronic Word-of-Mouth, Previous Experience and Abroad Tour Service Purchase Intentions Among Thai Tourists

Parichat Jaipong

Manipal GlobalNxt University, Malaysia

pj17923@campus.globalnxt.edu.my

(Corresponding Author)

ORCID ID: 0000-0002-9249-3169

ABSTRACT

Objective: This study determines the relationship between social influence, electronic word-of-mouth (E-WOM), previous experience, and tour service purchase intentions.

Method: A quantitative procedure was utilised. The theoretical framework was validated through data collected from 402 Thai abroad tour customers in Thailand. Thai tourists abroad who tour Thailand were surveyed using online convenience sampling. The statistical software SPSS Licenced Version 29 was utilised to conduct the descriptive analysis of the data. The partial least squares structural equation modelling (ADANCO 2.3.2; PLS-SEM) was utilised to test the hypotheses at a significance level lower than 0.001.

Results: There is a relationship between social influence, E-WOM, previous experience, and tour service purchase intention among Thai abroad tour customers. E-WOM significantly mediates social influence and tour service purchase intentions. Moreover, previous experience is the significant mediator between social influence and tour service purchase intentions.

Conclusion: These factors can be used to predict whether Thai customers will purchase an overseas tour service. This study's findings may assist academics by providing the determinants of social influence, attitude toward E-WOM, and previous experience to predict tour service purchase intention among Thai tourists abroad.

Recommendation: More factors should be considered for further study in quantitative research, such as digital marketing and customer satisfaction. Also, qualitative interviews could give more insightful results for strategic planners and researchers in the tourism and hospitality industry.

Keywords: *social influence, E-WOM, previous experience, tour service, purchase intention*



INTRODUCTION

Digital communications and networks are crucial for hospitality and tourism in the digital era. Since its beginning, it has offered many opportunities and difficulties to other industries, including the tourism and hospitality sectors. Digital communications and networks are essential to consider when transitioning innovation into a global market. Several technologies have been created with the capacity to enhance the economy by elevating people's living standards. The hospitality business operates in a competitive market with abundant strategies and new technology. Customers want exceptional service and drive technological innovation, and the hospitality industry is consistently dealing with increasing prices (Limna, 2023; Phuangsuwan et al., 2024). Several studies support the predictors of purchase intention: social influence, electronic word of mouth (E-WOM), and previous experience. These studies may apply to studying purchase intention among tourists abroad in Thailand (Liang et al., 2024; Rinaldi et al., 2024; del Pilar Usurin-Flores et al., 2024; Pane et al., 2024; Ebrahimabad et al., 2024; Dui et al., 2024). Numerous factors influence the purchase intentions of tourists travelling abroad. In this study, the identified predictors are social influence, E-WOM, and previous experience, which are critical digital communication and network factors impacting the purchase intentions of tour services. However, there is a notable lack of studies specifically examining the influence of E-WOM on tour service purchase intentions in Thailand. Hence, this study aims to determine the relationship between social influence, E-WOM, previous experience, and tour service purchase intentions among Thai customers planning tours abroad.

Research Question

How does the partial least square structural equation model (PLS-SEM) explain the relationship between social influence, electronic word-of-mouth, previous experience and abroad tour purchase intention among Thai tourists?

Research Objective

This study identifies the relationship between social influence, E-WOM, previous experience and abroad tour purchase intention in the tourism industry for this study.

LITERATURE REVIEW

Social Influence

Some studies support that social influence is a factor in purchase intentions (Dwisuardinata & Darma, 2023; Gunawan et al., 2023; Phan et al., 2023). Still, social influence did not yield significantly different effects on the behavioural intention for some factors, such as vaccination. No evidence was discovered to support the idea that young individuals are more influenced by



norms when the norm reference group comprises other young people rather than the entire population. Thus, social influence may not be significantly practical in getting young persons to trust and accept a novel vaccine compared to ordinary appeals (Sinclair & Agerström, 2023).

Electronic Word-of-Mouth (E-WOM)

With the rapid pace of digitization and technical advancements, the importance of E-WOM has notably risen. Marketers must consider this factor to connect with clients effectively. E-WOM heuristic cues influence customer behaviour intention and actual behaviour and identify the E-WOM heuristics that most significantly impact buy intention (Kandakova, 2023). E-WOM has developed substantially over the last two decades, greatly influencing contemporary consumer behaviours and changing marketing management strategies in consumer and industry markets (Liu et al., 2024). Some studies support that E-WOM positively influences purchase intention (Romadhoni et al., 2023; Hoang & Tung, 2023; Zahid & Ruswanti, 2024).

Previous Experience

Tourism experiences refer to an individual's personal assessment and involvement in events associated with their tourist activities, including the emotional, cognitive, and behavioural aspects that occur before, during, and after the trip. They determine that the primary focus of tourism planning should be on enabling travellers to create their own remarkable tourism experiences. Therefore, it can be asserted that a remarkable tourism experience cannot be generated through a universal strategy that applies to everyone (Henderson & Kan Tsui, 2019).

Tour Service Purchase Intention

Purchase intention refers to a customer's inclination to repurchase and advocate for using items or services, facilitating future transactions. Hence, the inclination to utilise products or services for future purchases and suggest them to peers indicates purchase intention. Customers' shopping behaviour has changed due to widespread apprehension regarding goods purchases and decreased buying power (Sosanuy et al., 2021; Nuanchaona et al., 2021).

Research Hypotheses

H1: Social media influence significantly impacts electronic word-of-mouth.

H2: Social influence significantly impacts previous experience.

H3: Attitude toward E-WOM significantly impacts tour service purchase intentions.

H4: Previous experience significantly impacts tour service purchase intentions.

H5: Previous experience significantly impacts electronic word-of-mouth.



METHODOLOGY

This quantitative research study gathered data through online closed-ended questionnaires utilising the Likert's Rating Scale. The questionnaire questions were designed using dependable and authentic research data. The measurement instruments' validity was assessed. Validity is the degree to which a measurement accurately represents the researcher's concept (Zikmund, 2013; Siripattanakul et al., 2022; Limna et al., 2022, b). The study variables were assessed using a five-point Likert Scale, with responses ranging from 1 (strongly disagree) to 5 (strongly agree). The demographic questions were based on Siripatthanakul (2022), Phuangsuwan's (2022), and Chaiprakarn (2022). The questionnaire items were adapted from a questionnaire created by Basri et al. (2016) and Sosanuy et al. (2021). Three academic specialists in business and marketing validated the measurements. Data was analysed using SPSS Licenced Version 29 and the partial least squares structural equation modelling (ADANCO 2.3.2; PLS-SEM).

RESULTS

The total number of respondents was 402 Thai abroad tour customers in Thailand, who were collected via an online survey. Most respondents were female (59.5%). They were over 26 years old (88.4%) and had a salary of more than 30,000 baht.

Table 1. Items, Factor Loadings, Cronbach's Alpha and Average Variance Extracted (n=402)

Items	Factor Loadings	Cronbach's Alpha	AVE
Social Influence (SI)		0.737	0.7915
1. I call to consult friends or relatives before deciding to be a tour customer (Mean=3.85, SD.=0.815)	0.8985		
2. I usually call others for more information before becoming a tour service customer. (Mean=3.90, SD.=0.733)	0.8808		
Electronic Word-of-Mouth (ATE)		0.7617	0.5852
1. I read reviews about a tour service I intend to purchase from online platforms before purchasing it. (Mean=4.12, SD.=0.67)	0.755		
2. A positive review will enhance my chances of buying a tour service. (Mean=4.18, SD.=0.695)	0.8265		



3. Negative reviews on social media are more credible as they point out tour service defects. (Mean=4.18, SD.=0.639)	0.6694		
4. I ask other customers before purchasing a tour service. (Mean=4.18, SD.=0.705)	0.7997		
Previous experience (PE)		0.7741	0.6889
1. Tour service websites and online platforms help me judge their credibility for quality. (Mean=4.04, SD.=0.758)	0.8582		
2. My previous experience with physical and online services dictates whether I purchase a tour service. (Mean=4.13, SD.=0.786)	0.7963		
3. If I am unsatisfied with my previous purchases, I won't buy from the tour service website again, no matter what. (Mean=4.00, SD.=0.736)	0.8342		
Tour Service Purchase Intentions (P.I.)		0.7183	0.778
1. I intend to use the Internet to ask for more information about the tour service. (Mean=4.16, SD.=0.759)	0.8519		
2. I would prefer to go online to purchase the tour service rather than physical booking. (Mean=4.14, SD.=0.742)	0.9112		

Table 2. R-squared (SRMR=0.08)

Construct	Coefficient of Determination (R ²)	Adjusted R ²
Attitude towards E-WOM (ATE)	0.4954	0.4929
Previous experience (PE)	0.2404	0.2385
Tour Service Purchase Intention (P.I.)	0.2670	0.2633

**Table 3** Total Effects Inference

Effect	Original Coefficient	Standard Bootstrap Results					Percentile Bootstrap Quantiles		
		Mean Value	Standard Error	T-Value	P-Value		0.03	0.975	0.995
					(2-Sided)	(1-Sided)			
SI → ATE	0.5488	0.552	0.0349	15.7125	0	0	0.4842	0.6225	0.648
SI → PE	0.4904	0.4931	0.0458	10.7121	0	0	0.4058	0.5815	0.6071
SI → PI	0.2925	0.2942	0.0302	9.6758	0	0	0.237	0.3532	0.375
ATE → PI	0.246	0.2488	0.0635	3.8752	0.0001	0.0001	0.1233	0.3767	0.4049
PE → ATE	0.5058	0.507	0.0374	13.5365	0	0	0.4325	0.5765	0.6023
PE → PI	0.4457	0.4465	0.0487	9.1577	0	0	0.3488	0.5397	0.5634

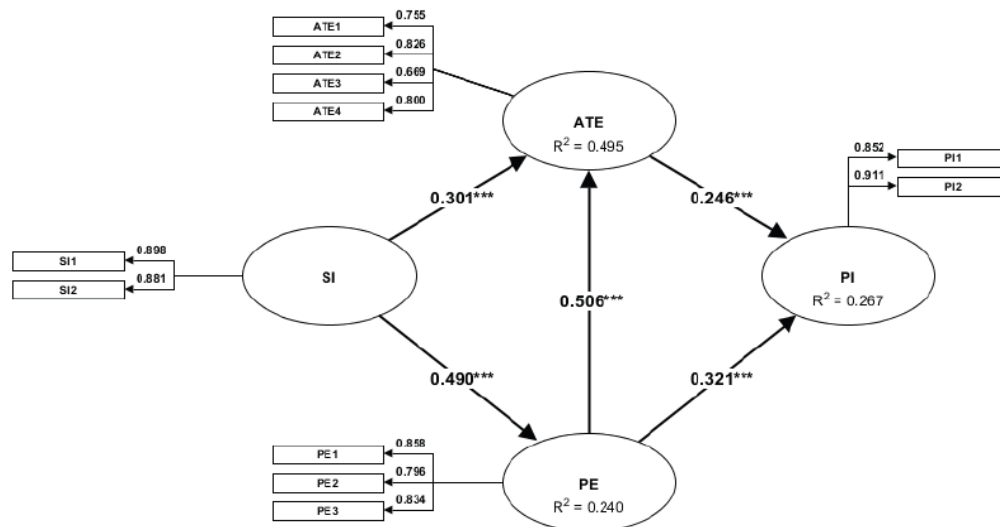


Figure 1. Structural Equation Model (ADANCO) of the Study (SRMR=0.08)
 ***Significant Level at $p < 0.001$.

**Table 4.** Assumptions

Hypotheses	p-values	Actions
H1: SI → ATE	p<0.001	Supported
H2: SI → PE	p<0.001	Supported
H3: ATE → PI	p<0.001	Supported
H4: PE → PI	p<0.001	Supported
H5: PE → ATE	p<0.001	Supported

***Significant Level at p<0.001

SI=Social Influence; ATE=Attitude toward Electronic Word-of-Mouth; PE=Previous Experience; PI=Purchase Intention

DISCUSSIONS

The findings support the study of Sosanuy et al., (2021); Nuanchaona et al. (2021); Dwisuardinata & Darma (2023); Gunawan et al. (2023); Phan et al. (2023); Sinclair & Agerström (2023); Liang et al. (2024); Rinaldi et al. (2024); del Pilar Usurin-Flores et al. (2024); Pane et al. (2024); Ebrahimabad et al. (2024); Dui et al. (2024) that the predictors of purchase intention are SI=Social Influence; ATE=Attitude toward Electronic Word-of-Mouth; PE=Previous Experience (Figure 1 and Table 4). It could be discussed as follows;

Social influence significantly impacts attitudes toward electronic word-of-mouth at Beta=0.301 and p<0.001. Thus, H1 was supported. Social influence significantly impacts previous experience at Beta=0.490 and p<0.001. Thus, H2 was supported. Attitudes toward electronic word-of-mouth significantly impact purchase intentions at Beta=0.246 and p<0.001. Thus, H3 was supported. Previous experience significantly impacts purchase intentions at Beta=0.321 and p<0.001. Thus, H4 was supported. Previous experience significantly impacts attitudes toward electronic word-of-mouth at Beta=0.506 and p<0.001. Thus, H5 was supported. SRMR equals 0.08, which is acceptable. Attitude towards electronic word-of-mouth significantly mediates social influence and purchase intention at R-square=0.495 (49.5%). Previous experience significantly mediates social influence and purchase intention at R-square=0.240 (24%). Purchase intentions could be predicted by social influence, attitudes toward electronic word-of-mouth, and previous experience at R-square=0.267 (26.7%).

Multiple studies provide evidence for the factors that predict purchase intention, including social influence, electronic word of mouth (E-WOM), and prior experience. These research findings may apply to examining the purchase intention of tourists from other countries.



CONCLUSIONS

In the digital era, digital communications and networks play a vital role in the hotel and tourism industry. It has presented numerous prospects and challenges to various industries, such as the tourist and hospitality sectors. When introducing new ideas to a worldwide market, it is crucial to consider the importance of digital communications and networks. Various technologies have been developed that can improve the economy by raising people's living standards. The hospitality industry operates in a fiercely competitive environment with a plethora of tactics and cutting-edge technologies. Customers demand outstanding service and promote technological advancement, while the hospitality business continuously grapples with rising prices. Various variables impact the inclination of travellers to make purchases while travelling internationally. The study examines the impact of social influence, electronic word of mouth, and previous experience on the purchase intentions of the tour service. These characteristics, which pertain to digital communication and networks, are considered predictors in the study. Nevertheless, there is limited evidence to substantiate the impact of electronic word-of-mouth on the intention to acquire tour services in Thailand. The findings indicate a correlation between social impact, electronic word-of-mouth, previous experience, and the intention of Thai clients abroad to acquire tour services. Electronic word-of-mouth greatly influences social influence and the inclination to purchase tour services. Furthermore, prior experience is crucial in mediating the relationship between social influence and the inclination to purchase tour services.

LIMITATIONS AND RECOMMENDATIONS

This study is quantitative research; more variables should be included. It may not involve in-depth insight. Thus, interviews or focus groups are recommended for further studies, and more variables should be included.

REFERENCES

- Basri, N. A. M. H., Ahmad, R., Anuar, F. I., & Ismail, K. A. (2016). Effect of word of mouth communication on consumer purchase decision: Malay upscale restaurant. *Procedia-Social and Behavioral Sciences*, 222, 324-331.
- Chaiprakarn, S. (2022). The Impact of Prices, Services and Facilities on Customer Satisfaction at Drug Stores in Thailand. *PROCEEDING: Volume 1 No. 2 2023*, 304.
- del Pilar Usurin-Flores, M., Panez-Bendezú, M. H., & Vargas-Merino, J. A. (2024). Digital Word-of-Mouth and Purchase Intention. An Empirical Study in Millennial Female and Consumers. In *Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing: Volume 17* (pp. 27-41). Cham: Springer Nature Switzerland.



- Dui, R., Siapno, E., & Paredes, M. P. (2024). The Antecedent Role of Past Experience, Electronic Word-of-Mouth, and Emotional Intelligence on the Determinants of Purchase Intention of Green Skincare Products. *International Journal of Multidisciplinary: Applied Business and Education Research*, 5(6), 1996-2011.
- Dwisuardinata, I. B. N., & Darma, G. S. (2023). The Impact of Social Influence, Product Knowledge, and Fear of Missing Out (FOMO) towards Purchase Intention on Alcoholic Beverage in Bali. *Binus Business Review*, 14(1), 1-11.
- Ebrahimabad, F. Z., Yazdani, H., Hakim, A., & Asarian, M. (2024). Augmented Reality Versus Web-Based Shopping: How Does Ar Improve User Experience and Online Purchase Intention. *Telematics and Informatics Reports*, 100152.
- Gunawan, C. M., Rahmania, L., & Kenang, I. H. (2023). The Influence of Social Influence and Peer Influence on Intention to Purchase in E-Commerce. *Review of Management and Entrepreneurship*, 7(1), 61-84.
- Henderson, I. L., & Kan Tsui, W. H. (2019). The role of Niche Aviation Operations as Tourist Attractions in Air Transport: a tourism perspective.
- Hoang, L. N., & Tung, L. T. (2023). Electronic word of mouth, brand image and young customers' online purchase intention during the COVID-19 pandemic. *Journal of Advances in Management Research*.
- Kandakova, E. (2023). *Assessment of electronic word of mouth effectiveness* (Doctoral dissertation, Masarykova univerzita, Ekonomicko-správní fakulta).
- Pane, I. A., Permatasari, M. R. S., Raharjo, A., Kurniawan, F., & Nurdiansyah, C. (2024). Analisa Pengaruh Komunikasi Pemasaran, Electronic Word Of Mouth dan Kualitas Produk Terhadap Keputusan Pembelian. *JEMSI (Jurnal Ekonomi, Manajemen, dan Akuntansi)*, 10(3), 1769-1776.
- Phan, V. D. V., Huang, Y. F., & Do, M. H. (2023). Exploring the effect of cognitive factors and e-social interactions on the green purchase intention: evidence from a transitional economy. *Young Consumers*, 24(6), 767-785.
- Phuangsuwan, P. (2022). The Influence of Good Governance on Organizational Performance for Universities in Thailand. *PROCEEDING: Volume 1 No. 1 2023*, 269.
- Phuangsuwan, P., Siripipatthanakul, S., Limna, P., & Pariwongkhuntorn, N. (2024). The impact of Google Maps application on the digital economy. *Corporate & Business Strategy Review*, 5(1), 192–203. <https://doi.org/10.22495/cbsrv5i1art18>
- Liang, S. Z., Xu, J. L., & Huang, E. (2024). Comprehensive analysis of the effect of social influence and brand image on purchase intention. *SAGE Open*, 14(1), 21582440231218771.
- Limna, P. (2023). Artificial Intelligence (AI) in the hospitality industry: A review article. *International Journal of Computing Sciences Research*, 7, 1306-1317.
- Limna, P., Siripipatthanakul, S., Siripipattanakul, S., Woodeson, K., & Auttawechasakoon, P. (2022, a). Applying the UTAUT to Explain Factors Affecting English Learning Intention Via Netflix (English Subtitle) Among Thai people. *Asia-Pacific Review of Research in Education*, 1(1), 1-19.



- Limna, P., Kraiwanit, T., & Siripipattanakul, S. (2022, b). The relationship between cyber security awareness, knowledge, and behavioural choice protection among mobile banking users in Thailand. *International Journal of Computing Sciences Research*, 6, 1-19.
- Liu, H., Jayawardhena, C., Shukla, P., Osburg, V. S., & Yoganathan, V. (2024). Electronic word of mouth 2.0 (eWOM 2.0)–The evolution of eWOM research in the new age. *Journal of Business Research*, 176, 114587.
- Nuanchaona, S., Siripipatthanakul, S., Nurittamont, W., & Phayaphrom, B. (2021). Factors affecting consumer's purchase intention. *International Journal of Business, Marketing and Communication*, 1(3), 1-13.
- Rinaldi, B., Ciptaningsih, E. M. S. S., & Andersean, D. E. (2024, April). The Influence Of Altruism, Environmental Concern, And Social Influence On Purchase Intention for Eco-Friendly Clothing Products: Study of Generation Z in Greater Jakarta. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1324, No. 1, p. 012075). IOP Publishing.
- Romadhoni, B., Akhmad, A., Naldah, N., & Rossanty, N. P. E. (2023). Purchasing Decisions Effect of Social Media Marketing, Electronic Word of Mouth (eWOM), Purchase Intention. *Journal of Accounting and Finance Management*, 4(1), 74-86.
- Siripipatthanakul, S. (2022). The Influence of COVID-19 Perceptions and COVID-19 Worries on Individuals' Intentions to Postpone Dental Visits. *Open Access Journal of Dental Sciences*, 7(1), 000327.
- Siripipattanakul, S., Siripipatthanakul, S., Limna, P., & Auttawechasakoon, P. (2022). The relationship between website quality, university image, e-WOM and intention to follow the university website. *Psychology and Education Journal*, 59(2), 529-544.
- Siripipatthanakul, S., Limna, P., Sriboonruang, P., & Kaewpuang, P. (2023). Applying the TPB and the UTAUT models predicting intentions to use telemedicine among Thai people during the COVID-19 pandemic. *International Journal of Computing Sciences Research*, 7, 1362-1384.
- Sinclair, S., & Agerström, J. (2023). Do social norms influence young people's willingness to take the COVID-19 vaccine?. *Health Communication*, 38(1), 152-159.
- Sosanuy, W., Siripipatthanakul, S., Nurittamont, W., & Phayaphrom, B. (2021). Effect of electronic word of mouth (e-WOM) and perceived value on purchase intention during the COVID-19 pandemic: the case of ready-to-eat food. *International Journal of Behavioral Analytics*, 1(2), 1-16.
- Zahid, F., & Ruswanti, E. (2024). Electronic Word Of Mouth, Brand Image, Purchase Intention And Customer Purchase Decisions For Skinceuticals Users. *Jurnal Ilmiah Manajemen Kesatuan*, 12(1), 229-244.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods*. Cengage learning.



Social Media and Its effect on Higher Education: A Review Article

Penpim Phuangsuan

University of Phayao, Thailand

penpim.ph@up.ac.th

(Corresponding Author)

ORCID ID: 0000-0003-2371-7998

Watthanasakon Rakpathum

Navamindradhiraj University Thailand

6403201007@nmu.ac.th

ORCID ID: 0009-0002-0118-043X

ABSTRACT

Objective: This study aims to explain the importance of social media in higher education.

Methods: This study is a review article that adopts a systematic approach based on scholarly papers in the Scopus, Web of Science (WOS), and Google Scholar databases. The data analysis method uses content analysis.

Results: Modern society, including higher education, is heavily influenced by social media. The growing use of social media has changed how students and teachers learn. Social media improves education by enabling quick communication, information exchange, and collaboration. Online discussions, instructional resources, and global peer and expert connections are available to students. However, social media affects schooling in many ways. It has many benefits but also causes diversions, privacy issues, and disinformation. Students' focus and productivity might also be affected by social media addiction.

Conclusions: Social media in education has changed learning processes, creating opportunities and problems. To maximise its potential, teachers and educators must balance using social media for higher education and minimise its adverse impacts on students' academic performance and well-being.

Keywords: *Social Media, Higher Education, Digital Technology, Online, Platforms*



INTRODUCTION

Social media has become an increasingly popular online platform for users to connect and share information. In education, social media is now commonly used as a tool for teaching and learning in higher education institutions. It has been found to enhance student productivity, engagement, motivation, and academic performance. Various social media websites such as Tumblr, Google+, Snapchat, Flickr, Facebook, and Twitter have expanded the possibilities of online networking and have introduced a new dimension to educational technology. Social media networking is the fastest-growing form of communication due to its ability to transmit necessary information rapidly (Firdaus et al., 2024). The digital age has transformed society, with social media platforms becoming essential to daily life. Social media is used primarily by students for communication, information sharing, entertainment, and social networking. Family connections and collaborative learning affect student social media use and academic achievement. Moreover, mental health affects family connection, collaborative learning, and academic performance. Students' academic performance improved with social media use. Family connection and collaborative learning significantly mitigated the social media-academic performance relationship. Moreover, mental health significantly impacted the relationship between collaborative learning, family connections, and academic success. The insights into students' psychological well-being and academic achievement for global education have been identified on how social media use affects students' academic performance and mental health, advancing education science (Zhang et al., 2024).

The impact of social media on learning and education inside higher education institutions is evident. The e-learning acceptance model (e-LAM) has identified several elements influencing students' willingness to use social media for instructional purposes in higher education institutions. The e-LAM utilises multiple theoretical perspectives to provide a more comprehensive understanding of the factors that promote the utilisation of social media for learning and education in higher education institutions across various academic programs and educational levels. By understanding students' motivations to use social media for educational reasons, educators can enhance their teaching methods and adjust to the changing demands of learners. The practice of iterative improvement enhances the overall quality of the learning and teaching experience. Through the utilisation of technology, comprehension of student motivations, and improvement of educational methods at higher education institutions, these factors contribute to a learning and teaching process that is more captivating, tailored, and efficient (Alshammari et al., 2024). It was identified using habit as a significant and robust predictor of social media addiction, as well as all the Technology Acceptance Model (TAM) characteristics examined. Incorporating the TAM with usage habits uncovered a thorough and multifaceted comprehension of social media addiction. However, while other elements have been identified as potential contributors to social media reliance and addictive behaviour, it seems that usage habit is the most critical component in driving these addictive tendencies among university students (Paiman & Fauzi, 2024). Thus, this review article discusses social media's positive and adverse effects on higher education.



LITERATURE REVIEW

Higher Education in the Digital Era

Technology-enabled lifelong learning has been widely debated in the continuous transition to a knowledge-based society. The transition also necessitates reforming higher education, incorporating novel methodologies for disseminating knowledge and acquiring skills. The seven primary themes or viewpoints are (1) the policy perspective, (2) the Value perspective, (3) the employability perspective, (4) the reform perspective, (5) the collaborative perspective, (6) the student perspective, and (7) the workplace learning and professional development perspective (Håkansson et al., 2024). Universities worldwide are encountering unique difficulties and opportunities in the constantly changing landscape of higher education. The swift progress of technology has introduced a period of digital transformation that is altering every facet of our lives. Higher education, as a fundamental cornerstone of society, is not exempt from this revolutionary wave. The adoption of digital technology by higher education institutions has become a crucial aspect that affects their ability to compete in the ever-changing market of educational services. In the current day of abundant information and technological advancements, the conventional method of physical education is rapidly being substituted by digital alternatives that provide enhanced adaptability, accessibility, and individualised learning opportunities. Many aspects of this transition include the incorporation of advanced technology, the growth of online learning, the adaptation of educational content, and the improvement of administrative procedures. These changes are a reaction to present market forces and are necessary for higher education institutions' long-term viability and significance (Stoyanova & Stoyanov, 2024).

While digital education may have had some earlier iterations, it is primarily considered a contemporary innovation. It refers to converting a specific part of the educational system into a digital format: many challenges and the widespread availability of online open courses. The advancement of Internet technology has led to a notable transformation in academic communication and collaboration. The advent of the digital revolution has fostered unfettered global access to information. Modern classrooms are furnished with a wide range of information and communication technology (ICT) equipment, and nearly all teachers have made substantial advancements in incorporating digital technology to enhance students' ability to access information and engage in collaborative learning. To remain competitive and deliver high-quality education, the higher education system should harness the potential of ICT. This is necessary due to the impact of digital transformation, disruptive technological advancements, and rapid change (Alenezi et al., 2023).

Consequently, the field of higher education faces distinct challenges and prospects within the ever-evolving environment of higher education. The rapid advancement of technology and social media has ushered in an era of digital transformation, impacting every aspect of our lives. The revolutionary wave is impacting higher education, a crucial societal pillar.



Social Media in Higher Education

Online courses utilise social media for engagement and learning, specifically focusing on (1) the purposeful utilisation of social media, (2) the difficulties and worrisome aspects of social media tools, and (3) examining the consequences of artificial intelligence. The online courses are about teaching future and current teachers and anyone interested in learning about education and designing with learning technologies. Their voices embody the perspectives of faculty, teachers, and students actively involved with and directly affected by the difficulties and possibilities of swiftly progressing technologies (Parra & Chatterjee, 2024).

The online environment has become essential in modern life due to the rapid growth of information technology. Higher education institutions, which nurture talent, present new problems and opportunities in educational administration. Online education administration changes traditional methodologies and provides educational administrators additional tools and resources. However, this transition raises concerns, including information overload, cybersecurity, and decreased student self-discipline. Innovative approaches to managing higher education students online and pursuing new administrative pathways are essential themes in current educational administration. By analysing online educational management opportunities and challenges, the impact of the online environment on higher education student management, and innovative approaches in educational administration, new perspectives and methods can be proposed to adapt to the digital age (Qing, 2024).

Global best practices for implementing artificial intelligence (AI) in higher education management have been highlighted in the deployment of AI within educational institutions. AI integration in higher education management presents both potential and obstacles. AI applications in various sectors and growing investment in digital infrastructure hold great potential for the future. Nevertheless, persistent problems include a need for more proficient workers, significant investments in infrastructure, and concerns about data privacy. Suggestions were made to enhance the use of AI in higher education institutions, which include formulating policies, investing in digital infrastructure, building capability, and collaborating with stakeholders. AI in higher education offers context-specific insights that serve as a valuable resource for policymakers, educators, and administrators seeking to navigate the digital revolution in higher education administration (Muhabbat et al., 2024).

Thus, higher education institutions foster talent, creating new administrative challenges and opportunities. Online education administration offers educational administrators new tools and methods. This transformation raises worries about information overload, cybersecurity, and student self-discipline. Online higher education student management and innovative administrative paths are vital themes in current educational administration. Analysing online educational management prospects and problems, the impact of the online environment on higher education student management, and innovative educational administration methods can lead to new viewpoints and methodologies in the digital era.



Theory of Acceptance Model, Social Media, Satisfaction and Learning Effectiveness

Online learning, social media, and technology acceptance have gained considerable importance in information technology. The complexities and various aspects of accepting and adopting eLearning in higher education pose challenges. It is crucial to thoroughly analyse the environmental, social, and economic consequences of implementing eLearning. Efforts should be made to guarantee that eLearning programs are accessible, fair, and viable in the long run. Various theories and models have been suggested to elucidate individual usage and behaviour and gauge the acceptance and satisfaction of technology adoption and online learning (Ahmad et al., 2023; Al-Adwan et al., 2023).

The technology acceptance model (TAM) is a conceptual framework comprising perceived usefulness, perceived ease of use, attitude towards utilising, behavioural intention to use, and actual system use (Limna et al., 2023; Limna et al., 2024). The use of smartphones in higher education presents various aspects of the actual system use, including student self-management, student learning outcomes, student perceptions of achievements, cost-benefits, and student expectations. These aspects provide insights into how students' acceptance and adoption of smartphone technology can be improved. In the present era, following the COVID-19 epidemic, student motivation and student quality perceptions are two variables that strengthen the TAM model (Mejía-Mancilla & Mejía-Trejo, 2024).

Technological advancements, such as the internet, are expanding and providing more options for learning. This fosters the cultivation of learning strategies and models. The blended learning concept is widely implemented in institutions. Implementing blended learning in numerous universities poses a significant challenge due to the extensive technological and human resource requirements. The acceptance factors for the adoption of social media in blended learning have the potential to provide valuable information to learning planners at private higher education institutes. This information can assist in making informed decisions and optimising blended learning planning through social media technology. The student's viewpoint at private higher education institutions determines the adoption of social media technologies in blended learning. The characteristics considered in this study were technological literacy, perceived validity, perceived trust, technology readiness (precisely optimism and innovativeness), and technology acceptance (specifically perceived efficacy, perceived ease of use, intention to use, and usage behaviour) (Yusuf et al., 2024).

The unified theory of acceptance and use of technology (UTAUT) is the modification of the TAM model that encompasses performance expectancy, effort expectancy, social influence, and facilitating conditions. Users' satisfaction is a mediator between their expectations of performance, expectations of effort, facilitating conditions, and their goal to learn English using Netflix with subtitles. Furthermore, facilitating conditions impact users' enjoyment most, with effort and performance expectancy closely behind. The English program directors and marketers should contemplate adopting the UTAUT model in English educational management due to its correlation with user satisfaction and the desired outcome of English learning through Netflix (with English subtitles) (Limna et al., 2022).



One study about the TAM model consists of two main components: perceived ease of use and perceived usefulness. This study shows that student satisfaction is crucial in connecting the TAM model and the intention to use smart education technology. Nevertheless, the TAM model does not substantially impact the intention to utilise smart education technologies. Adopting the TAM approach and considering student satisfaction, this study can potentially assist educators and instructors in enhancing their purpose to utilise smart education technology (Siripipatthanakul et al., 2022).

Online language education is a relatively new method, despite the previous integration of blended learning and technology in English as a Foreign Language (EFL) classes. The study uses instructional design, YouTube, and Webcomics (YouCom) as digital task-based language teaching (DTBLT) strategies in synchronous and blended learning settings. The study examines the efficacy of learners utilising YouCom by analysing factors such as engagement, motivation, cognitive processes, and student satisfaction. The perceptions of EFL students regarding the challenges encountered by English majors when studying languages online using YouTube and Webcomic applications have been examined. It is demonstrated that the cognitive process significantly impacts learners' effectiveness, with student satisfaction, engagement, and motivation following suit. The suggestion is to enhance perceptions through the cognitive process, student happiness, and engagement since they are firmly and significantly linked to learners' efficacy. It is recommended that the sample be extended to more areas. The contribution has the potential to aid educators in incorporating English learners' perspectives and enhancing their motivation to learn by utilising Webcomics and YouTube as instructional resources (Muthmainnah et al., 2023).

RESEARCH METHODOLOGY

A systematic review is a thorough and reliable assessment of the latest evidence utilising unbiased, rigorous, and repeatable research methodologies. Data analysis is a methodical process used to extract significance from large quantities of data, offering insights into the efficacy or inefficacy of various elements. Systematic reviews identify areas of uncertainty and the lack of relevant knowledge while emphasising the need for more research. Before initiating the review, adhering to the systematic review procedure is recommended. To achieve this, one can seek existing systematic reviews as examples, become familiar with a lexicon of commonly used terms, and develop the skill to distinguish between different types of systematic reviews. This study utilised qualitative approaches (Phuangsuwan et al., 2023; Kok & Siripipatthanakul, 2023; Lim & Siripipatthanakul, 2023; OW Library, 2024; Chaiprakarn & Kaewnaknaew, 2024). Qualitative research aims to comprehend individuals' or organisations' decision-making processes and activities. Furthermore, it elucidates the reasons for the occurrence of events. The study elucidated the need for precise data to efficiently accomplish research objectives and gain thorough insights into unique circumstances. The results of this systematic review are expected to enhance understanding of the subjects within the fields of Social Sciences, Management, and current Studies, providing insights into their potential benefits and the related difficulties (Kraiwanit et al., 2023; Phuangsuwan et al., 2024, a & b; Siripipatthanakul et al., 2024).

RESULTS

This systematic review was based on scholarly papers in Google Scholar, Web of Science (WOS), and Scopus from 2022 to 2024. Content analysis was employed in this study by two researchers. The keywords are social media, higher education, digital technology, and online platforms. Two researchers selected at least 20 valid scholarly papers in this systematic review. The evaluation using Grammarly detected 96% of grammar and 6% of plagiarism.

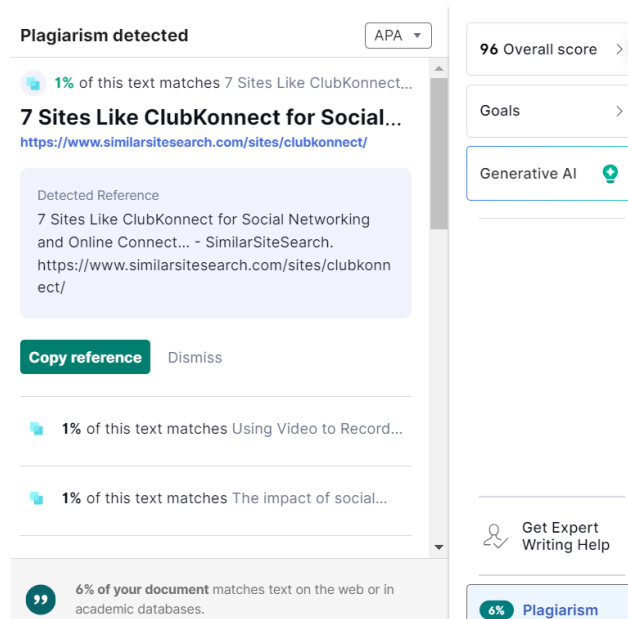


Figure 1. Grammarly’s Evaluation

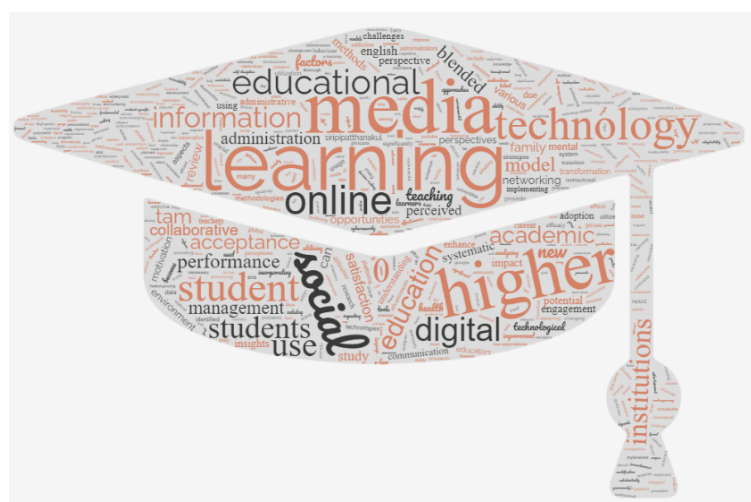


Figure 2. Word cloud (Source: wordcloud.com, 2024)



DISCUSSIONS

According to Siripipatthanakul et al. (2023); Ahmad et al. (2023); Firdaus et al. (2024); Zhang et al. (2024); Alshammari et al. (2024); Håkansson et al. (2024); Paiman & Fauzi, (2024); Yusuf et al., (2024); Mejía-Mancilla & Mejía-Trejo, (2024); Muhabbat et al., (2024) and Zhang et al. (2024), it could be discussed as follows.

Social media is a popular way to connect and share information. Higher education institutions employ social media for teaching and learning. It boosts student productivity, engagement, motivation, and performance. Social media platforms like Tumblr, Google+, Snapchat, Flickr, and Facebook have transformed online networking and instructional technology. Social media networking is the fastest-growing method of communication since it quickly transmits information. Social networking has become vital to daily living in the digital age. Students use social media for communication, amusement, information sharing, and networking. Family relationships and collaborative learning affect student social media use and academic performance. Mental health impacts family engagement, collaborative learning, and academic performance. Students' grades increased using social media. Family and collaborative learning dramatically reduced the association between social media and academic performance. Additionally, mental health strongly affects collaborative learning, family relationships, and academic achievement. Global education science has gained insights into how social media use influences students' mental health and academic performance.

Social media affects higher education learning and education. The e-learning acceptance model (e-LAM) discovered numerous factors impacting higher education students' social media utilisation for instruction. The e-LAM uses several theoretical perspectives to better understand the factors that encourage higher education institutions to use social media for learning and education across academic programs and levels. Understanding students' motives to use social media for education helps instructors improve their strategies and adapt to changing student needs. Iterative improvement enhances learning and teaching. Technology, understanding student motivations, and enhancing educational methods at higher education institutions make learning and teaching more engaging, personalised, and efficient. The Technology Acceptance Model (TAM) traits predicted social media addiction. Adding the TAM to consumption habits revealed a complex understanding of social media addiction. While other factors may contribute to social media reliance and addictive behaviour in university students, usage habits appear to be the most important.

CONCLUSIONS

Teachers have had to adjust to the remote learning environment, e-learning, using social media in education. Many educators in educational institutions, including higher education and universities, encounter this difficulty despite their lack of proficiency and resources to deliver sufficient remote instruction in numerous poor countries. As governments contemplate reopening schools after the relaxation of quarantine measures, the safety of kids and teachers must be given utmost importance. Key factors include ensuring social distancing



among pupils, providing them with personal protective equipment, and implementing regular virus testing. Technological advances like the internet expand learning opportunities through social media. Additionally, social media and digital technology promote learning methodologies and models. Many international institutions use blended learning. Many colleges need help implementing blended learning due to technology and human resource needs. Private higher education learning planners may benefit from social media acceptance criteria in blended learning. This information can improve social media-based blended learning planning and decision-making. Social media adoption in blended learning depends on private higher education students' opinions. Social media could improve technical literacy, validity, trust, readiness (optimism and innovation), and acceptability. Talent development in higher education creates new administrative issues and opportunities. Online education administration gives administrators new tools and strategies. This change raises concerns about information overload, cybersecurity, and student discipline. Online higher education student management and new administrative approaches are important topics in education administration. Analysing online educational management prospects and issues, the impact of the online environment on higher education student management, and creative educational administration methods might lead to new digital perspectives and methods.

LIMITATION AND RECOMMENDATIONS

This study is a systematic review article and may not represent the respondent's perceptions. Further studies, such as questionnaires or interviews, are recommended.

REFERENCES

- Ahmad, S., Mohd Noor, A. S., Alwan, A. A., Gulzar, Y., Khan, W. Z., & Reegu, F. A. (2023). eLearning acceptance and adoption challenges in Higher Education. *Sustainability*, 15(7), 6190. <https://www.mdpi.com/2071-1050/15/7/6190>
- Al-Adwan, A. S., Li, N., Al-Adwan, A., Abbasi, G. A., Albelbisi, N. A., & Habibi, A. (2023). Extending the Technology Acceptance Model (TAM) to Predict University Students' intentions to use metaverse-based learning platforms. *Education and Information Technologies*, 28(11), 15381-15413.
- Alenezi, M., Wardat, S., & Akour, M. (2023). The need of integrating digital education in higher education: Challenges and opportunities. *Sustainability*, 15(6), 4782. <https://www.mdpi.com/2071-1050/15/6/4782>
- Alshammari, M. M., Al-Mamary, Y. H., & Abubakar, A. A. (2024). Revolutionizing education: unleashing the power of social media in Saudi Arabian public universities. *Humanities and Social Sciences Communications*, 11(1), 1-12. <https://www.nature.com/articles/s41599-024-03313-w>



- Chaiprakarn, S. & Kaewnaknaew, C. (2024). Knowledge, Attitude, and Practice (Behaviour) Among Health Promotion School Students. *Advance Knowledge for Executives*, 3(2), 1-9.
- Firdaus, M., Purnomo, A., Rosyidah, E., Young, M. N., Anam, F., Prasetyo, Y. T., & Persada, S. F. (2024). Patent Landscape of Social Media in Education: A Review. *Procedia Computer Science*, 234, 780-786.
<https://doi.org/10.1016/j.procs.2024.03.064>
- Håkansson, L. M., Mozelius, P., Jaldemark, J., & Cleveland Innes, M. (2024). Higher education transformation towards lifelong learning in a digital era—a scoping literature review. *International journal of lifelong education*, 43(1), 24-38.
<https://doi.org/10.1080/02601370.2023.2279047>
- Kok, S. L., & Siripipatthanakul, S. (2023). Change Management Model in Corporate Culture and Values: A Case Study of Intel Corporation. *Advanced Knowledge for Executives*, 2(1), 1-30.
- Kraiwanit, T., Limna, P., & Siripipatthanakul, S. (2023). NVivo for social sciences and management studies: A systematic review. *Advance Knowledge for Executives*, 2(3), 1-11.
- Lim, L. & Siripipatthanakul, S. (2023). A Review of Artificial Intelligence (AI) and ChatGPT Influencing the Digital Economy. *Proceeding of the 3rd International Conference on Research and Development (ICORAD 2023)*, Indonesia, December 02-03, 2023, 29-42. DOI: 10.47841/icorad.v2i2.139
- Limna, P., Kraiwanit, T., & Chumwatana, T. (2024). Assessing the Integration of ChatGPT in Business Environments: An Application of the Technology Acceptance Model. *Journal of Dhamma for Life*, 30(1), 221-231.
<https://so08.tci-thaijo.org/index.php/dhammalife/article/view/3135>
- Limna, P., Kraiwanit, T., & Jangjarat, K. (2023). Adopting the technology acceptance model (TAM) to explore online purchase intention via Facebook live streaming: Empirical evidence from Bangkok, Thailand. *ASEAN Journal of Management & Innovation*, 10(1), 1-13. <https://ajmi.stamford.edu/index.php/ajmi/article/view/385>
- Limna, P., Siripipatthanakul, S., Siripipattanakul, S., Woodeson, K., & Auttawechasakoon, P. (2022). Applying the UTAUT to explain factors affecting English learning intention via Netflix (English Subtitle) among Thai people. *Asia-Pacific Review of Research in Education*, 1(1), 1-19.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4046242
- Mejía-Mancilla, J., & Mejía-Trejo, J. (2024). Technology Acceptance Model for Smartphone Use in Higher Education. *Scientia et PRAXIS*, 4(07), 113-158.
<https://scientiaetpraxis.amidi.mx/index.php/sp/article/view/181>
- Muhabbat, H., Mukhiddin, K., Jalil, H., Dustnazar, K., Farxod, T., Shavkat, M., ... & Jakhongir, S. (2024). The digital frontier: AI-enabled transformations in higher education management. *Indonesian Journal of Educational Research and Technology*, 4(1), 71-88.
<https://ejournal.upi.edu/index.php/IJERT/article/view/60367/0>
- Muthmainnah, M., Hasan, H., Al Yakin, A., Siripipatthanakul, S., & Limna, P. (2023). The effectiveness of learners adopting YouTube and Webcomics as English language teaching (ELT) materials. *Edumaspul: Jurnal Pendidikan*, 7(2), 3633-3648.



- Paiman, N., & Fauzi, M. A. (2024). Exploring determinants of social media addiction in higher education through the integrated lenses of technology acceptance model (TAM) and usage habit. *Journal of Applied Research in Higher Education*, 16(3), 776-803. <https://doi.org/10.1108/JARHE-03-2023-0114>
- Parra, J. L., & Chatterjee, S. (2024). Social media and artificial intelligence: critical conversations and where do we go from here?. *Education Sciences*, 14(1), 68.
- Phuangsuwan, P., Siripipatthanakul, S., Limna, P., & Siripipattanakul, S. (2024, a). Grammar and Plagiarism Checking Using Grammarly for English Learners: A Systematic Review. *Journal of Wisdom Political Science and Multidisciplinary Sciences*, 7(3), 1-20.
- Phuangsuwan, P., Siripipatthanakul, S., Suttipong, R., Praesri, S., & Wadpong, S. (2024, b). Development of Higher Education Institutions Based on Education Criteria for Performance Excellence (EdPEX) in Thailand. *Advance Knowledge for executives*, 3(1), 1-14.
- Qing, L. (2024). Research on the Innovation of Student Education and Management in Colleges and Universities under Network Environment. *International Journal of New Developments in Education*, 6(5).
- Phuangsuwan P., Siripipatthanakul, S., Nyen Vui, C. & Siripipattanakul, S. (2023). Self-Esteem in English Learning among Higher Education Students: A Qualitative Study in Thailand.
- Siripipatthanakul, S., Kaewpuang, P., Sitthipon, T., & Sriboonruang, P. (2023). A review of educational adaptation during the COVID-19 pandemic via online learning. *International Journal of Computing Sciences Research*, 7, 1514-1530.
- Siripipatthanakul, S., Limna, P., Kraiwanit, T., & Siripipattanakul, S. (2022, December). Predicting intention to use smart education technology during the COVID-19 pandemic: The case of higher education students in Thailand. In *International Conference On Research And Development (ICORAD)* (Vol. 1, No. 2, pp. 8-22).
- Siripipatthanakul, S., Nyen Vui, C., & Phuangsuwan, P. (2024). Strategic Management Adopting Digital Intelligence (Business Intelligence) for Dentistry and Dental Clinics. *Open Access Journal of Dental Sciences*, 9(1), 000388. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4073109
- Stoyanova, T., & Stoyanov, P. (2024, June). The Digitization of Higher Education Institutions-A Factor for their Competitiveness in the Market of Educational Services. In *Conference Proceedings. The Future of Education 2024*.
- Yusuf, F., Rahman, T. K. A., & Subiyakto, A. (2024). Information Technology Readiness and Acceptance Model for Social Media Adoption in Blended Learning: A Case Study in Higher Education Institutions in West Java, Indonesia. *Journal of Applied Data Sciences*, 5(2), 382-402. DOI: <https://doi.org/10.47738/jads.v5i2.195>
- Zhang, X., Abbas, J., Shahzad, M. F., Shankar, A., Ercisli, S., & Dobhal, D. C. (2024). Association between social media use and students' academic performance through family bonding and collective learning: the moderating role of mental well-being. *Education and Information Technologies*, 1-31. <https://link.springer.com/article/10.1007/s10639-023-12407-y>