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King Mongkut's Political Stability during the Era of Colonialism

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Abstract

The objectives of the research were: 1) to examine the factors affecting political stability during King Mongkut's reign and 2) to investigate strategies King Mongkut established for political stability during the influence of colonialism. The study was conducted as qualitative research by gathering data from documentary research and in-depth interviews. The documents consisted of primary documents which included chronicles, royal documents and announcements, and the secondary documents which included research, book and articles. In-depth interviews were conducted with 10 informants who are historians and political scientists. The data were interpreted and analyzed descriptively.

The results revealed that: 1) the factors affecting political stability of King Mongkut included external and internal factors. External factors included the spread of British and French influence into the regions and territories which affected the stability of the Kingdom of Siam and the King. The internal factors included the outdated governance which weakened the royal power of the monarch, the power and influence of the Bunnag family who controlled large amounts of people and forces, and the royal power of the King's younger brother who was popular with the Siamese citizens and foreigners. 2) King Mongkut implemented strategies in order to establish his political stability which consisted of building political acceptance to gain civil support and international acceptance. As well as managing effectively in politics and tensions by implementing coordinated policy towards Western nations demands and threats. As a result of the royal actions, the Kingdom of Siam was able to maintain its independence without being occupied by Western powers, and the King securely reigned the country until the end of his life.

Introduction

Colonialism is a phenomenon that occurred from the 15th - 19th century, a phenomenon that the European countries had explored the world and occupied lands and territories in different parts of the world gaining wealth

by exploiting other lands' resources (Hoffman, 2015). Dominating other interior nations in favor of extraction of the colony's wealth, employing the military and diplomatic forces means to occupy and seek benefits by utilizing the people and resources of the colonized region around the world (Veracini, 2010). Great Britain and

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France in 19th Century had competitively played the significant role in colonizing lands and expanding trade influence. Thailand (Siam) located in the strategic location, connected to Burma, Indochina, and Malay sultan states (Auslin, 2004), and rich in economic resources was the target of these western countries' interests.

King Mongkut, the 4th king of Chakri dynasty, reigned in Thailand during the western threats of intensive escalation and threats to the sovereignty of the country and the security of the throne (Nana, 2008). Internationally, acclaimed philosopher, King Mongkut, talented in languages, astronomy, foreign affairs and governance, had ruled the country for 17 years. During his reign, the king changed political and governance norms that were the foundation for the development of the country in many aspects (Plainoi, 2001). Under the threat of Western expansion and colonialism which was being intensified, the stability of the king as the head of state was highly important as it was not only crucial for the existence of the king, but also the state.

Political stability is a state of controlling power and authority firmly and safe from violent resistance that could potentially destroy the government or rulers (Dhiravekin, 2004). Being politically stabilized is explicitly essential during challenging times; and even more crucial in monarchy system when the king as the head of a kingdom does not absolutely control the governance. The ability of the monarch in establishing political stability during the cruel threat was beneficial in preserving the nation's sovereignty and political regime. King Mongkut had implemented various measures responding to internal and external political conditions threatening the kingdom and his throne; embracing western knowledges, initiating the modernization, and managing internal politics wisely, as a result the King had preserved the nation's sovereignty and maintained his political stability throughout his reign.

It is crucial and well worth examining what the monarch implemented to protect the nation and maintain the stability of the King during the violent threats of Western colonialism. The facts will create awareness for Thai people regarding the struggles the country has encountered and the enormous efforts the former king made to uphold the country's independence and foster national development. Therefore, it leads to the objectives of this research which are to thoroughly examine the variables influencing King Mongkut's political

stability as well as how the King established his political stability.

Objectives

- 1) To examine the factors affecting political stability during King Mongkut's reign.
- 2) To investigate how King Mongkut established his political stability during the influence of colonialism.

Methodology

1. Data Collection

This is qualitative research by collecting data via documentary researching and In-depth interviews. The primary documents include chronicles, royal documents, royal announcement, the archives and contemporary records, and secondary documents that included related articles, analysis and books.

2. Population and Samples

As this research is qualitative research focusing on historical and political topics, the population are the academics in history and political science. The key informants include 5 historians and 5 political scientists who were purposively selected as the research sample group.

3. Research Instrument

The instrument used in this research was an interview form conducted with the selected sample group. The framework of questions asked included the internal and international political conditions during the reign of King Mongkut, factors related to the King's political stability, the policies or strategies of the King to create political stability, and the achievement of political stability of the King.

4. Data Analysis

The data obtained from documents and interviews were sorted. The triangular check was used to verify the accuracy of the information. Data analysis techniques included Content Analysis, Interpretation, and Descriptive Analysis.

Conceptual Frameworks

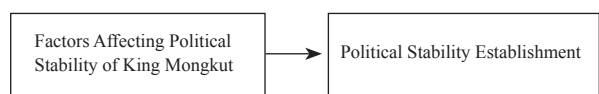


Fig. 1 Conceptual Framework

Research Results

1. Factors Affecting Political Stability of King Mongkut

Factors that affected political stability of King Mongkut consisted of various external and internal factors. The external factors consisted of the spreading of western colonization by expanding their powers into the region which affected the security and stability of the Kingdom of Siam. The internal factors were the outdated governance system, the influence of the Bunnag family, and the royal power of Prince Chutamani, his brother. The combination of all these factors influenced King Mongkut to carry out strategic policies to stabilize his throne and to secure the sovereignty of the kingdom, as well as his monarchy regime.

Considered as the external threat to the nation, Great Britain and France, the significant western powers who spread their power in the Southeast Asia Region, as well as Siam. In the 19th century during the reign of King Mongkut the 2 major nations intimidated the independence and security of the country known as Siam at that period of history. Great Britain's colonies in India and Malacca peninsular connected to the territory of Siam making the royal court of King Mongkut to have direct contact with the British interest. Controlling trade routes in Malacca, and seeking advantageous trade opportunity, Great Britain had disputes with Siam over land and trade agreements that could have escalated to violence. What Great Britain had done to China by violently threatening the sovereignty of the greatest Asian empire, in the consequence of in compliance to British trade agreement, was the action that would be applied to Siam and other nations if they failed to fulfill and respond to the British' demands. In the meantime, France, another western nation was trying to gain access to the south of China and wishing to gain wealth via exploring the lands, occupied Indo-China peninsular. The French ambitious to control the region was threatening the land under Siamese protection, and even Siam itself.

The outdated governance system was an internal factor affecting King Mongkut's political stability. Ancient Thai feudal social system or Sakdina, the social hierarchy assigning rank to citizens who were subject to serve their precedence in society, especially to the nobility. Hence, the King did not hold absolute power (Sereerangsan, 2018). Under this outdated governance system, the central administration had decentralized power to nobilities both in central and regional units, and the nobilities autonomously controlled

their men affecting most of the major state works including warfare that depended on the nobility's orders. These characteristics had weakened the stability of the King's power.

The Bunnag, appointed in major positions, controlled international trade and ruled people and the army in eastern and southern cities of the kingdom, and were the most political influential noble family since the reign of King Rama III. The Bunnag clearly demonstrated their power by suppressing the opposite royal members whom they considered as a threat to their interests. Playing the significant role in supporting King Mongkut ascending to the throne after the death of King Rama III in 1851 meant they were clearly marked as the most powerful noble group in the kingdom which could definitely affect the stability of the King. Moreover, the power of Prince Chutamani, King Mongkut's brother, also influenced the stability of the royal throne as the Prince had control over a large number of armies. While the King was lacking of any supporting troops due to his 27 years in monkhood in which he was unable to accumulate any wealth and forces.

2. Political Stability Establishment of King Mongkut

Political stability is a combination of the word "stability" which means continuity and unchanged and the word "politics" refers to activities involved in power and influence in dealing with various types of interests or the distribution of value patterns in society which depends on power (Lasswell, 1936), therefore; political stability means the state of being in power in order to be able to exercise power to manage or distribute resources and interests to the members in such a political society. As well as not being violently opposed to the cause of the loss of power, if there is any change, it will be an orderly change under the rules of the governing regime (Dhiravekin, 2004).

As the factors affecting King Mongkut's political stability included the spread of British and French influence into the regions and territories, the outdated governance system, the power and influence of the Bunnag family, and the royal power of his younger brother, the king had to strengthen his political post by; a) creating political legitimacy to gain political acceptance and support towards political system and rulers, and b) building effectiveness in politics and manage all tensions.

a. Creating political legitimacy to gain political acceptance and support towards political system and rulers

Political acceptance is strongly based on political legitimacy which refers to the perception on the governor or government having the right to coercively impose and enforce laws, or basically to use the power. Legitimacy is basically founded on the political norms in a specific culture; individuals believing that the ruler, as an authority, conducts himself or herself appropriately in accordance with social standards and norms (Dhiravekin, 2004). In monarchy system, the divine right establishes the political legitimacy of the monarch's rule; legitimacy also derives from popular perception (tradition and custom) and acceptance of the monarch as the rightful ruler of nation. Legitimacy can be divided into two categories: foundational legitimacy and contingent legitimacy. Foundational legitimacy refers to a government's capacity to ensure the safety and security of its citizens, while contingent legitimacy applies when governments exercise their authority in ways that are deemed acceptable (Mittiga (2021). Legitimacy contribute to political acceptance which leads to political support (Lipset, 1964), in contrast; the lack of legitimacy creates a negative perception among the people against government or rulers which could lead to disobedient, intolerant and eventually rebellious. Therefore, the political acceptance which is contributed by legitimacy is one of the foundations in establishing political stability.

As the legitimacy is the right and acceptance of an authority which includes the governing law, regime and ruler, people commonly acquiesce that the ruler, rightly appointed by the law and the social norms, has the justification to exercise power. Internationally, King Mongkut had projected to the major western royal courts the image of him as the King of a civilized kingdom who was legitimately in power to rule over the lands in the region. Hence, all the major western nations selectively treated Siam in a different manner- contacting and negotiating directly via royal-appointed ambassador.

Local wise, as the legitimacy of the monarchy regime was strongly based on the perception of people towards the rightness of the king, King Mongkut established political acceptance by conducting himself as a Bodhisattva; a person aiming to gain Buddhahood in the future, incarnation to earth in order to help people. In complying to the belief regarded to the ruler in Buddhism ideology, the king had publicly showed that he was highly concerned about his citizens' problems and grievances, and then solved them promptly to the well-being of his people. As a result of the royal

practices, the king had gained support by people which contributed to his political stability.

b. Building effectiveness in politics and managing all tensions

Political instability is caused by a failure in solving tensions pressured onto political system. There is a strong connection between the effectiveness and stability of government. In general, effectiveness is the capability of achieving desired outputs. The effectiveness in politics and managing tensions is the outcome in alleviating demands or eradicating political pressures which explicitly relates to the ability of government or authority. The unsolved political conditions and demand indicates the incapability of government and may lead to distrust on government. A lack of confidence on government breaks people support, and may lead to severe protest against the government (Miljkovic and Rimal 2008). As political tension and crisis strongly harm the stability of government, or ruler as individual, the ability in eradicating such tension is essentially crucial. The outside forces such as foreign policies and interest potentially affect the stability of governments due to contrasting national interests and may escalate to conflict and crisis (Huntington, 1965). If the government is unable to deal with such conditions effectively, it will affect its security and stability.

King Mongkut apparently realized that he had no strength to secure the stability of the throne as he had to rely on the power of the Bunnag family. To establish effectiveness in political management, therefore; the King created the balance of power in his royal court by appointing Prince Chatmani, his younger brother who had commanded a large number of troops as the second king named Pinklao. King Pinklao had the equal honor the same as King Mongkut. King Pinklao's influence made the Bunnag family more circumspect in their use of power. Crowning his royal brother as the second king was not only advantageous for managing power with the Bunnag family, but also to prevent his brother from challenging his own position. King Pinklao formally expressed his desire to take the throne after the death of King Rama III. This meant that by placing King Pinklao as the same honor to himself caused the relationship between them to remain peaceful throughout his reign. Nevertheless, King Mongkut had gained strong support from the Bunnag family.

To gain the Bunnag family's support and loyalty, since they played a significant role in supporting King Mongkut to succeed the throne in 1851, the King

maintained them in their positions to allow them to be involved and take accountability in governance as key state stakeholder. The King promoted Did and Tat, the senior members of Bunnag family to Somdet Chao Phraya, the highly special rank of nobility, and regents of the kingdom. All the key members of Bunnag were also promoted, especially Choung, Did's eldest son, was made Chao Phraya Sri Suriyawong who later played prominent roles in government and foreign relations. During the negotiation process of the Bowring Treaty, the treaty that brought a huge change in economic and society of Siam, seven high rank officials were authorized full power by the King to negotiate the treaty, within these numbers, four of them were Bunnag members, indicating that the King believed the Bunnags were an important political group sharing the kingdom's interests. Appointing the Bunnag members to be involved in the negotiation allowed them to be able to defend their interests, as well as the interests of the kingdom. The King distributed political interests to a highly influential group, and as a result he gained strong support from this nobility family. This was considered as the King's strategies to build effective political management.

To effectively respond to external threat; the spread of British and French influence into Southeast Asia region, King Mongkut contributed to effectively managing tension. The King was fully aware that under colonialism, the Western countries prioritized their own interests over the sovereignty and independence of other countries. The fall of sovereignty and the end of the dynasty could be caused by violent forces if his royal court did not conciliate with their demands.

The King was aware that the British Empire was focusing more on free trade with partial restrictions or tariffs, nevertheless; they still used forces to control the lands in which they had interests. To ease the tension threatened by the British Empire, the King flexibly responded and cooperated with the British intention, even though he would loss some trade control in the kingdom and the influence over the areas connected to the British colonies. The King compromised with British demands by welcoming British envoys for negotiations which then led to the agreement on The Bowring Treaty in 1855. The Bowring Treaty allowed Britain to have a consulate in Bangkok and complete extraterritorial powers in Siam (Ingram, 1971). While France, firstly established its colony in Southeast Asia by occupying Vietnam in 1862, was expanding its influence in the east of Siam. France, desired to occupy Cambodia as a method to access

Southern China. Cambodia was a Siamese tribute state, so France forced pressure on Siam. The King vigilantly evaluated the situation and implemented the proper policy to ease the tensions. Being tolerant to the pressure, the King signed a treaty with France in 1867 (Chandler, 1992) confirming that Cambodia was under French Protectorate, in exchange for control of some eastern provinces which included Battambang and Siem Reap. The King's response somewhat satisfied France which definitely contributed to the stability of the king.

As a result of King Mongkut's actions in various fields during his reign to respond to resolve external and internal political stability factors, the King effectively maintained political stability of the kingdom and to himself. The result of his foreign policy with the West in gaining international recognition that his government was the government of a civilized kingdom as well as having cordial relations with the royal courts of Western nations. The King made concessions to major Western nations allowing Siam to maintain its independence without being occupied. More importantly, the King's political stability was preserved.

Discussion

The research found that the influence of nobility such as the Bunnag family, affected King Mongkut's political stability. This is consistent with the results of a study by Sukanya (Bamrungsuk, 1982), which found that the Bunnag nobles were immensely powerful because they controlled important positions, especially the Ministry of Defense. The Bunnag family rise to noble status was due to the situations both inside and outside the country contributing to the Bunnag family becoming the most influential nobles. The Bunnag family played a significant role in the appointment of a new monarch: King Mongkut. Hence, the Bunnag family dominated the royal court during the transition period to a new reign. This is consistent with Therdpong who stated that the Bunnag family had a prominent role in supporting King Mongkut to ascend to the throne and later the King needed to rely on their support, indicating the most powerful nobility in the kingdom (Kongchan, 2004).

The research revealed that the outdated governance system was an internal factor affecting King Mongkut's political stability as the governance powers were scattered to nobility in foreside cities. Attajak (Sattayanurak, 1988) proposed that under changing conditions and circumstances which pushed King Mongkut to concentrate his power, therefore the absolute

monarchy was firstly established in his reign. As an absolute monarchy is commonly established in modern state which needs to have valid state boundary and unified people sharing the common national values, this research argues that the governance system in the reign of King Mongkut was still clearly decentralized; power still was allocated in various cities and towns, with both central and regional nobles playing roles in governing by controlling their own troops and resources. The reason Attajak might have made such a statement is the historical event where the King carried out the boundary delimitation between Siam and Britain in 1864. Despite such a delimitation, which was aimed to create state territory to stop Britain from expanding their power into the kingdom, there was no technology that could effectively determine the certainty of the boundaries. At that period of history it was not yet possible to forge the people to have a common sense of one kingdom. Since the centralization of the king's power was still ineffective, the attribution of the absolute monarchy in his reign had not yet occurred.

The research's finding on the topic of effective political management and managing tensions showed that King Mongkut's had performed effective politics administration by coordinating benefits with the nobles in order to give them the opportunity to participate in managing the country's interests as the key stakeholders. The King appointed Bunnag family member to control important positions, especially armed force control, trade and international affairs. Giving a sense of national administration ownership was not only to remunerate the Bunnag family for supporting the King to the throne, but also to prevent them from insubordination or resistance in case their interests got interrupted by Western demands. This is consistent with Terdpong's conclusion stating that the King was obliged to reward the Bunnag nobles for their role in the royal court as an important and prominent group in supporting the throne, this allowed the Bunnag family to continuously preserve and attain interests, especially in foreign trade (Kongchan, 2004). However, Therdpong mentioned that rewarding the Bunnag family to administrate the key positions of the kingdom had prevented the King from showing his full wisdom in political management. This does not align with this research finding which argues that the King was a talented and outstanding monarch of the Chakri dynasty. Handling the colonization threats during his reign intelligently, he performed a high competency in foreign policy and diplomacy.

In regards to the establishment of political support from people via creating political legitimacy, the research revealed that King Mongkut had conducted himself as a Bodhisattva who had high legitimacy to the throne as per Siamese norms. This is consistent with the results of the study of Sara Meephonkij stating that the King had preserved traditional knowledge and advanced the beliefs for the benefit of maintaining his stability and as a result he gained support from people who were influenced by the norms and beliefs (Meephonkij, 2012). This finding is also aligned with the study of Thongtong who found that the King had communicated to his citizen that he was a legitimated king who highly cared for his citizens well-being which made him accepted and supported by the people (Chandransu, 2010).

The research found that King Mongkut projected the image of the king of a civilized kingdom who legitimately owned power in ruling over the lands and tribute states in the region. This international projection created effectiveness in political management making major Western nations implement their policies with specific protocols. This finding aligns with Suwinya's (Imkiat, 2009) which stated that the king had improved the country's image in order to eliminate the Western's pretext claiming the right to occupy other lands due to being an uncivilization. The image adjustment and building resulted in the Western policy towards Siam being classified as a special status compared to other territories.

The research finding showed that King Mongkut contributed political stability by coordinating interests with Western powers. The King pursued a compromised policy by sacrificing some interests in order to preserve the independence of the country and stability of himself in order to alleviate tensions in the political system. This is consistent with the study of Kornkamol (Seekao, 2006) which proposed that the King was definitely unable to ignore Western demands threatening the kingdom's independence. As the King was fully aware that a harsh policy towards western countries was ineffective as evidenced by the loss of Myanmar in 1852, the King prudently carried out coordinative policies.

In terms of monarchy in the present time, Bogdanor (2003) argued that the monarchy has lost much of its magic but retains support on utilitarian grounds as a practical solution to the problem of sustaining constitutional and democratic government. Bogdanor also argued that the monarchy is subject to support the political regime, otherwise they would lose the stability.

This clearly shows that the monarchy's stability, even in the present time, depends on the acceptance of the people and being in accordance with the current political system. Hence, in order to establish such acceptance, the monarchy should act in enhancing the well-being of the people as well as the political regime. Bogdanor's study is aligned with this research result which found that the political stability establishment of King Mongkut comprised of "building political acceptance to gain civil supports" as the key component. The acceptance was based on the people's perception toward the King such as being politically legitimated in accordance with the political regime and he clearly projected himself to be the ruler who was highly attentive to the well-being and the needs of the people. Therefore, to establish political stability, both historically and present time, the common essential foundations include the people's acceptance and political legitimacy.

Conclusion

King Mongkut was a philosopher and talented king of Thailand, he reigned during the Western threats which were intensively escalating and threatening to the sovereignty of the country. The King's lack of wealth and force was due to his time of being a monk for almost 3 decades. The outdated government, decentralization governance, and the influence of nobility, as well as the western colonization threats influenced the King to implement political stability strategies. Projecting and demonstrating political legitimacy in accordance with social norms was practiced in order to gain political acceptance which was the essential foundation of public support. Allocating interests to major nobility groups, creating balance of power in the royal court, and avoiding confrontation by compromising with foreign demands were conducted by the King to create effectiveness in politics and manage tensions, By implementing the discussed strategies in this research, the King successfully established political stability.

Suggestions

1. Government agencies should publicize the royal performance of King Mongkut in how he preserved the nation's independence during Western colonization. This would lead to increase awareness on how the monarchy had contributed the sovereignty and flourishing of the country.

2. Ministry of Education should promote students' awareness and pride of being Thai by increase

focus on teaching Thai history. Awareness should be focused on the events in protecting the country from colonization during the reign of King Mongkut and King Chulalongkorn.

3. In the field of political science, the courses should include political stability topic. The course administrators should insert knowledge of political stability of the monarchy in pre-modern times to ensure learners have a profound understanding of the monarchy system, in the view of evolutionary changes. This would aid students to connect their knowledge to the present situations and to have profound understanding in current social and political phenomenon.

4. Future research should be conducted as comparative studies in the preservation of national independence in Asian countries during the spread of colonialism in the 19th century between Thailand and Japan or China, which were the countries that were not colonized by the West. Such research would increase the understanding of the politics during the historical periods.

Reference

- Auslin, Michael R., (2004). *Negotiating with Imperialism: The Unequal Treaties and the Culture of Japanese Diplomacy*. Cambridge: Harvard University Press.
- Bamrungasuk, Sukanya. (1982). *The authority and role of Samuha Phra Kalahom during the Ratanakosin period*. Thesis of Master of Arts Program. Chulalongkorn University.
- Bogdanor, Vernon (1997). *The Future of Constitutional Monarchy, The Monarchy and the Constitution*. Oxford, Oxford Academy.
- Chandler, David P. (1992). *History of Cambodia*. Boulder, CO: Westview Press.
- Chandransu, Tongthong. (2010). *The Political View of King Rama IV on the Institution of Monarchy*. Master of Political Science, Sukhothai Thammathirat Open University.
- Dhiravekin, Likit. (2004). *Theory of political development*. Bangkok: Thammasat University.
- Hoffman, Philip T. (2015). *Why Did Europe Conquer the World?* Princeton, Princeton University Press.
- Huntington, Samuel P. (1965). "Political Development and Political Decay." *World Politics*. 17 (3), 386-430.
- Imkiat, Suwinya. (2009). *Westernizing Changes in Thai Society During the Reign of King Rama IV (1851-1868)*. Master of Art, Ramkhamhaeng University.
- Ingram, James C (1971). *Economic Change in Thailand 1850-1970*. Palo Alto: Stanford University Press.
- Kongchan, Therdpong (2004). *Politics in establishment of King Mongkut*. Bangkok: Maticchon.
- Lasswell, Harold D. (1936). "Politics: Who Gets What, When, How". *American Political Science Review*, 30 (6), 1174-1176

- Lipset, Seymour Martin. (1964). *Political Man*. London: Mercury books.
- Mann, Michael States. (1977). Ancient and Modern. *European Journal of Sociology*. 18 (2), 262–298.
- Meephonkij, Sara. (2012) *His Majesty King Mongkut's Initiations and Accomplishments in the preservation, development, and transference of knowledge*. Degree of Philosophy Program in Education's Dissertation, Chulalongkorn University.
- Miljkovic, Dragan, and Rimal, Arbindra. (2008). "The impact of socio-economic factors on political instability: A cross-country analysis." *The Journal of Socio-Economics* .37(6), 2454-2463.
- Mittiga, Ross (2021). "Political Legitimacy, Authoritarianism, and Climate Change." *American Political Science Review*. 116 (3), 998–1011.
- Nana, Krairek (2008). *King Mongkut and western colonial powers*. Bangkok: Matichon
- Plaiynoi, S. (2001). *His Majesty King Mongkut, King of Siam*. Bangkok: Pimkham.
- Sattayaburak, Attachak. (1988). *The transformation of historical consciousness and the changes in Thai society from the reign of King Mongkut to 1932 A.D.* Thesis of Master of Arts Program. Chulalongkorn University.
- Sereerangsan, Teerapat. (2018). "The Mix of Four Regimes: Monarchy, Bureaucratic Polity, Plutocracy, and Democracy." *King Prajadhipok's Institute Journal*. 16 (1), 5-21.
- Sikoa, Kornkamol (2006). "His Majesty King Mongkut in protecting Siam from Western imperialism." *Chulachomklao Royal Military Academy journal*. 4(1), 12-32.
- Veracini, Lorenzo (2010). *Settler Colonialism: A Theoretical Overview*. New York: Palgrave Macmillan.



Teaching Effectiveness and Academic Performance as Moderated by Gender

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Abstract

This research was undertaken to determine the moderating effect of gender on the relationship between teaching effectiveness and the academic performance of university students. It utilizes descriptive correlational design using survey questionnaires to a sample of three hundred twenty-two students in the Bachelor of Science in Business Administration (BSBA) during their first- and second-year as the main participants. Results showed that a significant comparative difference existed between female students who performed better than the male students. A significant relationship exists between teaching effectiveness as well as gender as primary determinants in determining the academic performance of students. Findings revealed that the academic performance proved to be predicted by teacher effectiveness and gender notwithstanding the interrelatedness of its relationships. To determine the moderating effect of gender, the logistic hierarchical regression analysis was employed. When moderated, gender did not show any interactive effect on the relationship between teaching effectiveness and academic performance. With the on set of outcomes-based approach in the higher education system, notable findings of this study may pave the way for academic and administrative sectors to unceasingly develop innovative methodologies in improving the management of learning of the millennial generation.

Introduction

College life seems to be demanding and stressful for the freshmen although the transition from secondary education to tertiary is not anymore new (Eddaif et al., 2017). The academic achievement of university students, which is commonly measured by their Cumulative Grade Point Average (CGPA), is one of the 28 markers that highlights the students' qualification (Valli Jayanthi et al., 2014; Yogendra & Andrew, 2017). What affects the academic performance of students continues to be a

lingering issue among academic practitioners, 30 experts, policymakers, and educators (Ampofo & Owusu, 2015). Al-Zoubi and Younes (2015) noted the biggest problem that modern academic institutions are facing is the low academic achievement of students which challenges them from attaining the institution's mission. Reality speaks that high school students who desire to proceed to the tertiary education lack the essential knowledge, skills, and habits of mind to succeed (Jaeger, 2013).

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Objective

Studies reveal that a notable interrelationship exists between the teacher's behavior and the academic achievement of students (Rashid & Zaman, 2018). Cited by Muema, Mulwa, and Mailu (2018), Adunola argued that poor academic performance of the majority of the students is fundamentally associated to ineffective teaching methods of the teachers and that various teaching strategies should take place to articulate the knowledge to the learners. For example, if teachers lack motivation and commitment (Michael & Wumi, 2016), these may result to poor attendance and unacceptable behavior towards the students which ultimately affect their academic performances. If teachers possess the abilities to understand (Mvula, 2020) and interpret specific objectives, both the teaching and the learning processes are carefully undertaken in such a manner then the teachers can decide on what the appropriate strategies and resources are best suited to the students. Although there are a number of theories of teacher evaluation in the body of knowledge that take into account the agreement which behaviors lead to learning, this perspective on how teachers are evaluated according to the student performance as a laying ground for educational reforms is still unsubstantiated (Biunno, 2019). Gender, on the other hand, is considerably assumed to have an effect on students' academic performances (Adigun et al., 2015; Christopher et al., 2019; Parajuli & Thapa, 2017) where differences of their academic achievements have been noticed but still need further scientific confirmation (Hdii & Fagroud, 2018).

In some studies gender was treated as a moderating variable. In their study, Ye et al. (2018) concluded that gender moderated the relationship between the academic stress and academic self-efficacy where a stronger evidence was seen for females than that of males. Gender proved to be a significant moderating variable when it was associated between the content quality and perceived ease of use in the utilization of the learning management system in higher educational institutions in Saudi Arabia as discussed in the study of Binyamin et al. (2020). In the study of Lei et al. (2018) the interaction of gender was significantly evident between teacher support and students' academic emotions. In the study conducted by To et al. (2018), female gender and higher age were significantly associated with the academic performances of the Norwegian occupational therapy students in terms of the grade point average. Similarly, (Parajuli & Thapa, 2017)

also concluded in their study that gender differences proved to be substantially associated with the academic performances of the students.

It is clear from Brew et al. (2021) that a more thorough examination of the factors influencing college students' academic success is required. Researchers Arora and Singh (2017) and Islam and Tasnim (2021) have revealed a variety of links that have an impact on students' academic success. However, research into the role of gender as a moderator in the relationship between teacher appraisal and student academic achievement is still ongoing, and further research is needed (Parajuli & Thapa, 2017). Both male and female students interact the existing bivariate correlations, therefore the findings of this study have implications for policy formulations in the educational sphere, where gender plays a central role as a moderator between teachers' effectiveness and students' academic results. In particular, a full explanation of what determines teacher effectiveness in terms of dedication, topic knowledge, teaching for independent learning, and learning management to students in tertiary education must be provided. Students' perceptions of a teacher's efficacy may differ from one another. The goal of this study is to see if gender differences have a moderating effect on the link between teaching effectiveness and student academic performance. This fills in the gaps and makes a significant contribution to the body of knowledge. The research investigated some of the most intriguing aspects that influence academic success that have yet to be uncovered.

Methods for generating the results of this academic endeavor provide an essential base for the academic council to review its policies on enforcing the academic learning mechanisms to the students as well as for the administrative council to utilize the budget intended for the improvement of the institution's infrastructure projects. The findings could aid in decision-making in pursuing further the philosophy of the university as well as the goals and objectives of the Business Administration program. The findings in this study will aid in the development of methodologies to improve the quality of instruction and structural reforms catered to the students and to validate these methodologies for a more comprehensive policy use relative to curriculum and instruction.

Conceptual Framework

Anchored from the theory of teacher self-efficacy, its theoretical foundation was authored by Albert

Bandura in view of the social cognitive theory as cited by (Nabavi, 2012). Berman et al. cited by Kiamba et al. (2017) contended that teacher efficacy pertains to how a teacher believes that one has the capability to affect the academic achievements of students.

Under the self-determination theory, it purports that people become self-driven when competence, connection, and autonomy (Ryan & Deci, 2000) are achieved. The self-determination theory concentrates fundamentally on the internal sources of motivation such as to gain knowledge or independence (Cherry, 2019).

In Figure 1, the conceptual paradigm of the study linking the constructs to the academic performance of students is presented. As proposed, this paradigm consists of three variables each of which manifests a relationship with each other. Teaching effectiveness, an independent variable, pertains to the performance of faculty members at the university level. The academic performance is perceived to be influenced by teaching effectiveness of the teacher. Gender, on the other hand, moderates the relationship between teaching effectiveness and academic performance.

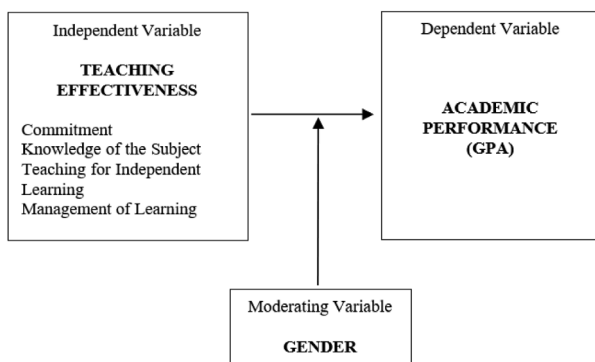


Fig. 1 Conceptual Framework

Research Methodology

1. Population and Samples

This research was conducted at the North Eastern Mindanao State University – Tagbina Campus. The university is situated in the northeastern part of Mindanao in the province of Surigao del Sur, Philippines. The study employed the universal sampling technique since the participants were the business administration students under the College of Business and Management during their first year and second year in the first semester of academic year 2019-2020 of which 101 were

males and 221 were females. As an inclusion to the criteria of selection, all participants were included in the study so there was no need to calculate the sample size. The administration of the survey was conducted during classroom instruction where the researcher sought permission from the faculty handling the class. Prior to the survey, the researcher was advised to follow all necessary research protocols and ethical considerations especially on the welfare of the respondents.

2. Research Instrument

This is a standardized instrument adopted from the National Budget Circular (NBC) 461 for State Universities and Colleges (SUC's). The teaching effectiveness instrument is composed of four assessment areas where a faculty member is periodically rated every semester by the students, peers, supervisor, and self. In this study, students' ratings were utilized. These include commitment, knowledge of the subject, teaching for independent learning, and management of learning. Having teachers with a high level of commitment (Shu, 2022) will have a more accurate understanding of their workplace's capabilities and successfully support student achievement. Effective teacher preparation directly connects to the question of whether the capacity to demonstrate their knowledge in the classroom may be regarded as concrete or abstract in nature (Jeschke et al., 2021). Cited by Žydzūnaitė et al. (2015), independent learning according to Chan pertains to the capacity of the students to fully accept their responsibilities for the decisions they make regarding their learning. Management of learning refers to the classroom management (Chalak & Fallah, 2019) as a fundamental component in education where students acquire knowledge for an effective teaching – learning study, gender is also hypothesized as the moderating variable to determine its interaction effect between teaching effectiveness and academic performance of students. The academic performance being the dependent variable of the study is measured in terms of the grade point average (Reda & Mulugeta, 2018) of the students for the semester. This consisted of all the subjects enrolled during the previous semester. A student who receives a GPA of 1.0 – 1.2 is considered excellent. A very satisfactory remark is given if a student receives a GPA between 1.3 – 1.5; satisfactory remark between 1.6 – 2.0; good remark between 2.1 to 2.5; and a fair remark between 2.6 – 3.0. The university's administrators, deans, and the office of the academic affairs were asked to examine the questionnaire's content before it was sent

out. This was done to ensure that all of the appropriate procedures for establishing validity had been adhered to. Thirty students from other colleges were invited to participate in the pilot testing of the study. This was to test and retest whether or not these questions proved to be consistent. The questions proved to be acceptable after obtaining Cronbach's alpha of 0.892.

Table 1 Numerical Grade Equivalent

GRADE	EQUIVALENT	CLASSIFICATION	
1	95 - 100%	Excellent	11
1.1	94	Excellent	12
1.2	93	Excellent	13
1.3	92	Very Satisfactory	
1.4	91	Very Satisfactory	
1.5	90	Very Satisfactory	15
1.6	89	Satisfactory	16
1.7	88	Satisfactory	
1.8	87	Satisfactory	
1.9	86	Satisfactory	17
2	85	Satisfactory	
2.1	84	Good	
2.2	83	Good	18
2.3	82	Good	
2.4	81	Good	19
2.5	80	Good	
2.6	79	Fair	
2.7	78	Fair	20
2.8	77	Fair	
2.9	76	Fair	
3	75	Fair	
5	74 and below	Failed/Dropped	

3. Collection of Data

Due to the transition of the educational system orienting to the K-12 program in basic school, an extra milestone in the Philippine educational system, there were only two-year levels in tertiary education at the time this survey was done. During the execution of the K-12 program, the study's respondents completed senior high school. The secondary level senior high school academic curriculum provided as additional building blocks in leveraging the competencies of the students, with the first batch of students graduating in 2018. The study's exclusion criteria included graduates of the Alternative Learning System (ALS), returnees, and continuing students. In accordance with academic institution research ethics, the researcher requested permission from the campus director, as indicated by the program coordinator and formally authorized by the head of research, to formulate the study. This was done to guarantee that the research project aligned with the university's research program. The researcher distributed and retrieved the survey 38 instruments throughout the

week where classes were held, with the help of the faculty handling the subject, after receiving consent from the campus director. The survey was completed in seven working days, taking into account the characteristics of the respondents.

4. Data Analysis

The approach of this study is quantitative in nature as it utilizes descriptive correlational techniques to describe the variables and its relationships. In the correlational research method, McLeod (2020) opined that the examination of the study identifies the variables and looks for its relationships. To test the relationship whether teaching effectiveness and gender predict the academic performance of students, the Multiple Linear Regression (MLR) analysis was utilized. The regression analysis was the statistical tool for this study to analyze the relationship between a dependent variable and two or more independent variables (Kumar, Talib & Ramayah, 2017).

After the regression analysis of the variables involved in the study, the researcher investigated further the conditioning effect of gender between the teaching effectiveness and academic performance of students through the causal-comparative research design. Moderated Multiple Regression (MMR) analysis was employed to establish whether or not gender moderates have a causal relationship (Maheshwari, 2018) between teaching effectiveness and academic performance of students. Survey questionnaires were the main instruments in the data gathering. In conclusion, the descriptive-correlational and causal-comparative methods of the research are the most appropriate designs to conduct this study.

Result (s)

Level of Teaching Effectiveness

Table 2 presents the summary table of teacher effectiveness as perceived by the students in the business administration program. The results showed that indicators generated a very high level of teaching effectiveness with an overall mean of 4.53 and a descriptive level of very high. This means that all indicators of teaching effectiveness of the faculty members in the business program were always manifested. Based on the individual perspective, teaching for independent learning generated a very high descriptive level of 4.59 among other indicators. Knowledge of the subject ($\bar{x} = 4.54$), and commitment ($\bar{x} = 4.51$) both indicated as very high level of teaching effectiveness.

Management of learning yielded the lowest mean of 4.47 but still on a very high level of teaching effectiveness.

Table 2 Level of Teaching Effectiveness

Indicator	SD	Mean	Descriptive Level
Commitment	0.41	4.51	Very High
Knowledge of the Subject	0.39	4.54	Very High
Teaching for Independent Learning	0.38	4.59	Very High
Management of Learning	0.40	4.47	Very High
Overall	0.40	4.53	Very High

T-test Comparison of the Academic Performance of Students when grouped according to Gender

The Grade Point Average (GPA) is utilized in this study to measure the academic performance of the students as exhibited in Table 3. A statistical significant difference is unveiled in the academic performance of students when grouped according to their gender orientation. This is evidenced between the males ($M = 2.22$, $SD = 0.33$) and the females ($M = 2.02$, $SD = 0.25$), $t(320) = -5.92$ where $p < 0.05$ (assuming equal variances), $CI.95$ -2.265943 , -1.33352 . The study, therefore, fails to reject the null hypothesis. Reaching its statistical significance, the actual difference in mean scores between groups is close to medium effect. The effect size of 0.67 is calculated using Cohen's d . A noticeable GPA mean of female college students proved to be greater or equivalent to "satisfactory" than the GPA mean for males having classified as "good". Apparently, female students perform better than the males in their academics in relation to business administration.

Table 3 T-test Comparison of the Academic Performance of Students when grouped according to Gender

Academic Performance	Gender	N	Mean (GPA)	SD	t	Sig. (2-tailed)
Grade Point Average (GPA)	Male	101	2.22	0.33	-5.92	0.000
	Female	221	2.02	0.25		

Correlation between Teaching Effectiveness and Academic Performance

The overall r -value of -0.119 demonstrated a significant link at $p < 0.05$, as shown in Table regarding the correlation between teaching effectiveness and student academic performance. As a result, the null hypothesis was rejected. This result showed that the effectiveness of a teacher is strongly linked to a student's academic achievement. The r -values varied from -0.084

to -0.132 when looking at markers of teaching effectiveness that were linked to academic success. When the factors are connected with academic performance, commitment has the highest r -value ($r = -0.132$, $p > 0.05$). As a result, there is a considerable link between commitment and academic performance. When the remaining measures, such as topic knowledge ($r = -0.095$, $p > 0.05$), instruction for autonomous learning ($r = -0.095$, $p > 0.05$), and learning management ($r = -0.084$, $p > 0.05$), were associated to academic performance, they revealed insignificant associations.

Table 4 Correlation between Teaching Effectiveness and Academic Performance

Teaching Effectiveness	Academic Performance (GPA)
Commitment	-0.132^*
	.018
Knowledge of the Subject	-0.095
	.087
Teaching for Independent Learning	-0.095
	.089
Management of Learning	-0.084
	.134
Overall	-0.119^*
	.033

* $p < 0.05$ (Correlation is significant at 0.05 level (2-tailed)).

Association between Gender and Academic Performance

The findings presented in Table 5 showed the association between gender and the academic performance of the business administration students. Since gender is a categorical variable and could not illustrate a linear relationship, the Eta coefficient test was utilized. This measured the strength of association between gender having two categories (male and female) and the academic performance of students which was a scale or interval variable. The result of Eta coefficient test revealed 0.314, a weak association between gender and academic performance based on the Pearson's Correlation Coefficient scale for use with the Eta Coefficient.

Table 5 Association between Gender and Academic Performance

Eta Coefficient Test	
Academic Performance as Dependent Variable	.314

Multiple Regression Analysis on the Influence of Teaching Effectiveness and Gender on Academic Performance

Reflected in Table 5 is the regression analysis of teacher effectiveness and gender to the academic

performance of the business administration students. The multiple regression analysis was utilized to assess the strength of the relationship whether teaching effectiveness and gender predict academic performance. Findings unveiled that teaching effectiveness and gender were significant predictors of the academic performance of students as evidenced by $R = .333$, $R^2 = 0.111$, adjusted $R^2 = 0.105$ and $\{F(2,319) = 19.878, p < 0.05\}$. The R-squared of .111 manifests that 11% variation in academic performance of students is explained by the variation in teaching effectiveness and gender. Although the R-squared is low, it does not negate the importance of these variables since the p-value continues to be statistically significant and these coefficients have the same as interpretation indicated in this study (Frost, n.d.). Evidently, the obtained R-value of 0.333 signifies a relationship among the variables. This significant influence is proven by F-value of 19.878 with a $p < 0.05$ signifying model fit.

It is also established from the result that both teaching effectiveness and gender were significant at 0.05 alpha level as evidenced by their respective p-value of 0.039 and 0.000 and are considered to be predictors of academic performance. This further implies that both teaching effectiveness and gender have significant amounts of unique variance to the academic performance. The amount of variance that teaching effectiveness and gender predicting or influencing the academic performance uniquely on its own is significant. As a result, the null hypothesis that no meaningful association exists between teaching effectiveness and student academic achievement is rejected.

Table 6 Multiple Regression Analysis on the Influence of Teaching Effectiveness and Gender on Academic Performance

Model	Summary of Regression	Unstandardized Coefficients	Standardized Coefficients	t	Sig
		B Std. Error	Beta		
1 (constant)		2.454 .211		11.658	.000
Teaching Effectiveness		-.096 .046	-.109	-2.072	.039
Gender		.198 .034	.311	5.889	.000
Multiple R	0.333				
R Square	0.111				
Adjusted R Square	0.105				
F	19.878				
p	0.000				

Moderating Effect of Gender on the relationship between Teaching Effectiveness and Academic Performance

To have the moderation hypothesis tested whether gender moderated the relationship between teaching effectiveness and academic performance, hierarchical regression analysis was employed for this purpose. Teaching effectiveness was the independent variable, gender was the moderating variable, and academic performance was the dependent variable. This is reflected in table 7 as the primary source of data for table 8 and table 9 which are all essential in the formulation of mod graph as illustrated in Figure 2. Following the standard procedures, teaching effectiveness was multiplied with the dummy-coded gender variable to yield an interaction effect. These two main effects and the interaction term (teaching effectiveness x gender) were utilized in a hierarchical regression to predict academic performance. When regressing teaching effectiveness and gender in step 2, the model manifested to be significant ($p < .05$) and demonstrated a change in R-square of .097. The R-square change described how much variance in the dependent variable these predictors explained in each step. The R-square change of 0.097 signified an additional variance of 9.7% to the variance of 1.4% in step 1 regression showing that 1.4% of the variance in academic performance of students was due to the teaching effectiveness. The interaction term explained about .1% new variance above and beyond the two main effects. This was marked less than the change in R-square in steps 1 and 2.

Table 7 Regression Results to assess the Moderating Effect of Gender on the relationship between Teaching Effectiveness and Academic Performance

Model	Unstandardized Coefficients	Standardized Coefficients	t	R Sig.	R Square Change
step	B	Std. Error	Beta		
(constant)					
Teaching Effectiveness	.554	.221		1.577	.014
	.104	.049	.119	2.143	.033
(constant)					
Teaching Effectiveness	.454	.211		1.658	.000
Gender	.096	.046	.109	2.072	.039
	.198	.034	.311	5.889	.000
(constant)					
Teaching Effectiveness	.374	.275		.632	.000
Gender	.078	.061	.089	1.289	.198
GenderxTeaching Effic	.392	.426	.617	.919	.359
	.043	.094	.307	.457	.648

Note: Gender was dummy coded with 0 = female, 1 = male. This regression included an interaction term named gender x teaching effectiveness. This interaction is not significant, $t = -.457, p = .648$

Table 8 Statistical Output Necessary to Graph the Moderation Result of Gender on the Teaching Effectiveness-to-Academic Performance Relationship.

Variable	B	Mean	SD
Teaching Effectiveness	-.078	4.52764	.337062
Gender	.392		
Interaction Term	-.043		
Constant	2.374		

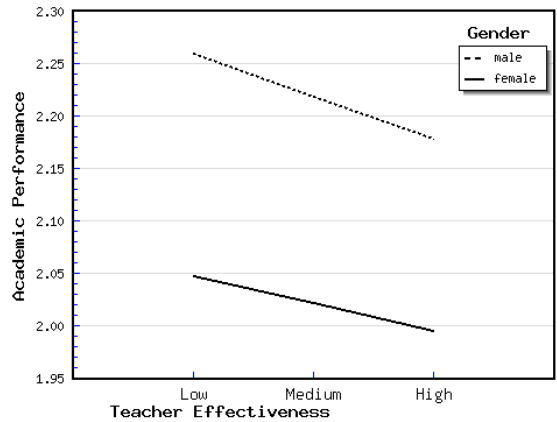
Table 9 Summary of Means on the Main Effects of Teaching Effectiveness on Academic Performance

Gender	Teaching Effectiveness		
	Low	Medium	High
Female	2.047135	2.020844	1.994553
Male	2.25894	2.218156	2.177371

The unstandardized coefficients, mean, and standard deviation of teaching effectiveness reflected in step 3 regression in table 7 were utilized and presented in table 8 supported with descriptive statistics and the computed values of the main effects of teaching effectiveness and gender to the academic performance in table 9. When the effect of one independent variable differs based on the extent of magnitude of another variable which is also the moderating variable, the interaction is said to take place. The interaction effect ($B = -.043$, $p > 0.05$) which was the product of gender and teaching effectiveness was not significant. No evidence was proven that gender moderated between teaching effectiveness and academic performance of students; hence, the null hypothesis is accepted. The interaction effect was not a contributor to the model variance. A modgraph is generated as illustrated in Figure 2 to validate the results of the regression. The graph shows two asymmetrical lines represented by male (heavy line) and female (broken line). One way to determine the presence of the interaction effect is when one slope is steeper than the other. As can be seen in the Figure 2, the male slope is steeper than the female slope. Simple slope analysis further unveiled that male students demonstrated a non-significant slope, -0.121 , $p > 0.05$. Females also generated a non-significant slope of -0.078 , $p > 0.05$. These slopes were calculated after obtaining the covariance matrix in regression analysis as presented in table 10. The results show that the effectiveness of teachers as perceived by both male and female students when moderated is not related to their individual academic performances. Hence, gender is not a contributing factor between teaching effectiveness and academic performance.

Table 10 ModGraph Output for Simple Slopes of Male and Female Groups

	Male	Female
Simple Slopes	-0.121	-0.078
Standard Errors	0.0707	0.0632
t-values	-1.7111	-1.2332
p-values	0.0880	0.2183

Moderating Effect of Gender on Teacher Eff and Acad Perf**Figure 2** Graphical depiction of the moderating effect of gender in the teaching effectiveness-to-academic performance relationship

Discussion

In relation to the commitment, the very high level as demonstrated by the faculty members in the business administration program is attributed with their preparedness in their assigned responsibilities. Faculty members have accurate records in determining the academic performance of students and are periodically submitted on time to the concerned authorities. This level of commitment corroborates the findings of previous research (Altun, 2017; Gupta & Verma, 2021) contending that students are motivated to comply with activities when teachers have a high level of commitment. Parallel to the findings of this study, Bashir and Gani (2020) contended that when instructors have the impression that their organizations have high level of involvement, they respond with a stronger level of dedication and view themselves as an essential component of the organization (Batugal, 2019).

The knowledge of the subject also signifies a very high level. This is remarkably manifested by faculty members who have innovative knowledge in articulating the integration of current issues and trends to the subject. They also explain the relevance of the present topics to the previous lessons demonstrating the mastery of the

subject matter. These findings are in congruent to the study of Kiamba et al. (2017) where the teacher's subject knowledge is an essential parameter of teaching effectiveness. Parallel to this study, Jeschke et al. (2021) opined that the provision of learning opportunities may not be sufficient to meet the needs of an experienced teacher of one subject if teaching that subject demands knowledge and the capacity to apply knowledge specific to that subject. The findings corroborate to the beliefs of Kirschner and Wopereis cited by Gandhi and Lynch (2016) who argued that instructors should have access to all of the information that they require in order to successfully transmit information to their pupils.

Teaching for independent learning results showed at a very high level. This is apparent where students are encouraged to learn and are also guided beyond what is required for them to set concepts into practice. Since the practice allows them to think independently and to hold accountable in executing their decisions, these students are given due recognition of their academic performances which greatly enhances their self-esteem. These results aligned to the qualitative study of Susanti (2017) where independent learning was perceived by the informants in the higher education is very essential as they learn something new beyond the boundaries of the classroom. In conjunction with the results of this study, Alserhan's and Yahaya's (2021) findings concluded that in order to promote students' individual progress, teachers developed empathetic responses to their students' classroom participation and critical imitation of instructional strategies. Structuring and/or reconstructing the learning and teaching-learning context in order to improve the achievement of group learning objectives has an additional impact on student learning management. Consistent with the results obtained by Munna and Kalam (2021), an active learning environment promotes diversity and improves the efficiency of both teachers and students. Faculty members used their inventiveness to allow students to develop their mental powers throughout class activities. The findings support Magulod's (2019) findings that strong correlations exist between students' learning styles, study habits, and academic achievement.

There is a compelling support for the role of teaching effectiveness (i.e. commitment, knowledge of the subject, teaching for independent learning, and management of learning) in fulfilling the academic performance of students. Good educators should be experts in the subjects they teach and to have a teacher

who is an authority in his or her field is like having a gold mine in a classroom (D & Harcourt, 2019). Akram (2019) inferred that subject knowledge of teachers is a significant predictor of students' academic performances. Additionally, findings revealed that commitment rendered a significant relationship towards academic performance. The outcomes of this study coincided with the studies conducted by Bibiso et al. (2017), which asserted that a positive association can be seen between a teacher's level of commitment and the academic accomplishment of their students. Looking into the entire spectrum employed in this study, teacher effectiveness revealed to contribute a significant relationship to the academic performance. These findings are congruent from the study of Bird (2017) who espoused that significant relationships did exist between student achievement and teacher evaluation. Further, the results of this study also corroborate to other studies indicating the significant relationships between teaching effectiveness and academic performance of students (Akram, 2019). Moreover, parallel to the study of Akram (2019), teacher effectiveness proved to be a significant predictor to the academic performance and that effective teachers do produce better performing students (Akiri & Ugborugbo, 2017). Examining closely on the dimensions of teaching effectiveness used in this study, knowledge of the subject, teaching for independent learning, and management of learning did not show significant relationships to the academic performance of students.

Further, gender was not associated in the academic performance of students. However, female students perform better than males students as evidenced in their means. These results are in conjunction with other studies that females students outperformed the male in terms of their academic performances (Ahmad et al., 2018; Parajuli & Thapa, 2017). Regression results reveal that both teaching effectiveness and gender are significant predictors on the academic performance of students. However, results found to be unlikely the same during the interaction between teaching effectiveness and gender which did not predict the academic performance of the college students in the business administration program. The results show that gender, when moderated with teaching effectiveness, failed to predict the relationship in the academic performance of students. Changes in gender did not significantly affect the variation in the teaching effectiveness in an attempt to influence the academic performance. Regardless of gender, how students perceived the level of teaching

effectiveness remained the same. This result is consistent with other studies that the inclusion of gender to moderate the relationship between emotional engagement and academic achievement is not significant (Lei et al., 2018)

Suggestion

This quantitative study investigated the moderating variable's triangulated effect interacted with the antecedent variable to determine if the moderator had a significant impact on the result variable. In terms of the direct impacts of teacher effectiveness on academic performance, the correlations among variables revealed in this study were extremely wide and consistent with the assumptions. The factors used in the analysis were chosen to help the researcher to reach more specific conclusions. The effectiveness of teachers and student academic success as evaluated by the grade point average are closely associated, according to the regression research. There is no link between gender and academic success. Furthermore, gender had no influence on the connection between teaching effectiveness and academic achievement. To summarize, commitment, topic knowledge, instruction for autonomous learning, and learning management were shown to be critical variables in students' academic performance. Although it stressed out that teacher effectiveness is an influential factor in predicting the academic performance of the students in consideration with their genders, an intriguing question lies on which of the individual components of teacher effectiveness is the most substantial predictor of academic performance when moderated by gender. One limitation of this study is that the evaluation of teachers is mainly concentrated on the variables covered in this study. It is believed that there are more unexplored antecedents of teacher's effectiveness affecting the academic performance of students. Further research is suggested to provide a more comprehensive analysis in understanding the relationships of the variables especially the conditioning effects of gender issues in relation to other factors. Given these results, the academic council may periodically review the instructional platforms of the university in enhancing the teaching effectiveness of the faculty members considering the changing learning environment vis-à-vis the learners in the millennial generation.

Reference

- Adigun, J., Onihunwa, J., Irunokhai, E., Yusuf, S., & Adesina, O. (2015). Effect of gender on students' academic performance in computer studies in secondary schools in New Bussa, Borgu local government of Niger state. *Journal of Education and Practice*, 6(33) 1-7.
- Akiri, A. A., & Ugborugbo, N. M. (2017). Teachers' effectiveness and students' academic performance in public secondary schools delta state, Nigeria. <https://www.tandfonline.com/doi/abs/10.1080/09737189.2009.11885284>
- Akram, M. (2019). Relationship between students' perceptions of teacher effectiveness and student achievement at secondary school level. *Bulletin of Education and Research*, 41(2)93-108. <https://files.eric.ed.gov/fulltext/EJ1229453.pdf>
- Ahmad, N., Hussain, S., & Khan, F. N. (2018). Test anxiety: Gender and academic achievements of university students. *Journal of Postgraduate Medical Institute*, 32(3), 295–300.
- Alserhan, S., & Yahaya, N. (2021). Teachers' Perspective on Personal Learning Environments via Learning Management Systems Platform. *International Journal of Emerging Technologies in Learning*, 16(24), 57–73. <https://doi.org/10.3991/ijet.v16i24.27433>
- Altun, M. (2017). The effects of teacher commitment on student achievement: A case study in Iraq. *International Journal of Social Sciences & Educational Studies*, vol 3(3) 51-54. <https://doi.org/10.6007/IJARBSS/v7-111/3475>
- Al-Zoubi, S. M., & Younes, M. A. B. (2015). Low academic achievement: Causes and results. *Theory and Practice in Language Studies*, 5(11) 2262-2268. Retrieved <https://www.academypublication.com/ojs/index.php/tpls/article/view/tpls051122622268>
- Ampofo, E. T., & Owusu, B. O. (2015). Students' academic performance as mediated by students' academic ambition and effort in the public senior high schools in Ashanti Mampong municipality of Ghana. *International Journal of Academic Research and Reflection*, 3(5) 19-35.
- Arora, N., & Singh, N. (2017). Factors Affecting the Academic Performance of College Students. *I-Manager's Journal of Educational Technology*, 14(1), 47. <https://doi.org/10.26634/jet.14.1.13586>
- Batugal, M. L. C. (2019). Organizational Culture, Commitment and Job Satisfaction of Faculty in Private-Sectarian Higher Education Institutions (HEIs). *World Journal of Education*, 9(2), 123. <https://doi.org/10.5430/wje.v9n2p123>
- Bibiso, A., Olango, M., & Bibiso, M. (2017). The relationship between teachers commitment and female students academic achievements in some selected secondary schools in Wolaita Zone, Southern Ethiopia. *Journal of Education and Practice*, vol 8(4) 75-80. <https://files.eric.ed.gov/fulltext/EJ1132934.pdf>

- Binyamin, S. S., Rutter, M. J., & Smith, S. (2020). The moderating effect of gender and age on the students' acceptance of learning management systems in Saudi higher education. *Knowledge Management and E-Learning*, 12(1), 30–62. <https://doi.org/10.34105/j.kmel.2020.12.003>
- Bird, D. O. (2017). *Relationship between teacher effectiveness and student achievement: An investigation of teacher quality* (Dissertation). Ball State University, Indiana. https://cardinalscholar.bsu.edu/bitstream/handle/123456789/200666/BirdD_2017-2_BODY.pdf?sequence=1&isAllowed=y
- Biunno, M. (2019). *Exploring the moderating effect of teacher practice on the relationship between prior student academic performance and current student academic performance in a New Jersey public school district*. (Graduate Theses and Dissertations). Seton Hall University, USA. <https://scholarship.shu.edu/cgi/viewcontent.cgi?article=3701&context=dissertations>
- Brew, E. A., Nketiah, B., & Koranteng, R. (2021). A Literature Review of Academic Performance, an Insight into Factors and their Influences on Academic Outcomes of Students at Senior High Schools. *OALib*, 08(06), 1–14. <https://doi.org/10.4236/oalib.1107423>
- Chalak, A., & Fallah, R. (2019). Effect of Classroom Management and Strategies on Students' Achievement at Undergraduate Level. *Language Teaching Research Quarterly*, 11(January), 81–98.
- Cherry, K. (2019, October 7). Self-determination theory and motivation. <https://www.verywellmind.com/what-is-self-determination-theory-2795387>
- Christopher, D., Ruth, I., & Christopher, D. (2019). *Influence of Gender and School Location on Science and Mathematics Students' Achievement in Western Senatorial District of Nasarawa State, Nigeria*. 4413(8), 259–264. <https://doi.org/10.36349/EASMB.2019.v02i08.001>
- D, E. I. P., & Harcourt, P. (2019). Influence of Teaching Effectiveness on Students' Learning Outcome. *International Journal of Innovative Social & Science ...*, 7(2), 37–48. <https://seahipaj.org/journals-ci/june-2019/IJISSER/full/IJISSER-J-4-2019.pdf>
- Eddaif, B., Boriky, D., Mustapha, F., Sadik, M., Hanine, M. A., Kasour, R., Moustad, M., & Talbi, M. (2017). Transition from high-school to university: Obstacles and difficulties. *Journal of Research & Method in Education*, 7(2) 33-37. Retrieved from <https://www.iosrjournals.org/iosr-jrme/papers/Vol-7%20Issue-2/Version-1/F0702013337.pdf>
- Frost, J. (n.d.). *How to interpret regression models that have significant variables but a low r-squared*. Retrieved from <https://statisticsbyjim.com/regression/low-r-squared-regression/>
- Hdii, S. & Fagroud, M. (2018). The effect of gender on university students' school performance: The case of the national school of agriculture in Meknes, Morocco. <https://dx.doi.org/10.7220/2335-8777.9.1.4>
- Gandhi, H. K., & Lynch, R. (2016). A comparative study of teachers' knowledge of commonict software, their perceptions towards using ict and their perceived self-confidence in integrating ict in their classes according to gender in two international schools in Thailand. *Schoolar: Human Behaviours*, 8(2), 78–93.
- Gupta, M., & Verma, G. (2021). Teaching Effectiveness of School Teachers: A Theoretical Perspective. *International Journal of Creative Research Thoughts (IJCRT)*, 9(10), 172–179.
- Islam, A., & Tasnim, S. (2021). An Analysis of Factors Influencing Academic Performance of Undergraduate Students: A Case Study of Rabindra University, Bangladesh (RUB). *Shanlax International Journal of Education*, 9(3), 127–135. <https://doi.org/10.34293/education.v9i3.3732>
- Jaeger, V. A.L. (2013). Transitions from high school to college. Retrieved <https://www.ncbi.nlm.nih.gov/pubmed/25522648>
- Jeschke, C., Kuhn, C., Heinze, A., Zlatkin-Troitschanskaia, O., Saas, H., & Lindmeier, A. M. (2021). Teachers' Ability to Apply Their Subject-Specific Knowledge in Instructional Settings—A Qualitative Comparative Study in the Subjects Mathematics and Economics. *Frontiers in Education*, 6(July), 1– 8. <https://doi.org/10.3389/educ.2021.683962>
- Kiamba, E. W., Mutua, F., & Mulwa, D. (2017). Influence of teacher's subject matter knowledge on students' academic achievement of Kiswahili language in public secondary schools in Kathonzwani sub-county, Kenya. *Scholarly Research Journal for Humanity Science & English Language*, 6(29). 8052-8059. <http://oaji.net/articles/2017/1201-1539425229.pdf>
- Kumar, M., Talib, S. A., & Ramayah, T. (2017). *Business research methods*. Oxford Publishing.
- Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and academic achievement: A meta-analysis. *Social Behavior and Personality: An International Journal*, 46(3), 517-528. <https://doi.org/10.2224/sbp.7054>
- Lei, H., Cui, Y., & Chiu, M. M. (2018). The relationship between teacher support and students' academic emotions: A meta-analysis. *Frontiers in Psychology*, 8(JAN), 1–12. <https://doi.org/10.3389/fpsyg.2017.02288>
- Magulod Jr., G. C. (2019). Learning styles, study habits and academic performance of Filipino university students in applied science courses: Implications for instruction. *Journal of Technology and Science Education*, vol 9(2), 184-198. <https://www.jotse.org/index.php/jotse/article/view/504/392>
- Maheshwari, V. K. (2018, January 23). Causal-comparative research. <http://www.vkmaheshwari.com/WP/?p=2491>
- McLeod, S. (2020). Correlation definitions, examples & interpretation. Retrieved from <https://www.simplypsychology.org/correlation.html>

- Michael, I. O., & Wumi, O. A. (2016). Causes and remedies to low academic performance of students in public secondary schools: A study of Ijero local government area of Ekiti state. *Research on Humanities and Social Sciences*, 6(15) 66-71. Retrieved from <https://core.ac.uk/download/pdf/234675274.pdf>
- Muema, J. S., Mulwa, D. M., & Mailu, S. N. (2018). Relationship between teaching method and students' performance in mathematics in public schools in Dadaab Sub County, Garissa County; Kenya. *Journal of Research & Method in Education*, 8(5) 59-63. Retrieved from <http://iosrjournals.org/iosr-jrme/papers/Vol-8%20Issue-5/Version-5/10805055963.pdf>
- Munna, A. S., & Kalam, M. A. (2021). Teaching and learning process to enhance teaching effectiveness: literature review. *International Journal of Humanities and Innovation (IJHI)*, 4(1), 1-4. <https://doi.org/10.33750/ijhi.v4i1.102>
- Mvula, A. K. (2020). Teaching methods and students' academic performance in kinematical motion: Graphical interpretation and conceptual understanding. *American Journal of Social Sciences and Humanities*, 5(1) 169-103. Retrieved from https://www.researchgate.net/publication/338322212_Teaching_Methods_and_Students'_Academic_Performance_in_Kinematical_Motion_Graphical_Interpretation_and_Conceptual_Understanding/link/5e0cd5184585159_aa4ab4c5c/download
- Nabavi, R. T. (2012). Theories of developmental psychology: Bandura's social learning theory & social cognitive learning theory. *University of Science and Culture, January 2012*, 1-24.
- Parajuli, M., & Thapa, A. (2017). Gender Differences in the Academic Performance of Students. *Journal of Development and Social Engineering*, 3(1), 39-47. <https://doi.org/10.3126/jdse.v3i1.27958>
- Rashid, M. A. H., & Zaman, S. U. (2018). *Effects of teacher's behavior on academic performance of students*. Retrieved from https://www.researchgate.net/publication/325248514_Effects_of_Teacher's_Behavior_on_Academic_Performance_of_Students
- Reda, H., & Mulugeta, G. (2018). Investigating the causes of students' less academic performance in engineering college of debre berhan university. *American Journal of Theoretical and Applied Sciences*, 7(3), 126-131. <https://doi.org/10.11648/j.ajtas.20180703.15>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. <https://doi.org/10.1037/0003066X.55.1.68>
- Shu, K. (2022). Teachers' Commitment and Self-Efficacy as Predictors of Work Engagement and Well-Being. *Frontiers in Psychology*, 13(April), 1-7. <https://doi.org/10.3389/fpsyg.2022.850204>
- Susanti, A. (2017). *An analysis of students' effort toward independent learning beyond the classroom* (Master Thesis). Ar-Raniry State Islamic University, Indonesia. <https://core.ac.uk/download/pdf/293463893.pdf>
- To, A., Predict, S., Performance, A., Norwegian, A., & Students, T. (2018). *Age, gender and approaches to studying predict academic performance among Norwegian occupational therapy students*. 36-43.
- Valli Jayanthi, S., Balakrishnan, S., Lim Siok Ching, A., Aaqilah Abdul Latiff, N., & Nasirudeen, A. M. A. (2014). Factors Contributing to Academic Performance of Students in a Tertiary Institution in Singapore. *American Journal of Educational Research*, 2(9), 752-758. <https://doi.org/10.12691/education-2-9-8>
- Ye, L., Posada, A., & Liu, Y. (2018). The moderating effects of gender on the relationship between academic stress and academic self-efficacy. *International Journal of Stress Management*, 25(December 2017), 56-61. <https://doi.org/10.1037/str0000089>
- Yogendra, N., & Andrew, A. (2017). A Study On The Factors Influencing On Grade Point Average (GPA) With Special Reference To Third Year Commerce And Management Students Of Eastern University, Sri Lanka. *Journal for Studies in Management and Planning*, 03(08), 409-425. https://www.researchgate.net/profile/Anthony_Andrew2/publication/319645230_A_Study_On_The_Factors_Influencing_On_Grade_Point_Average_GPA_With_Special_Reference_To_Third_Year_Commerce_And_Management_Students_Of_Eastern_University_Sri_Lanka/links/59c762c90f
- Žydzūnaitė, V., Teresevičienė, M., & Gedvilienė, G. (2015). The Structure of Independent Learning in Higher Education: Students' Attitude. SOCIETY, INTEGRATION, EDUCATION. *Proceedings of the International Scientific Conference*, 1(July), 336. <https://doi.org/10.17770/sie2014vol1.774>



The Influence of Tourist Satisfaction on Destination Intention of Revisiting: A Case Study of Yintan Scenic Area in Beihai, Guangxi

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Abstract

With the rapid development of tourism and the acceleration of industry competition, the homogeneity of scenic spots is becoming more and more serious, and many scenic spots have the problem of low tourist revisit rates. Therefore, this paper takes Beihai Yintan scenic area as an example, selected the data of tourist satisfaction survey of Beihai Yintan scenic area as the data source, and used analysis software to conduct frequency, variance, factor, correlation, and regression analysis, etc., to research the influence mechanism of tourist satisfaction on the intention to revisit the destination. The conclusions are as follows: 1) The evaluation index of tourist satisfaction with Beihai Yintan scenic area can be divided into eight dimensions, including entertainment activities, shopping experience, and dining experience. The highest degree of tourist satisfaction is tourism resources, and the price of scenic spots has the lowest satisfaction. 2) In the multi-dimensional evaluation system of scenic spot satisfaction, in addition to overall satisfaction, the four dimensions of the evaluation of entertainment activities, tourism resources, scenic spot prices, and scenic supporting facilities are significantly related to tourists' willingness to revisit, and the degree of correlation decreases in order; 3) Satisfaction evaluation of tourists' overall satisfaction, tourism resources, supporting facilities and prices of scenic spots has a positive influence on revisit intention, and the degree of influence decreases successively. Satisfaction of recreational activities has a negative influence on revisit intention. 4) Although tourists are mostly satisfied with various dimensions of scenic spots, there is still much room for improvement in their overall satisfaction. Finally, the paper combines the changes in tourists' demand under the background of the normalization of the current pandemic and puts forward countermeasures and suggestions for the high-quality development of the Beihai Yintan scenic area after COVID-19..

Introduction

Under the influence of the COVID-19, the world's tourism industry has suffered a major blow. China's tourism industry is also facing this situation. Compared with 2020, China's tourism volume in 2021 will decrease by 43.2%. However, the tourism volume of some scenic spots in China is still on the rise. For example, the number of tourists in Beihai Yintan scenic spot in Guangxi increased by 2.3% in 2021 compared with 2020. Therefore, in order to explore the impact of tourist satisfaction on revisit destination intention, this paper takes Beihai Yintan scenic spot as an example.

Beihai Yintan scenic spot has a good geographical location. It is located in Yinhai District, Beihai City, Guangxi Zhuang Autonomous Region, China. Starting from the fishing port of Qiaogang town in the West and Daguansha in the East, it is composed of sea tidal flats, extending about 24 kilometers from east to west, 30-3000 meters wide, with a land area of 12 square kilometers and a total area of about 38 square kilometers. At the same time, it has a comfortable temperature all year round, with an average annual water temperature of 23.7 °C. Therefore, Beihai Yintan scenic spot is known as "the first beach in China", which is famous for "Long Beach, fine white sand, clear water temperature, gentle waves and no sharks". On July 2, 2012, Beihai Silver Beach ranked third in the first online survey of "China's top ten most beautiful beaches".

Literature review

Tourist satisfaction and tourists' willingness to revisit are two important elements related to the high-quality development of scenic spots. Since the concept of 'satisfaction' was formally introduced in the tourism academia in the 1970s, along with its development and evolution, tourism satisfaction became a major research hotspot in the tourism academia. Research on the conceptual connotation of tourist satisfaction, formation mechanism, satisfaction measurement model and its relationship with tourists' behavior intentions are key research areas, the latter two are particularly valued. For the evaluation of satisfaction indicators, some scholars have built an indicator system based on actual needs for empirical purposes. In the related research on tourist satisfaction and tourist willingness, the willingness to revisit is particularly valued by foreign scholars. The first reason is that high customer satisfaction in practice is more likely to bring about positive word-of-mouth communication (Eugen,

1996). The second is that in many studies scholars have found that there is a positive correlation between the satisfaction of tourists and their revisit intentions, recommendation intentions, and the possibility of complaining (2004), which can make market predictions. Domestically, relevant research began in the early 1990s, and the research focused on the influencing factors of tourist satisfaction and the role of satisfaction. The research results are mostly based on foreign research models and improve and apply practical results in empirical research. The research area focused on small and medium-sized areas such as single scenic spots and single-city tourist destinations. There is still a lack of research on tourist satisfaction in multiple scenic spots.

At present, Chinese scholars' research focus on this topic have focused on the influencing factors of tourists' willingness to revisit, and the influence of tourist experience, emotions, and other factors on the intention to revisit. And some scholars have carried out detailed research on the mechanism of influence of willingness to revisit. There are still few empirical studies on the influence of tourist satisfaction on revisit intention. Domestic scholars have mostly explored the mediating effect of satisfaction on tourists' revisit. In the process of empirical investigation of satisfaction and willingness to revisit, the survey is generally carried out using more mature scales that have been used by predecessors. However, despite the use of mature scales, it may be difficult to achieve the expected results in actual research. For example, Raffaella (2012) found that tourism destination image is closely related to marketing, and destination image will further affect tourists' behavior. The stereotyped image is difficult to stimulate tourists' interest, while the vivid image stimulates tourists' more regarding emotion and motivation and increases their interest in the region. Guo (2018) used the Perceived Value Scale in their research, and the results of exploratory factor analysis lacked the emotional value and social value dimensions that were in line with expectations. Therefore, based on years of field survey experience, it is more reliable and practical to design survey questionnaires on satisfaction and willingness to revisit according to the important perception aspects of tourists' actual tourism activities. In terms of research methods, the research on the factors affecting tourists' willingness to revisit mostly used structural equation models, regression models, etc. to verify. Liu et al.(2019) started from the perspective of meta-analysis, this article mainly selected logistic

regression model for analysis. Wen Pang (2018) selected Xi'an as a case and used the footprint of the network as the data source, extracted the widely used and characteristic tourism image network vocabulary using Rost content Mining software, and analyzed Xi'an Tourism cognitive image and emotional image using content analysis method and grounded theory. Tourists' overall emotion towards Xi'an is positive. Positive perception mainly comes from historical buildings, natural scenery, delicious snacks and convenient transportation conditions. The negative evaluation mainly comes from the scenic spot management service. In the exploratory study of Rantih Village, Verinita (2019) used the questionnaire survey method and found that in the newly developed scenic spots, tourists' decisions are mainly affected by the attributes of tourism attractions. Zong (2020) used a survey and found that hotel comfort and theme are also one of the factors affecting tourists' willingness to revisit. Suanpang (2022) found that the local scenic spots have local specialties and food activities, which will also greatly meet the hearts of tourists, so as to improve tourists' willingness to revisit. At the same time, Chuanchom (2021) found that the beauty of scenic spots and the value of tourism are important factors affecting tourists' revisit.

Objectives

1. To formulate the questionnaire survey of Beihai Yintan scenic spot.
2. To analyze the questionnaire data and summarize the factors affecting tourists' revisit intention.
3. To offer corresponding suggestions.

Conceptual framework

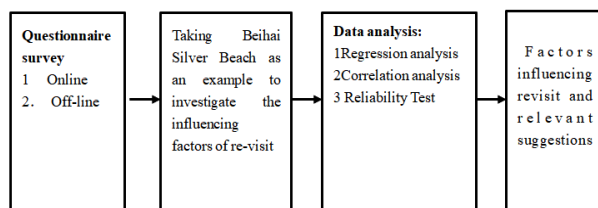


Figure 1 Conceptual framework

Figure 1 Conceptual framework

Research methodology

1. Research Design

Obtain the data information of tourist satisfaction and revisit intention of Beihai Yintan scenic area through the passenger satisfaction survey data platform, on the basis of literature review., Data analysis

was conducted using statistical software for variance, factor analysis, correlation analysis and regression analysis as well as the relationship between visitors' satisfaction and revisit intention based on the empirical analysis and research. The above method was conducted in order to obtain what factors affect the willingness of tourists to visit again, and then guide the local tourism market to make corresponding measures.

2. Instrument:

The research tool used in the study is a structured questionnaire. The details of the questionnaire are discussed below.

Questionnaire

As shown in Table 1, among the tourists surveyed, the proportion of men and women were equal, with men accounting for 48.3% of the total number and women 51.7%. In addition, most interviewees were between 18 and 45 years old, accounting for 61.8% of all interviewees.

In terms of education, 77.1% of respondents were college students (undergraduate and junior college), which was the main group of respondents, followed by those with medium or low education (high school or below), accounting for 22.9%. Disposable monthly household income of the respondents can reflect the personal economic foundation, so it is also the focus of this survey. Interviewees with a monthly income of 1,500 to 10,000 yuan were the main group, accounting for 62.9%, while those from high-income families (with a monthly disposable income of more than 20,000 yuan) were relatively few, accounting for only 3.9%. Therefore, in general, the gender ratio of the tourists surveyed was balanced, and the age level was reasonable, and the education level and monthly income can reflect the real situation of the tourists surveyed.

Table 1 Basic information of interviewees

Project	Subprojects	Sample size	The percentage/%
Age group	Under the age of 30,	177	34.1
	31-45 years old	145	27.9
	46-60 years old	176	33.9
	More than 61 years old	21	4.1
Gender	Male	197	48.3
	Female	322	51.7
Education	Under the high school	119	22.9
	Undergraduate	249	47.9
	Master and above	151	29.2
Household disposable income	Below 1500 yuan	46	8.9
	1500-5000 yuan	170	32.8
	5001-10000 yuan	156	30.1
	10001-20000 yuan	126	24.3
	20001 yuan or more	21	3.9

3. Collection of data

The data collection consisted of the procedure as follows:

3.1 The questionnaire survey was conducted from September 2020 to May 2021, and a total of 600 questionnaires were distributed.

3.2 The questionnaire consisted of three parts. The first part introduced the basic demographic information of the surveyed tourists, such as gender, education level, age, residence, income, and other socio-economic attributes. The second part included the related problems of tourists' satisfaction with the scenic spot. The Likert five scales were used to assign 1 to 5 points according to the order of options from "very dissatisfied" to "very satisfied". The third part contained the opinions and suggestions. After preliminary interpretation, invalid questionnaires and other unqualified questionnaires were deleted, and 519 valid questionnaires were finally obtained, and the sample structure reached the statistical standard.

4. Data analysis

Analysis of data from questionnaires and interviews used software. After the field survey by questionnaire and then by voted code created by the user by parsing purposes. The statistical data used to test the hypothesis of "influencing factors affecting tourists' willingness to revisit" were analyzed by correlation analysis and reliability test.

A questionnaire and interview, the procedures were as follows:

- (1) Review of documents and related research to serve as a guide to create questionnaires and interviews.
- (2) Create questionnaires and interviews, analysis by objective research.
- (3) Give relevant suggestions and guidance for the analyzed data.

5. Reliability Test

The questionnaire is divided into two parts: demographic information and tourists' satisfaction and intention to revisit. To make the research reliable, the 43 evaluation indicators of the second part of the tourist satisfaction evaluation and the overall satisfaction and the willingness to revisit were selected. The α reliability coefficient test method was used to analyze the

reliability of the question data, and the coefficient value was obtained. The result was 0.921, which is greater than 0.90, indicating that the internal data of the survey statistics meet the statistical analysis standard and can be analyzed.

Results

Evaluation results of tourist satisfaction

Since there are too many dimensional indicators of tourist satisfaction, it is not conducive to reflect the relationship between tourist satisfaction and revisit intention. This paper adopts factor analysis method to extract the dimensions of multi-dimensional evaluation of tourist satisfaction, and reflects similar indicators in fewer categories in order to reduce the dimensions of the indicators in the questionnaire. Before the factor analysis, a KMO test and Bartlett test of sphericity should be used to test data applicability. After testing, the KMO value was 0.925, greater than 0.8, and the Bartlett spherical test value was 9449.262, which is significant at the level of 0.000, indicating that all the items have strong correlation and are suitable for factor analysis.

In order to more clearly reflect the closeness of the relationship between the tourist perception factors, based on the statistical software, the data is rotated with the maximum variance to obtain the factor loading matrix. After orthogonal rotation processing, the load and common value of 43 satisfaction indexes were obtained. In general, the case where the absolute value of the factor load exceeds 0.4 is considered significant, so 0.4 is used as the limit, and the absolute value of the factor load is less than 0.4, so these ten factors can be eliminated: C2.1 scenic spot ticket price, C3.3 Scenic ticketing service, C3.5 professional quality of staff, C3.6 staff service attitude, C4.2 tourist market order, C4.3 scenic spot safety management, C5.1 scenic spot parking lot, C5.2 tourist toilet, C5.4 Tourism informatization construction, C6.1 Accessibility of scenic spots. Using the remaining 33 indicators to perform factor analysis and the dimensions are named according to the commonality of the factors. The results are shown in Table 2.

Table 2 Results of factor analysis

Evaluation index	F1	F2	F3	F4	F5	F6	F7	F8
C9.3	0.843							
C9.2	0.827							
C9.5	0.797							
C9.1	0.788							
C9.4	0.77							
C9.6	0.748							
C8.2		0.779						
C8.3		0.777						
C8.1		0.773						
C8.4		0.757						
C8.5		0.736						
C7.2			0.848					
C7.3			0.829					
C7.1			0.768					
C7.5			0.723					
C7.4			0.645					
C1.1				0.813				
C1.3				0.786				
C1.2				0.77				
C1.4				0.723				
C2.5					0.705			
C2.3					0.705			
C2.6					0.694			
C2.2					0.681			
C2.4					0.675			
C5.5						0.769		
C4.1						0.753		
C6.3						0.689		
C3.2							0.728	
C3.4							0.726	
C3.1							0.629	
C6.2							0.835	
C4.4							0.634	

Where F1 means entertainment, F2 means shopping experience, F3 means dining experience, F4 means tourism resources, F5 indicates the scenic spot price, F6 means supporting facilities in the scenic spot, F7 means scenic spot service, F8 means scenic order. C9.3: Entertainment characteristics, C9.2: Fun of entertainment activities, C9.5: Experience of entertainment activities, C9.1: Richness of entertainment activities, C9.4: Completeness of entertainment activities, C9.6: Safety of entertainment activities, C8.2: Commodity types, C8.3: Product quality, C8.1: Product Features, C8.4: Integrity Management, C8.5: Shopping service attitude, C7.2: Dining environment, C7.3: Convenient dining, C7.1: Local characteristics, C7.5: Service Attitude, C7.4: Food hygiene, C1.1: View of attraction, C1.3: Tour value, C1.2: Landscape Features, C1.4: Resource richness, C2.5: Transportation price, C2.3: Commodity prices, C2.6 Facility price, C2.1: Food and Beverage Price, C2.4: Accommodation price, C5.5 Scenic Signage, C4.1 Scenic area hygiene, C6.3: Boot logo, C3.2: explain service, C3.4: Complaint Service, C3.1: Consulting Service, C6.2: Internal traffic, C4.4: Passenger flow management.

Analysis of the difference in satisfaction evaluation of each dimension

SPSS software frequency analysis was used to perform frequency statistical analysis on various satisfaction levels and the results are shown in Table 3. The highest dimension of the average satisfaction score was tourism resources. The average value is greater than 4, indicating that this item is highly satisfied with tourists,

especially the attraction of the landscape and the tourist value of the scenic spot, which is greater than the average value of the dimensions. The lowest average satisfaction score was the reasonableness of the scenic spot price, especially the average score of commodity/souvenir prices and catering prices was less than 3, indicating that it is mainly a negative evaluation. Others, in descending order of satisfaction, are scenic spot services, shopping experience, entertainment activities, dining experience, scenic spots supporting facilities, and scenic spot order. The scores of all dimensions were more than 3, so they were all positive evaluations. The difference in the internal satisfaction evaluation of the entertainment activity dimension was the largest, the standard deviation exceeded 1, and the smallest difference was the reasonableness of the scenic spot price. The internal differences of other dimensions are: dining experience, scenic spot service, shopping experience, scenic spot order, scenic spot supporting facilities, and tourism resources.

Table 3 Frequency analysis results of satisfaction evaluation

	Indicators	The average	The standard deviation	The variance	
F1	C9.3	3.45	3.58	1.0218	1.044
	C9.2	3.53			
	C9.5	3.73			
	C9.1	3.45			
	C9.4	3.6			
	C9.6	3.73			
F2	C8.2	3.68	3.87	0.86923	0.756
	C8.3	4.06			
	C8.1	3.70			
	C8.4	4.18			
	C8.5	3.92			
	C7.2	3.47			
F3	C7.3	3.43	3.57	0.92394	0.854
	C7.1	3.42			
	C7.5	3.74			
	C7.4	3.79			
	C1.1	4.16			
	C1.3	4.11			
F4	C1.2	4.09	4.11	0.69281	0.48
	C1.4	4.06			
	C2.5	3.05			
	C2.3	2.98			
	C2.6	3.01			
	C2.3	2.99			
F5	C2.4	3.06	3.02	0.48866	0.239
	C5.5	3.48			
	C4.1	3.25			
	C6.3	3.60			
	C3.2	3.94			
	C3.4	4.27			
F6	C3.1	3.66	3.44	0.72718	0.529
	C6.2	3.55			
	C4.4	3.28			
	Overall satisfaction	3.25			
	Revisit intention	3.44			
	Willing to travel again	3.44			
Overall	3.25	3.25	0.88699	0.787	
Revisit intention	3.44	3.44	0.78351	0.614	

Correlation analysis of tourist satisfaction and revisit intention

Correlation analysis and regression analysis were used to analyze the relationship between the evaluation of tourists' satisfaction and their intention to revisit. Correlation analysis can detect whether two or more variables are correlated and the degree of correlation can be further reflected according to specific results. As can be seen from Table 4, the correlation analysis of entertainment activities, tourism resources, scenic spot prices, supporting facilities and overall satisfaction is significant and all of them are positively correlated. The correlation between overall satisfaction and revisit intention was between 0.6 and 0.8, which is a strong correlation. The correlation value between tourism resources and revisit intention was 0.4~0.6, which is a medium correlation. As an element that directly attracts tourists, the satisfaction evaluation of tourism resources greatly affects the intention to revisit, overall satisfaction has also been proposed as an important factor affecting the intention to revisit, so it has certain credibility. The correlation between the price of scenic spot and the supporting facilities of scenic spot and the intention to revisit was between 0.2 and 0.4, which indicates that they are weakly correlated with the intention to revisit. The correlation between recreational activities and revisit intention was less than 0.2, showing a very weak correlation.

Table 4 Correlation analysis results of satisfaction evaluation and tourists' intention to revisit

		F1	F2	F3	F4	F5	F6	F7	F8	Overall satisfaction
Revisit intention	Pearson correlation	0.480	0.003	0.537	0.159	0.495	0.589	0.067	0.093	0.627
	Sig.	0.001	0.954	0.837	0.000	0.000	0.000	0.180	0.061	0.000

It can be seen from table 4 that the Pearson correlation values of F1, F3, F5 and F6 are 0.480, 0.537, 0.495 and 0.589, respectively. Variables in the range of 0.4 ~ 0.6, indicates that these four variables are related to tourists' willingness to revisit. Therefore, in order to further study whether these four variables have a positive impact on tourists' willingness, we used regression analysis to further analyze F1, F3, F5 and F6.

Regression analysis

Linear regression analysis, is an important statistical analysis method to explore the causal relationship and can reflect the influence of multiple

independent variables on dependent variables. Usually, it can preliminarily judge whether there is a linear relationship according to its scatter distribution diagram, and further clarify the way that the dependent variable is affected by the independent variable through the coefficient value, and explain whether there is a causal relationship between the variables (Dou, 2016). For further analyzing the relationship between the degree of satisfaction and revisit intention tourist scenic spot, according to the results of correlation analysis, an observation of the scatterplot showed that independent variable entertainment activities, tourism resources, scenic spot price, the scenic area facilities, overall satisfaction, and the dependent variable had a linear relationship between the revisit intention. The results are shown in Table 5.

Table 5 Regression analysis results of satisfaction evaluation and tourists' revisit intention

The independent variables	The dependent variable	Coefficient (β)	Degrees of freedom (df)	R ²	Adjusted R	F	Sig
F1	Revisit intention	-0.125	Regression 5 Residual 401 Total 406	0.832	0.443	65.689	0.000
F3		0.205					0.003
F5		0.085					0.000
F6		0.109					0.045
Overall satisfaction		0.485					0.009

As can be seen from Table 5, F1, F3, F5 and F6 were taken as independent variables, and the willingness to revisit was taken as dependent variable for linear

regression analysis. First of all, the F value was 65.689, that is, the significance probability of F value is less than 0.01, indicating that this variable has passed the F test, and that at least one of these four items and tourist satisfaction has an impact on the intention to revisit, and the regression effect is good. In addition, the R2 value of the model was 0.832, indicating that the better the fitting effect of the regression model is, that is, the four are positively correlated with the satisfaction of tourists. At the same time, the maximum regression coefficient of variable F3 was 0.205, indicating that variable F3 has the greatest influence on the willingness to revisit. The regression coefficient of Overall Satisfaction was 0.485,

and the Sig was 0.009, indicating that all four factors had a positive impact on the willingness to revisit.

Discussion

This paper takes Beihai Silver Beach scenic spot as an example, and surveys the satisfaction degree of traveling to Beihai Silver Beach as the data source through questionnaire survey. Factor analysis, correlation analysis, regression analysis and other methods were used to explore the impact of tourist satisfaction on the intention to visit again, and the following conclusions were drawn:

(1) The evaluation index of tourists' satisfaction with Beihai Yintan scenic area can be divided into eight dimensions: entertainment activities, shopping experience, dining experience, tourism resources, reasonability of price, supporting facilities, service and order. The satisfaction evaluation of each dimension had certain differences. The highest satisfaction of tourists was tourism resources, especially the attraction of landscape and the value of scenic spots, which is greater than the mean of dimension. The lowest average score of satisfaction was the reasonableness of scenic spot prices, especially the prices of commodities/souvenirs and catering. The average score of this question was less than 3, indicating that it was mainly a negative evaluation. The satisfaction scores of other dimensions from high to low are: scenic spot service, shopping experience, entertainment activities, dining experience, supporting facilities and order. Comparatively speaking, tourists' satisfaction with the direct experience level of tourism activities was higher, while their satisfaction with the management and service level of scenic spots was relatively low.

(2) According to the results of the correlation analysis, there is a significant correlation between tourists' overall satisfaction and their intention to revisit. Among the eight satisfaction evaluation dimensions of Beihai Yintan scenic area, only four of them are significantly correlated with tourists' intention to revisit, which are: entertainment activities, tourism resources, scenic spot prices and supporting facilities. Among them, the correlation between tourism resources and revisit intention is moderate. There is a weak correlation between the price of scenic spot and the supporting facilities of scenic spot and the willingness to revisit. There was a weak correlation between recreational activities and revisit intention.

(3) According to the regression analysis results,

the overall satisfaction will have a positive impact on tourists' intention to revisit. From the perspective of each dimension of satisfaction, tourism resources, tourism supporting facilities and reasonable price of scenic spots all have a positive impact on tourists' intention to revisit, while recreational activities in scenic spots have a negative correlation with tourists' intention to revisit. The overall satisfaction is the most intuitive evaluation of the value of the scenic spot by tourists, and the latter three are the key aspects of tourists' experience in the scenic spot. Therefore, how to maintain the overall satisfaction, improve the tourism facilities, regulate the prices of the scenic spot, and explore the tourism resources is the key to enhance the competitiveness of Beihai Yintan scenic area. As the direct experience of tourists, recreational activities in scenic spots can satisfy the temporary freshness of tourists. However, for the current public tourists who like to seek new and different things, even if they have a good experience in an activity in the scenic spots, they may not choose to revisit. Therefore, it is necessary to grasp the psychology of tourists, explore traditional culture in various aspects, make full use of festivals and other opportunities to form multi-seasonal cultural themes, so that the inheritance of scenic activities can be innovative, and can break through the threshold of tourists' willingness to revisit.

Suggestions

According to the results of the empirical research, combined with the investigation and interview of Beihai Yintan scenic area after COVID-19, this paper believes that Beihai S Yintan scenic area should pay close attention to the difference of tourist satisfaction in all dimensions in the future development, maintain the dimension with high satisfaction and improve the dimension with low evaluation of tourists, so as to enhance tourist experience. At the same time, attention should be paid to the dimension index that has a positive impact on the intention to revisit, and the revisit rate should be improved by improving the services related to this index. In addition, under the background of normalization of COVID-19, tourists' psychology has changed to a certain extent, which brings with it changes in the demand for tourism products. Beihai Yintan scenic area should also be transformed accordingly. Specifically, in the future, Beihai Yintan scenic area should try to improve the tourist resources and facilities with high tourist satisfaction, improve the reasonability of the price of the scenic spot on the basis

of three factors, but also pay attention to the scenic spot security factors and tourist psychological experience guidance.

(1) As far as tourism resources are concerned, it is possible to further develop existing tourism resources, explore traditional culture in multiple directions, or use modern technology to give tourists new experiences, so that there are new ideas in the inheritance and the cultural essence of the new ideas. Exploring new tourism resources, catering to the preferences of young people, the main force of tourism today, combining the attractions of Beihai Yintan scenic area with AI, smart tourism, etc., emphasizing the form of experience and science fiction, and transforming tourism resources into new ones in their favorite ways. Travel products, online personalized customization, etc. are also optional ways to further increase satisfaction. As far as scenic services are concerned, we should first focus on tourist experience, increase service training and catering quality supervision in the catering industry in and around the scenic area, and focus on improving the supporting facilities within the scenic area, and pay attention to the tourists' demand for tourist signs and traffic guidance signs. Improve the sanitary conditions of scenic spots and enhance tourists' willingness to revisit by improving the satisfaction of tourists with strong tourism supporting facilities. At the same time, in light of the current background of the normalization of COVID-19, pay attention to the tourist reservation system, restrict the flow of tours, maintain the order and sanitation of the scenic area, and provide tourists with a safe and good environment for play. In addition, the shopping experience of tourists is directly related to the supply of products and services. The quality of goods and services should be strictly controlled, a good shopping atmosphere should be created, contactless services should be advocated, and the opportunity of changing demand for tourism talents under the normalization of COVID-19 should be seized through introduction and training. To accelerate the construction of excellent talent team and then enhance the future market competitiveness of the enterprise.

(2) The reasonableness of prices in scenic spots should be paid attention to, and tourists' willingness to revisit should be enhanced by improving the degree of price satisfaction in scenic spots. Price is an important variable in the evaluation of the competitiveness of tourist destinations. Appropriate adjustment is conducive to improving the competitiveness of scenic spots. The empirical results show that there is a significant positive

correlation between the reasonability of scenic spot price and the intention to revisit, and the mean price satisfaction of Beihai Yintan scenic area is the lowest among all dimensions (3.02). Therefore, after the end of COVID-19, the reasonable pricing strategy of Beihai Yintan scenic area will be an important aspect to improve tourist satisfaction and enhance tourists' willingness to revisit.

(3) In view of the conclusion that the satisfaction of recreational activities in scenic spots is negatively correlated with tourists' willingness to revisit, a new concept of tourism resource development in Beihai Yintan scenic area, which 'presents step by step and forms a multi-season cultural theme', is put forward. For visitors to pursue unique exotic psychology and market competition, Beihai Yintan scenic area should form a unique selling point, not only to contribute to the scenic spot but also to keep the site fresh. Therefore, in the process of scenic resource development and design, with gradual scenic recreational activities to mobilize the tourists point of interest, and enhance holiday time, form a multi-season cultural theme. As well as increase online publicity to mobilize tourists' interest and participation enthusiasm for a long time, thereby increasing tourists' satisfaction and willingness to revisit.

Reference

- Dou, L. (2016) The influence of elderly tourists' emotional solidarity with residents on revisit intention. *Tourism Science*, 30(5):63-73.
- Eugene, W. and Claes, F. (1994). Customer Satisfaction, Market Share, and Profitability: Findings from Sweden. *Journal of Marketing*, 58(3):53-66.
- Guo, A. X. and Huang, F. C. (2013). An empirical study on the key drivers of revisit intention: the comparison of perceived value, perceived attraction, tourist satisfaction and tourist trust. *Journal of Jiangxi University of Finance and Economics*, 2(1):38-46.
- Jirat, Chuanchom. Nongluck, Popichit and et.al. (2021). Factors Influencing Thai Tourists' Decision Making to Choose Dvaravati Civilization for Tourist Attractions. *Journal of Multidisciplinary in Social Sciences*, 17(1): 28-36.
- Liu, F. J. and Xu, J. Y. (2019). A research on the factors influencing tourists' revisit willingness based on a Meta-analysis. *Tourism Science*, 33(1):33-53.
- Pannee, Suanpang. Jiranuch, Sopa and et. al. (2022). Gastronomy Tourism in Ayutthaya World Heritage from Tourist's Perspective. *Journal of Multidisciplinary in Social Sciences*, 18(1): 1-8.
- Raffaella, Nicoletta and Rocco, Servidio. (2012). Tourists' opinions and their selection of tourism destination images: An affective and motivational evaluation. *Tourism Management Perspectives*, 4.

- Shu, T. C. and David, D. (2004). Examining the mediating role of experience quality in a model of tourist experiences. *Journal of Travel & Tourism Marketing*, 16(1):79-90.
- Verinita, Yanda and Afrinon, Putra. (2019). Linkage of Tourism Product Variable, Destination Image, and Word of Mouth to Visiting Decision at Rantih Tourism Village, West Sumatera. *Proceedings of the 3rd International Seminar on Tourism (ISOT 2018)*, 689-694.
- Ximan, Zong. John, Barnes. (2020). Factors Affecting Chinese Tourists' Pro-Environmental Intention to Stay at Eco-Friendly Hotels in Thailand. *Journal of Multidisciplinary in Social Sciences*, 16(2): 49-56.
- Wen, Pang. Shu, Wang and et.al. (2018). Research on Destination Image Perception Based on Digital Footprint of Tourism -- Taking Xiran as an Example. *3rd International Conference on Contemporary Education, Social Sciences and Humanities (ICCESSH 2018)*, 1288-1294.



The Study of Undergraduates' Satisfaction and Loyalty in Gocheck System

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Abstract

This research paper aims to explain the factors that impact undergraduate students' satisfaction and loyalty in Gocheck system. The conceptual framework was developed based on previous three theoretical models, and derived with seven variables for the study namely, image, perceived value, perceived quality, service quality, satisfaction, trust, and loyalty. The research has applied quantitative approach in data collection and analysis by distributing questionnaires to undergraduate students of three majors who are currently using Gocheck system at Yunnan Normal University, China (n=500). Multistage sampling techniques of judgmental sampling, stratified sampling and convenience sampling were used for data collection. The collected data were analyzed using the Structural Equation Model (SEM) and Confirmatory Factor Analysis (CFA) to confirm model fit, reliability, and validity of the constructs, and test the research hypotheses proposed. The results explicated that undergraduates' loyalty in Gocheck system was formulated from their satisfaction, which the direct antecedents of satisfaction were trust and perceived value, and indirectly affect by perceived quality. Image, perceived quality, and service quality has lack of direct significant effect on satisfaction. Therefore, the higher education institutions, system developers and marketing practitioners were advised to strengthen and promote the system performance, features, and functionalities in order to demonstrate the trust in the system and the advantages from services offered. This could help students by ensuring academic integrity in their scholarly works and foster their satisfaction and repetitive usage in Gocheck system.

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Introduction

Academic institutions are nowadays upholding the importance of academic integrity for transparency and intellectual honesty in scholarly works, especially to ensure the originators of works and ideas are respected. Breaches of academic misconduct can result in disciplinary actions for the scholars. Academic misconduct in this context means any behavior that attempts, taken, or assist others to derive with unfair academic advantage. Academic misconduct includes plagiarism, contract cheating, collusion, and data fabrication (University of Cambridge, 2019). Guo and Ye (2019) viewed that to avoid academic misconduct, it is no longer possible to rely solely on the discipline of the scholars. A rigid mechanism for detecting misconduct activities is recommended to secure academic ethics and integrity. The mechanism should be rapid and accurately operate for falsification detection. Misconduct detection system has been widely used in academic institutions to ensure academic integrity of the scholarly works, as well as academic institutions in China. Academic misconduct is also emphasized in China's education institutions as shown from the study of Mo (2018).

Tong Yuan, a company in China has partnered with numbers of top universities in China such as Hunan Normal University, China University of Geosciences, and Henan University to develop a citation detection system called Gocheck. Gocheck system was officially launched in March 2015 with aim to provide professional paper detection with value-added services according to the needs of users. Gocheck system utilizes powerful data mining technology to integrate and process data for a large-scale of text comparison. The system is a professional writing comprehensive platform that offers wide range of services including paper citation detection, paper format detection, paper writing guidance, and graduate publication management system. Gocheck system has been highly recognized and trusted by number of writers, and rapidly formed a wide influence and popularity in various universities. According to statistics, Gocheck has more than eight million registered users and the detection volume is as high as ten thousand papers a day with less than five minutes for running a transaction. Apart from academic institutions, Gocheck system is also applicable to other institutions that works on scholarly publications or articles such as editorial departments, publishing houses, government offices and scientific research institutions (Bi & Ye, 2019; Liu, Wong,

Shi, Chu & Brock, 2014).

At present, breaches of academic misconduct still occur from time to time, hence the detection system is imperative and widely used to promote transparency and intellectual integrity in scholarly works. This paper is conducted to further study the satisfaction and loyalty of undergraduate students who are currently experiencing Gocheck system, hence the case study would be focusing on the higher education institutions of China. The findings aim to encourage the continuous commitment and usage of Gocheck system to improve efficiency in paper detection and foster academic integrity in scholarly publications for the scholars or students. Therefore, the findings would be beneficial to higher education or universities, lecturers, and citation detection system developer to understand the key drivers that can stimulate the users' satisfaction and loyalty in using citation detection system or Gocheck. These insights can be used for their consideration when designing, developing, or selecting the system that fits the needs of the students. Factors studied to explain its impact on undergraduate students' satisfaction and loyalty of Gocheck system were based on previous research of three theoretical models, which consist of image, perceived value, perceived quality, service quality, trust, satisfaction, and loyalty.

The cognition and feeling of a company in the consumers' memory is called company image (Srivastava & Sharma, 2013). Company image is the consequence of what consumer think, believe, undergo, feel, impress, and understand of a company (Dimitriadis & Zilakaki, 2019). The perception that contributes to company image could be on the products or services' reliability, quality, and performance (Cassia, Cobelli, & Ugolini, 2017). Abratt and Kleyn (2012) stated that image indicated the perception or positioning of the interior and exterior stakeholders toward the company. The study of Lee and Lee (2018) showed that when people have a nice feeling of a company's image, they were more likely to estimate the company's products and services in a positive mode. Many scholars believed that the enterprise image in the business-to-consumer has an active influence or positive correlation on customers' satisfaction (Chiu, Zeng, & Cheng, 2016; Dimitriadis & Zilakaki, 2019; Kant, Jaiswal, & Mishra, 2017; Moorthy, Chun T'ing, Ai Na, Sze Xian, & Wei Ling, 2018) According to Chang and Yeh (2017), a company's brand image has an intensity impact on client satisfaction and loyalty, and client satisfaction also affected client loyalty. Further studies of Elsässer and Wirtz (2017) and Jeong and Kim (2020)

has proven the positive indirect effect of image towards loyalty through satisfaction. The company image can influence customers in two aspects, attitudinal through satisfaction and behavioral through loyalty. Therefore, a company should establish its own brand image and integrate the brand image into client satisfaction and loyalty. The first hypothesis proposed hereafter for the study is:

H1: Image has significant impact on satisfaction.

Perceived value defined by Zeithaml (1988) is the consumer's overall evaluation on the benefits and value received from the products and services. The value perceived by consumer would be based on the profits gained and sacrifices made, for instance money spent, time saving, effort, and convenience (Sanchez, Callarisa, Rodriguez, & Moliner, 2006). Customer perceived value is the fundamental concept for branding and marketing. As the value perceived by customers increases, they would be willing to buy and less likely to find alternatives. Hence, this would result in a long-term relationship with seller or loyalty (Akroush & Mahadin, 2019). Previous studies have showed that perceived value has positive and significant relationship on satisfaction. The overall value that significantly impacted satisfaction consist of functional, emotional, and social values (Kim & Park, 2017). Gan and Wang (2017) also emphasized the importance of value that has significant and positive influence on satisfaction and purchase intention of the consumers. The relationship is also consistent with other empirical research which found that the perceived value was considered as one of the key predictors of satisfaction (Chatterjee, Shainesh, & Sravanan, 2018; Gallarza, Ruiz-Molina, & Gil-Saura, 2016; Rasoolimanesh, Dahalan, & Jaafar, 2016). Therefore, the second hypothesis proposed for the study is:

H2: Perceived value has significant impact on satisfaction.

Perceived quality referred to the estimate of the comprehensive advantages or dominance of a product or service by consumers (Zeithaml, 1988). Fornell, Johnson, M.D., Anderson, E.W., Cha, J.S., & Bryant (1996) distinguished perceived quality into product quality and service quality. The opinion made by customers through their experience of product used is called perceived product quality. Moreover, perceived service quality referred to the opinion made by customers after experiencing related services provided by the companies, such as product features and functionalities. García-Fernández et al. (2018) demonstrated the

relationship between perceived quality, perceived value and satisfaction in their research. In their opinion, perceived quality plays a very important role in forecasting perceived value. The quality and features of the product are also important in the study of Russo, Confente, Gligor, and Cobelli (2019) as it has positive impact on customer satisfaction, product selection and their re-purchase decision. Customers would be attracted to the companies that offers products and services with assortment of qualities that met their level of expectation (Hult, Sharma, Morgeson, & Zhang, 2019; Riquelme, Roman, & Iacobucci, 2016). Customers would weigh the benefits received and cost paid while assessing the quality of product or service experienced (Cobelli, Bonfanti, Cubico, & Favretto, 2019). Hence, perception on quality is a crucial antecedent of values and customer satisfaction (Gonçalves, Cândido, & Feliciano, 2020; Kasiri, Guan Cheng, Sambasivan, & Sidin, 2017; Murfield, Boone, Rutner, & Thomas, 2017). Other studies have indicated that quality perceived by customer can directly affect their perceived value, and in turn lead to level of satisfaction (Samudro, Sumarwan, Simanjuntak, & Yusuf, 2020; Suhartanto, Brien, Primiana, Wibisono, & Triyuni, 2020). The hypotheses are then proposed with two causal relationships from perceived quality as the following:

H3: Perceived quality has significant impact on perceived value.

H4: Perceived quality has significant impact on satisfaction.

Service quality was defined as how consumers regarded and evaluated the company and its services (Parasuraman, Zeithaml, & Berry, 1985), which was subjectively assessed through their impression and opinions (Ojasalo, 2019). The success of companies can be guaranteed and recognized from their superior service quality offered (Zeithaml, 2000). With a good balance of service quality offered by service providers and received by the customers, satisfaction on both parties can be attained. The balance can be achieved from understanding the needs of two parties when developing the services (Lee, Lee, & Yoo, 2000; Parasuraman Berry, & Zeithaml, 2002). There are various past research that studied the relationship between perceived service quality and satisfaction as part of customer loyalty program. Hence these studies have indicated the influence of service quality on satisfaction and its indirect impact on customer loyalty (Özkan, Süer, Keser, & Kocakoç, 2020). With a good level of service quality, it would

enable to satisfy the needs and expectation of the customers (Foroudi, Jin, Gupta, Foroudi, & Kitchen, 2018; Gong & Yi, 2018; Ofori, Boakye, & Narteh, 2018; Paiz et al., 2020; Vo, Chovancova, & Tri, 2020). The fifth hypothesis for the study is then propose as:

H5: Service quality has significant impact on satisfaction.

Trust means that based on customer's experience, they have confidence in the benevolence and integrity of the supplier or service provider (Schoorman, Mayer, & Davis, 2007). Benevolence refers to a compassion relationship between two parties that their act would protect the other parties' welfare and are not harmful. Integrity refers to the belief that the act of other party is reliable, consistent, and able to fulfil the promises (Morgan & Hunt, 1994). When consumer trust their supplier or service provider, insecurity in the relationship or interaction would be lesser, encourage good cooperation, then creates the satisfaction that help sustain the positive relationship (Agarwal & Narayana, 2020; Balaji, Roy, & Wei, 2016). Former research has found that trust is essential for maintaining a long-term customer's relationship. It gives the customer's expectancy for future interaction and encourages repurchase intention, therefore trust was found to be a predictor of customer loyalty (Chang & Hung, 2018; Esterik-Plasmeijer & Raaij, 2017; Levy & Hino, 2016; Nadiri, 2016). Also, prior research has proven the significant relationship of trust and customer satisfaction as the security and reliability of products and services provided by the supplier can maximize users' satisfaction (Bricci, Fragata, & Antunes 2016; Jham, 2016, Kao & Lin, 2016; Wahyoedi, 2017). Trust is then hypothesized for two causal relationships as the following:

H6: Trust has significant impact on satisfaction.

H8: Trust has significant impact on loyalty.

Satisfaction is the emotional evaluation from cumulative experience of the products or services offered by the supplier or service provider over time (Song, Wang, & Han, 2019). The customer's emotional evaluation is usually the comparison of products or services performance and their anticipation (Pizam, Shapoval, & Ellis, 2016; Ulaga & Eggert, 2006). Customer satisfaction is one of the prerequisites for creating loyalty. Shaping customer satisfaction over time would create a long-term relationship or loyalty which could help the company to ensure customer retention and lower chances of customer exploring alternatives (Madzik & Shahin, 2021). Previous studies have

highlighted the significance of satisfaction on loyalty. The increased satisfaction would lead to the increase of loyalty due to its positive influence (Ghorbanzadeh, 2021; Jahan, Rahman, Hossain, & Saiful, 2019; Kotler, Armstrong, Harris, & Piercy, 2017; Song et al., 2019). Therefore, the hypothesis is proposed as:

H7: Satisfaction has significant impact on loyalty.

Oliver (1999) and Lam and Shankar (2014) defined loyalty as the consumers' commitment to re-purchase the products or services repetitively in the future, regardless of any conditional situations that may persuade the switching. In the context of marketing studies, loyalty is the relationship between the consumers and brands, products, services, or the company (Bahri-Ammari, Van Niekerk, Ben Khelil, & Chtioui, 2016). Loyalty can be seen as the step that consumers would reach after achieving satisfaction (Mohamed Taheri, Farmaki, Olya, & Gannon, 2020; Woratschek, Horbel, & Popp, 2019), which was highly impacted from factors such as perceived value, perceived quality, and corporate image (Gallarza et al., 2016; Jeong & Kim, 2020; Murfield et al., 2017). Previous research also discussed the cause and effect on trust and loyalty and concluded that trust was the key element to establish and keep relationships with consumers (Chang & Hung, 2018). Further, Leninkumar (2017) found through research that trust was an intermediary between satisfaction and loyalty, which has a remarkable effect on both client satisfaction and loyalty.

Objectives

1. To examine the significance and impact of image, perceived value, perceived quality, service quality, and trust on satisfaction of undergraduate students towards Gocheck system.

2. To examine the significance and impact of satisfaction and trust on loyalty of undergraduate students towards Gocheck system.

3. To highlight research findings for universities, lecturers, and citation detection system developer to understand the determinants of undergraduates' satisfaction and loyalty on citation detection system as presented in the case study of Gocheck.

Conceptual Framework

The conceptual framework was developed based on previous research of three theoretical models. The factors proposed for determining the satisfaction and loyalty were focused on the customers' perceptions or

relationship towards the brand or product and services. Firstly, Ball Coelho, and Machas (2004) studied the effect of image, expectations, perceived quality, perceived value, complaints, satisfaction, communication, trust, and loyalty among the customers in the banking sector. The study used European Customer Satisfaction Index (ECSI) model to explain customer loyalty. Secondly, the previous research of Michael, David, and Yang (2013) studied the relationship between service quality, university image, perceived value, satisfaction, and recommend service. The study surveyed the university students in a public university of China. Thirdly, the research of Kundu and Datta (2015) studied the relationship between trust, e-service quality (e-SQ) and customer satisfaction in the context of internet banking. Seven factors were selected for this study to determine the antecedents of satisfaction and loyalty of undergraduate students on the Gocheck system. The conceptual framework is proposed in Figure 1.

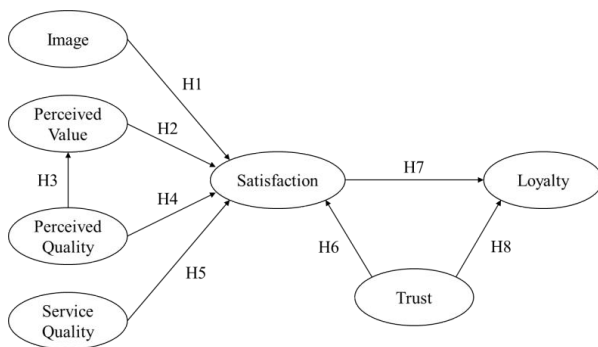


Figure 1 Conceptual Framework

Research Methodology

The research was conducted by using the quantitative approach in data collection and analysis. Questionnaire was applied as a survey tool for data collection, which was distributed online and offline paper-based to the target group of undergraduate students. Measurement items were adopted from previous research literature and the researcher has conducted content validation to ensure internal consistency by using Item-Objective Congruence (IOC) and pilot test of Cronbach's Alpha. The questionnaire consisted of three parts. The first part was screening questions to sort the characteristics of respondents according to the research target group. Second part was measurement items by using five-point Likert scale from strongly disagree (1) to strongly agree (5) to measure each variable item.

Last part was questions on demographic profile of the respondents. Questionnaires were distributed and completed at 500 samples. The collected data was then analyzed using Statistical Package for the Social Science (SPSS) and AMOS for confirmatory factor analysis (CFA) to test the construct validity and fitness of measurement model and structural equation model (SEM) to test fitness of structural model and research hypotheses proposed.

1. Population and Sample Size

The population of this research was focused on undergraduate students who were currently experiencing Gocheck system. Undergraduate students at Yunnan Normal University, China were selected for the population as the university is currently using Gocheck for academic misconduct detection in their three main majors. Hair, Celsi, Oritinau, and Bush (2013) suggested that the minimum sample size for the study should be 500. Further, sample size calculated from A-priori Sample Size Calculator for Structural Equation Models (Soper, 2006) recommended the minimum sample size of 425 from the parameter of 7 latent variables, 20 observed variables and probability level at 0.05. Therefore, the author decided to collect 500 samples from undergraduate students in Yunnan Normal University for the representative statistical result.

2. Sampling Technique

The researcher used multistage sampling of purposive or judgmental sampling, stratified sampling, and convenience sampling methods. As the population size is large with more than eight million users of Gocheck and the complete list of the target population cannot be compiled, two or more stages of samplings were used to reach target respondents (Shimizu, 2005). At the first stage, judgmental sampling was used to select target population of three majors at Yunnan Normal University as these departments are currently utilizing Gocheck system for their academic misconduct detection. For the second stage, stratified sampling was used to divide sample unit into three majors and proportionately allocate sample size to each unit to ensure the representative of population. As shown in Table 1, the sample size of 500 were allocated to each major, the total numbers of students from three majors totaled 7,906. At the last stage, convenience sampling was used to distribute questionnaires to target respondents of undergraduate students who were experiencing Gocheck system. Questionnaires were distributed during October 2021 via online and offline at the university's departments

to undergraduate students who were willing to participate. The questionnaires were completed and valid for analysis at 500 sets.

Table 1 Population and Sample Size

Subjects using Gocheck System	Population Size of Undergraduate Students	Sample Size
Primary education	3,340	211
Mathematics and Applied Mathematics	2,534	160
Biological sciences	2,032	129
Total	7,906	500

Source: Yunnan Normal University (2021)

3. Preliminary Data Analysis

Prior to distribution of questionnaires, validation of variable items in the questionnaire was conducted to confirm the consistency and reliability of items (Zikmund, 2000). The researcher employed Index of Item–Objective Congruence (IOC) testing with three experts and pilot test of Cronbach’s Alpha with 30 participants with characteristics similar to target population to validate the content. The results were acceptable with item indices higher than 0.5 (Turner & Carlson, 2003) and Cronbach’s alpha values higher than 0.7 (Nunnally, 1978). Furthermore, normality of data was tested with data collection to ensure identification of data errors and outliers before running Structural Equation Modeling (SEM) testing. Skewness and kurtosis methods were used to verify normality of data and the results confirmed the acceptable normal distribution of data at values ranging from -2 to +2 (Hair, Anderson, Tatham, & Black, 1998).

Result

1. Demographic Information

The questionnaires were distributed and completed by respondents at 500 sets. The demographic profile of respondents showed that females were the majority at 67.6 percent (338), and males at 32.4 percent (162). Respondents were aged at 18 to 25 years old for 94.4 percent (472), 26 to 33 years old for 5.6 percent (28), and none of the respondents were aged above 33 years old.

2. Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis (CFA) was conducted in this study to affirm fitness of measurement model, convergent validity, and discriminant validity. Convergent validity for this study was affirmed from the measurement of Cronbach’s alpha reliability exceeding

the cut-off point of 0.7 (Nunnally, 1978), Composite Reliability (CR) exceeding the cut-off point of 0.7 (Hair, Black, Babin, Anderson, & Tatham, 2006), Average Variance Extracted (AVE) and factor loading exceeding the cut-off point of 0.5 (Fornell & Larcker, 1981). The results for convergent validity are presented in Table 2.

Table 2 Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variable	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach’s Alpha	Factor Loading	CR	AVE
Image (I)	Michael et al. (2013)	3	0.867	0.774-0.867	0.872	0.694
Perceived Value (PV)	Chatterjee et al. (2018)	3	0.830	0.749-0.810	0.831	0.621
Perceived Quality (PQ)	Gonçalves et al. (2020)	3	0.814	0.734-0.769	0.800	0.572
Service Quality (SQ)	Özkan et al. (2020)	3	0.765	0.596-0.789	0.769	0.530
Trust (T)	Levy and Hino (2016)	3	0.781	0.617-0.797	0.783	0.549
Satisfaction (SA)	Dehghan, Dugger, Dobrzykowski, and Balazs (2014)	2	0.723	0.655-0.864	0.737	0.588
Loyalty (LOA)	Martinez (2015)	3	0.860	0.784-0.875	0.880	0.710

Note: Composite Reliability (CR); and Average Variance Extracted (AVE)

Discriminant validity was affirmed by using Fornell-Lacker criterion to compare the square root of average variance extracted with the inter-construct coefficient. The results in Table 3 showed that the square root of average variance extracted from all items exceeded its inter-construct, therefore discriminant validity was guaranteed (Fornell & Larcker, 1981).

Table 3 Discriminant Validity

	I	PV	PQ	SQ	T	SA	LOA
I	0.833						
PV	0.727	0.788					
PQ	0.657	0.635	0.756				
SQ	0.613	0.610	0.694	0.728			
T	0.597	0.628	0.690	0.720	0.740		
SA	0.650	0.682	0.682	0.638	0.708	0.767	
LOA	0.634	0.724	0.648	0.669	0.700	0.765	0.842

Note: The diagonally listed value is the AVE square roots of the variables.

Furthermore, fitness of measurement model was assessed by using goodness of fit indices. CMIN/df, GFI, AGFI, CFI, TLI, NFI, and RMSEA indices were used as indicators for model fit in CFA testing. The statistical values presented in Table 4 were at the acceptable range of CMIN/df=3.853, GFI=0.910, AGFI=0.861, CFI=0.945, TLI=0.924, NFI=0.928, and RMSEA=0.076. Hence fitness of measurement model was proven.

Table 4 Goodness of Fit

Index	Acceptable Values	Measurement Model	Structural Model
CMIN/df	< 5.0 (Al-Mamary & Shamsuddin, 2015)	3.853	3.830
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.910	0.909
AGFI	≥ 0.80 (Sica & Ghisi, 2007)	0.861	0.863
CFI	> 0.90 (Hair et al., 2006)	0.945	0.944
TLI	> 0.90 (Hair et al., 2006)	0.924	0.924
NFI	> 0.90 (Hair et al., 2006)	0.928	0.926
RMSEA	< 0.08 (Pedroso et al., 2006)	0.076	0.075

Note: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker-Lewis index, and RMSEA = Root mean square error of approximation.

3. Structural Equation Model (SEM)

Muijs (2004) has defined structural equation modeling (SEM) as an extension of multiple regression. Steenkamp and Baumgartner (2000) stated that SEM as a very useful research tool for theoretical testing. The goodness of fit indices used for measuring fitness of structural model is demonstrated in Table 4. The calculation resulted in CMIN/df=3.830, GFI=0.909, AGFI=0.863, CFI=0.944, TLI=0.924, NFI=0.926, and RMSEA=0.077, showing the statistical values were in the acceptable range.

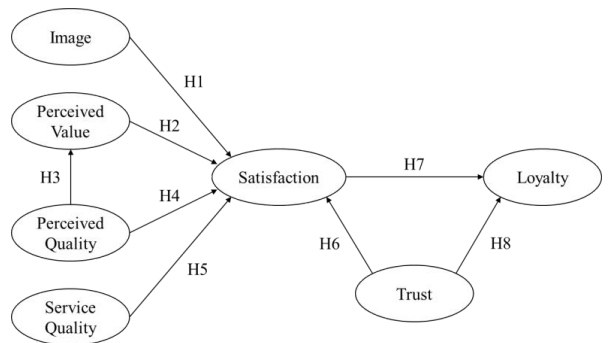
4. Research Hypothesis Testing Result

The significance of relationship between variables in the research model is calculated from its regression weights and R² variances at standardized path coefficient (β) and t-value. The hypotheses were supported at $p < 0.05$ and $t > 1.96$. The summary of hypothesis testing results are shown in Table 5 and reveal that the significance affect was confirmed for H2, H3, H6, and H7 and were supported, whereas H1, H4, H5, and H8 were found as insignificant and the testing results were not supported. Loyalty has sole direct affect from satisfaction, while other independent variables of trust, perceived value, image, perceived quality, and service quality were contributed indirectly on loyalty through satisfaction. The variation of loyalty in Gocheck can be explained by all independent variables at 65.7%. Perceived value had a direct influence on satisfaction towards Gocheck, while image, perceived quality, and service had indirect influence. The variation of satisfaction can be explained by independent variables at 56.1%. Perceived value of the respondents was significantly affected by the perceived quality and its variation can be explained at 65.2%.

Table 5 Hypothesis Result of the Structural Model

Hypothesis	Path	Standardized path coefficients (β)	S.E.	t-value	Test result
H1	Image => Satisfaction	0.112	0.062	1.287	NotSupported
H2	Perceived Value => Satisfaction	0.556	0.075	6.442*	Supported
H3	Perceived Quality => Perceived Value	0.923	0.053	15.397*	Supported
H4	Perceived Quality => Satisfaction	0.559	0.131	0.267	NotSupported
H5	Service Quality => Satisfaction	-0.308	0.246	-1.351	NotSupported
H6	Trust => Satisfaction	0.639	0.203	3.340*	Supported
H7	Satisfaction => Loyalty	0.904	0.137	8.907*	Supported
H8	Trust => Loyalty	0.602	0.129	0.272	NotSupported

Note: * $p < 0.05$

**Figure 2** The Results of Structural Model

Note: Solid line reports the Standardized Coefficient with * as $p < 0.05$, and t-value in Parentheses; Dash line reports Not Significant.

The result from Table 5 and Figure 2 can be refined as follows:

H1, there was lack of significant impact of image on satisfaction as the standardized path coefficients was at 0.112 and t-value at 1.287. Undergraduates viewed the company or brand image of Gocheck system did not relate to their satisfaction in usage. The finding contrasted with previous literature studies of Chang and Yeh (2017), Elsäßer and Wirtz (2017) and Jeong and Kim (2020), however supported with the study of Singh et al. (2021). It can be explained that brand building activities of Gocheck developers may be insufficient or ineffective to build positive perception towards the brand or intended brand positioning in the minds of the students. Their experience from using may not match with their expectation, hence irrelevant to their satisfaction.

H2, the significant impact of perceived value on satisfaction was confirmed with the standardized path coefficients at 0.556 and t-value at 6.442. The benefits

gained from using the system either time, price, effort, and convenience significantly contributed to the students' satisfaction. The finding was consistent with the studies of Chatterjee et al. (2018), Gallarza et al. (2016), Kim and Park (2017), and Rasoolimanesh et al. (2016).

H3, the hypothesis was supported that perceived quality significantly impact perceived value with the standardized path coefficients at 0.923 and t-value at 15.397. This implies that the quality of Gocheck system, for instance, performance quality, responding time, technical support, mainly drives the value of the product, which later forms students' satisfaction in the Gocheck system. This finding was aligned with previous research of García-Fernández et al. (2018), Gonçalves et al. (2020), and Russo et al. (2019).

H4, perceived quality does not have a direct significant impact on satisfaction from the standardized path coefficients at 0.559 and t-value at 0.267, but instead has an indirect impact on satisfaction through perceived value. The features and attributes of the product does not directly lead to satisfaction, but instead it enhances the product value perceived by the students. It was considered as the total benefits gained from using the system. This indirect impact on satisfaction was consistency with papers of Kasiri, et al. (2017), Murfield et al. (2017), Samudro et al. (2020), and Suhartanto et al. (2020).

H5, there is no significant impact of service quality on satisfaction from the standardized path coefficients at -0.308 and t-value at -1.351. The finding was contradicted with the literature studies from Foroudi et al. (2018), Paiz et al. (2020), and Vo et al. (2020) that indicates the significant relationship between service quality and satisfaction. This can imply that the service quality provided to end users or students were not recognized or superior that could enable users to have a positive impression and opinions toward the system, for instance, the system's responsiveness and user friendliness.

H6, trust has significant impact on satisfaction with the standardized path coefficients at 0.639 and t-value at 3.340. When the students believe in the security and reliability of the system, they tend to have favorable experience from using that leads to satisfaction. The finding was supported by Agarwal and Narayana (2020), Balaji et al. (2016), Bricci et al. (2016), and Wahyoedi (2017). Trust was the strongest direct predictor of satisfaction, followed by perceived value.

H7, the result supported the hypothesis that satisfaction has significant impact on loyalty with the

standardized path coefficients at 0.904 and t-value at 8.907. This can conclude that if using Gocheck system can satisfy the needs of the students, they are likely to have a long-term commitment or continuous usage. The significant impact was consistent with prior studies by Ghorbanzadeh (2021), Jahan et al. (2019), Kotler et al. (2017), and Song et al., (2019).

Lastly H8, loyalty was not found to be impacted by trust with the standardized path coefficients at 0.602 and t-value at 0.129, which conflicts with the research of Chang and Hung (2018), Esterik-Plasmeijer and Raaij (2017), and Levy and Hino (2016). This lack of relationship was instead aligned with the research of Tabrani, Amin, and Nizam (2018). It can be explained that the students' belief or trust in the system does not directly encourage continuous or long-term usage, but rather stimulate their satisfaction.

Discussion

This paper focused on examining the significant factor impacting undergraduate students' satisfaction and loyalty in Gocheck system in high education of Yunnan, China. Eight research hypotheses were proposed based on conceptual framework developed from previous literature studies. The conceptual framework examined the significant impact of image, perceived value, perceived quality, service quality and trust on satisfaction and loyalty. Questionnaire was used as a tool for data collection at 500 samples from the target respondents of undergraduate students who were currently experiencing Gocheck system and studying in the selected three main majors at Yunnan Normal University, China. Questionnaires consisted of screening question to filter respondents to target group, a five-point Likert scale for measuring variable items, and demographic profile questions. The collected data was analyzed using confirmatory factor analysis (CFA) to test the construct validity and fitness of measurement model and using structural equation model (SEM) to test fitness of structural model and research hypotheses proposed. The results from such analysis would determine the significant factors impacting satisfaction and loyalty in order to satisfy the research objectives.

Perceived value (H2) and trust (H6) had a significant impact on satisfaction of undergraduate students towards Gocheck system, whereas image (H1), perceived quality (H4), and service quality (H5) were insignificant and had the least impact on satisfaction. Subsequently, satisfaction in Gocheck system had a

significant impact on loyalty of undergraduate students, while trust was insignificantly impacted. As a result, the research hypothesis testing showed that four out of eight hypotheses were supported with empirical data.

Loyalty was impacted only from satisfaction, in which the significant antecedents of satisfaction were trust and perceived value. The perceived value was impacted by perceived quality. This finding has strengthened the marketing theory and practices that loyalty is the vital factor to maintain the long-term business-to-customer relationships, which the formulation of loyalty would include the emphasize on its antecedents (Sirdeshmukh, Singh, & Sabol, 2002). Also, the findings partially support the extended model of European Customer Satisfaction Index (ECSI) which grounded the research framework that loyalty can only be significantly explained by satisfaction and its antecedents of perceived value and perceived quality (Vilares & Coelho, 2004). Image has been presumed to have significant relationship with satisfaction under ECSI but was not consistent with this research findings, which may be due to the fact that corporate image, brand building activities, or positioning of Gocheck system was not known or persistent in the mind of students that enable their satisfaction when using. Also, trust was a factor that extended ECSI model to provide wider insights of loyalty (Ball et al., 2004). However, this research found lack of significant relationship between trust and loyalty, it instead stimulates the students' satisfaction. For the relationship between service quality and trust on satisfaction it also partiality supported the model of e-service quality (e-SQUAL) models developed by Parasuraman, Zeithaml, and Malhotra (2005) that trust positively relates to satisfaction, whereas service quality does not relate to satisfaction. This can entail that the service quality such as efficiency, responsiveness, privacy, or customer service were not recognized or superior for the students to earn their positive impression and satisfaction.

The findings have revealed that undergraduate students' satisfaction is the strongest predictor of loyalty in Gocheck system. This can help the higher education institutions, lecturers and citation detection system developer to understand the determinants of undergraduates' satisfaction and loyalty on citation detection system or Gocheck in this study and adopted to their implementations. The important factors that higher education institutions, lecturers and citation detection system developer should emphasize in order

to build users' satisfaction were their perception on product's value and its quality. These important factors should be emphasized for sustaining long-term relationship or loyalty, however for other insignificant factors, the system developers or higher education institutions can research the gap for their improvement and students' recognition. For instance, their brand engagement to build corporate image, and service quality that the product has offered. In terms of perceived value and perceived quality that contributes to satisfaction, the product attributes, features, and benefits gained from using Gocheck system should be ensured, and consistency promoted by system developers or higher education institutions. Also, as perceived value and perceived quality are students' opinion gained after experiencing the system, the system developer can improve the features and functionalities that enhances direct experience when using. By sustaining students' continuance usage or loyalty in Gocheck system, the institutions and lecturers can improve the efficiency in scholarly work review and uphold the academic integrity and transparency.

Suggestion

The research findings have discovered key factors that impact undergraduate students' satisfaction and loyalty of the Gocheck system, which are perceived value, perceived quality, and trust. Trust is the most influential factor on satisfaction of undergraduate students. therefore, the system developer should ensure that Gocheck system is reliable, consistency and able to fulfil its promise. These can be demonstrated through the performance of the system. Its consistent accuracy of citation detection, reliable source of data comparison, and secure data privacy on the papers reviewed. The second influential factor on satisfaction is perceived value. Perceived value is the students' perception on the net benefits gained from using the system, including the product quality such as system performance, features, and functionalities. Hence, the advantages of Gocheck system should be well explained and understood by the students, not only the advantages of that the institutions would receive, but also on their own scholarly works such as building awareness of academic ethics and prevent any intentional or unintentional academic misconduct. Higher education institutions, lecturers, and system developer should not only focus on the implementation of these significant factors, communications and trainings are also vital to ensure

the key messages are delivered to the users or in this context undergraduate students. The key messages of trustworthy, valuable, and qualified system can be embedded in the trainings of Gocheck system instruction and during the lecture class. These implementation and communications can result to continuance usage and loyalty in the Gocheck system. Apart from the significant driver of trust, perceived value, and perceived quality, the researcher would like to suggest higher education institutions, lecturers, and system developer to investigate the irrelevant factors of image and service quality. Their operational and marketing strategies may not be effective enough to be recognized in these aspects, therefore with improvement, the antecedents of satisfaction and loyalty can be widened.

Limitation and Further Study

The limitation of this study lies in the fact that the population and sample are specifically undergraduates of three majors in a university in Yunnan, China. Different analysis results may vary when looking at different schools, majors, or countries. Also, the citation detection system was solely focused on the Gocheck system, whereas the study with other branded system may offer different insights due to its range of services offered, system functionalities, and technical services. Further, the research framework can be integrated with other research theories to explore other determinants for extensive insights such as the DeLone and McLean successful models to determine attributes of information system quality that may have an impact to perceived value, satisfaction, or loyalty of the users.

Reference

- Abratt, R., & Kleyn, N. (2012). Corporate identity, corporate branding and corporate reputations: reconciliation and integration. *European Journal of Marketing*, 46(7/8), 1048-1063.
- Agarwal, U.A., & Narayana, S.A. (2020). Impact of relational communication on buyer-supplier relationship satisfaction: role of trust and commitment. *Benchmarking: An International Journal*, 27(8), 2459-2496.
- Akroush, M.N., & Mahadin, B.K. (2019). An intervariable approach to customer satisfaction and loyalty in the internet service market. *Internet Research*, 29(4), 772-798.
- Al-Mamary, Y.H., & Shamsuddin, A. (2015). Testing of The Technology Acceptance Model in Context of Yemen. *Mediterranean Journal of Social Sciences*, 6(4), 268-273.
- Bahri-Ammari, N., Van Niekerk, M., Ben Khelil, H., & Chtioui, J. (2016). The effects of brand attachment on behavioral loyalty in the luxury restaurant sector. *International Journal of Contemporary Hospitality Management*, 28(3), 559-585.
- Balaji, M.S., Roy, S.K., & Wei, K.K. (2016). Does relationship communication matter in B2C service relationships? *Journal of Services Marketing*, 30(2), 186-200.
- Ball, D., Coelho, P.S., & Machas, A. (2004). The role of communication and trust in explaining customer loyalty. *European Journal of Marketing*, 38(9/10), 1272-1293.
- Bi, L., & Ye, J. (2019). Study on the detection of the repetition rate of bachelor's thesis and its standardization promotion strategy. *Library Forum*, (3), 10-19.
- Bricci, L., Fragata, A., & Antunes, J. (2016). The effects of trust, commitment and satisfaction on customer loyalty in the distribution sector. *Journal of Economics, Business and Management*, 4(2), 173-177.
- Cassia, F., Cobelli, N., & Ugolini, M. (2017). The effects of goods-related and service-related B2B brand images on customer loyalty. *Journal of Business & Industrial Marketing*, 32(5), 722-732.
- Chang, C.-C., & Hung, J.-S. (2018). The effects of service recovery and relational selling behavior on trust, satisfaction, and loyalty. *International Journal of Bank Marketing*, 36(7), 437-454.
- Chang, Y.H., & Yeh, C.H. (2017). Corporate social responsibility and customer loyalty in intercity bus services. *Transport Policy*, 59, 38-45.
- Chatterjee, S., Shainesh, G., & Sravanan, C.N.S. (2018). Does intention translate into action? Investigating the impact of loyalty intention on future usage. *Journal of Indian Business Research*, 10(2), 151-169.
- Chiu, W., Zeng, S., & Cheng, P.S.T. (2016). The influence of destination image and tourist satisfaction on tourist loyalty: a case study of Chinese tourists in Korea. *International Journal of Culture, Tourism and Hospitality Research*, 10(2), 223-234.
- Cobelli, N., Bonfanti, A., Cubico, S., & Favretto, G. (2019). Quality and perceived value in career guidance e-services. *International Journal of Quality and Service Sciences*, 11(1), 53-68.
- Dehghan, A., Dugger, J., Dobrzykowski, D., & Balazs, A. (2014). The antecedents of student loyalty in online programs. *International Journal of Educational Management*, 28(1), 15-35.
- Dimitriadis, E., & Zilakaki, E. (2019). The effect of corporate social responsibility on customer loyalty in mobile telephone companies. *International Journal of Economics and Business Administration*, 3(4), 433-450.
- Elsäßer, M., & Wirtz, B.W. (2017). Rational and emotional factors of customer satisfaction and brand loyalty in a business-to-business setting. *Journal of Business & Industrial Marketing*, 32(1), 138-152.
- Esterik-Plasmeijer, P., & Raaij, W. (2017). Banking system trust, bank trust, and bank loyalty. *International Journal of Bank Marketing*, 35(1), 97-111.

- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Fornell, C., Johnson, M.D., Anderson, E.W., Cha, J.S., & Bryant, B.E. (1996). The American customer satisfaction index: nature, purpose, and findings. *Journal of Marketing*, 60(4), 7-18.
- Foroudi, P., Jin, Z., Gupta, S., Foroudi, M.M., & Kitchen, P.J. (2018). Perceptual components of brand equity: configuring the symmetrical and asymmetrical paths to brand loyalty and brand purchase intention. *Journal of Business Research*, 89, 462-474.
- Gallarza, M.G., Ruiz-Molina, M.E., & Gil-Saura, I. (2016). Stretching the value-satisfaction-loyalty chain by adding value dimensions and cognitive and affective satisfactions: a causal model for retailing. *Management Decision*, 54(4), 981-1003.
- Gan, C., & Wang, W. (2017). The influence of perceived value on purchase intention in social commerce context. *Internet Research*, 27(4), 772-785.
- García-Fernández, J., Gálvez-Ruiz, P., Fernández-Gavira, J., Vélez-Colón, L., Pitts, B., & Bernal-García, A. (2018). The effects of service convenience and perceived quality on perceived value, satisfaction and loyalty in low-cost fitness centers. *Sport Management Review*, 21(3), 250-262.
- Ghorbanzadeh, D. (2021). From satisfaction to loyalty: the role of emotional structures in the process of transition from satisfaction to loyalty. *Asia-Pacific Journal of Business Administration*, 13(3), 335-356.
- Gonçalves, F.M.R.R., Cândido, C.J.F., & Feliciano, I.M.P.L. (2020). Inertia, group conformity and customer loyalty in healthcare in the information age. *Journal of Service Theory and Practice*, 30(3), 307-330.
- Gong, T., & Yi, Y. (2018). The effect of service-quality on customer satisfaction, loyalty, and happiness in five Asian countries. *Psychology and Marketing*, 35(6), 427-442.
- Guo, W., & Ye, J. (2019). The function, limitation and countermeasure of the software for detecting academic anomalies and misconducts -- from the perspective of academic research norms. *Library Forum*, 3, 2-9.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate Data Analysis* (6th ed.). Harlow, England: Pearson Education.
- Hair, J. F., Celsi, M. W., Oritinau, D. J., & Bush, R. P. (2013). *Essentials of Marketing Research* (3rd ed.). New York: McGraw-Hill Education.
- Hult, G.T.M., Sharma, P.N., Morgeson, F.V. III, & Zhang, Y. (2019). Antecedents and consequences of customer satisfaction: do they differ across online and offline purchases? *Journal of Retailing*, 95(1), 10-23.
- Jahan, N., Rahman, M.M., Hossain, M.A., & Saiful, H. (2019). An empirical study on customer satisfaction: mobile phone users in an emerging market. *Journal of Digital Convergence*, 17(4), 75-85.
- Jeong, Y., & Kim, S. (2020). A study of event quality, destination image, perceived value, tourist satisfaction, and destination loyalty among sport tourists. *Asia Pacific Journal of Marketing and Logistics*, 32(4), 940-960.
- Jham, V. (2016). Customer satisfaction with internet banking: exploring the mediating role of trust. *Journal of Emerging Trends in Economics and Management Sciences*, 7(2), 75-87.
- Kant, R., Jaiswal, D., & Mishra, S. (2017). The investigation of service quality dimensions, customer satisfaction and corporate image in indian public sector banks: an application of structural equation model (SEM). *The Journal of Business Perspective*, 2(1), 1-10.
- Kao, T.W.D., & Lin, W.T. (2016). The relationship between perceived e-service quality and brand equity: a simultaneous equations system approach. *Computers in Human Behavior*, 57, 208-218.
- Kasiri, L.A., Guan Cheng, K.T., Sambasivan, M., & Sidin, S.M. (2017). Integration of standardization and customization: impact on service quality, customer satisfaction, and loyalty. *Journal of Retailing and Consumer Services*, 35, 91-97.
- Kim, K.-H., & Park, D.-B. (2017). Relationships among perceived value, satisfaction, and loyalty: Community-based ecotourism in Korea. *Journal of Travel and Tourism Marketing*, 34(2), 171-191.
- Kotler, P., Armstrong, G., Harris, L.C., & Piercy, N. (2017). *Principles of Marketing*. Harlow: Pearson.
- Kundu, S., & Datta, S.K. (2015). Impact of trust on the relationship of e-service quality and customer satisfaction. *EuroMed Journal of Business*, 10(1), 21-46.
- Lam, S.Y., & Shankar, V. (2014). Asymmetries in the effects of drivers of Brand loyalty between early and late adopters and across technology generations. *Journal of Interactive Marketing*, 28(1), 26-42.
- Lee, J., & Lee, Y. (2018). Effects of multi-Brand company's CSR activities on purchase intention through a mediating role of corporate image and Brand image. *Journal of Fashion Marketing and Management: An International Journal*, 22(3), 387-403.
- Lee, H., Lee, Y., & Yoo, D. (2000). The determinants of perceived service quality and its relationship with satisfaction. *Journal of Services Marketing*, 14(3), 217-231.
- Leninkumar, V. (2017). The relationship between customer satisfaction and customer trust on customer loyalty. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 450-465.
- Levy, S., & Hino, H. (2016). Emotional brand attachment: a factor in customer-bank relationships. *International Journal of Bank Marketing*, 34(2), 136-150.

- Liu, M., Wong, I.A., Shi, G., Chu, R. and Brock, J.L. (2014). The impact of corporate social responsibility (CSR) performance and perceived brand quality on customer-based brand preference. *Journal of Services Marketing*, 28(3), 181-194.
- Madzik, P., & Shahin, A. (2021). Customer categorization using a three-dimensional loyalty matrix analogous to FMEA. *International Journal of Quality & Reliability Management*, 38(8), 1833-1857.
- Martínez, P. (2015). Customer loyalty: exploring its antecedents from a green marketing perspective. *International Journal of Contemporary Hospitality Management*, 27(5), 896-917.
- Michael, D., David, A., & Yang, W. (2013). Understanding Chinese university students' experiences: an empirical analysis. *Asia Pacific Journal of Marketing and Logistics*, 25(3), 391-427.
- Mo, J. (2018). The degree of silence and management of academic misconduct in colleges and universities. *Journal of Jishou University (Social Science Edition)*, 2, 35-41.
- Mohamed, N., Taheri, B., Farmaki, A., Olya, H., & Gannon, M.J. (2020). Stimulating satisfaction and loyalty: transformative behaviour and Muslim consumers. *International Journal of Contemporary Hospitality Management*, 32(9), 2903-2923.
- Moorthy, K., Chun T'ing, L., Ai Na, S., Sze Xian, L., & Wei Ling, T. (2018). Corporate image no longer leads to customer satisfaction and loyalty: a Malaysian perspective. *International Journal of Law and Management*, 60(4), 934-952.
- Morgan, R.M., & Hunt, S.D. (1994). The commitment-trust theory of relationship marketing. *The Journal of Marketing*, 5(1), 20-38.
- Muijs, D. (2004). *Doing Quantitative Research in Education with SPSS*. London: Sage.
- Murfield, M., Boone, C.A., Rutner, P., & Thomas, R. (2017). Investigating logistics service quality in omni-channel retailing. *International Journal of Physical Distribution & Logistics Management*, 47(4), 263-296.
- Nadiri, H. (2016). Diagnosing the impact of retail bank customers' perceived justice on their service recovery satisfaction and post-purchase behaviours: an empirical study in financial centre of Middle East. *Economic Research-Ekonomska Istraživanja*, 29(1), 193-216.
- Nunnally, J.C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
- Ofori, K.S., Boakye, K., & Narteh, B. (2018). Factors influencing consumer loyalty towards 3G mobile data service providers: evidence from Ghana. *Total Quality Management & Business Excellence*, 29(5-6), 580-598.
- Ojasalo, J. (2019). Short-term and long-term quality of service. *International Journal of Quality and Service Sciences*, 11(4), 620-638.
- Oliver, R.L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63, 33-44.
- Özkan, P., Süer, S., Keser, İ.K., & Kocakoç, İ.D. (2020). The effect of service quality and customer satisfaction on customer loyalty: The mediation of perceived value of services, corporate image, and corporate reputation. *International Journal of Bank Marketing*, 38(2), 384-405.
- Paiz, N.A.M., Ali, M.H., Abdullah, A.R., & Mansor, Z.D. (2020). The effects of service quality on satisfaction and purchase intention in mobile commerce. *International Journal of Business and Management*, 15(4), 36-42.
- Parasuraman, A., Berry, L., & Zeithaml, V. (2002). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67(4), 114-139.
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithaml, V.A., & Malhotra, A. (2005). E-S-QUAL: a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213-233.
- Pedroso, R., Zanetello, L., Guimaraes, L., Pettenon, M., Goncalves, V., Scherer, J., Kessler, F., & Pechansky, F. (2016). Confirmatory factor analysis (CFA) of the crack use relapse scale (CURS). *Archives of Clinical Psychiatry*, 43(3), 37-40.
- Pizam, A., Shapoval, V. and Ellis, T. (2016). Customer satisfaction and its measurement in hospitality enterprises: a revisit and update. *International Journal of Contemporary Hospitality Management*, 28(1), 2-35.
- Rasoolimanesh, S.M., Dahalan, N., & Jaafar, M. (2016). Tourists' perceived value and satisfaction in a community-based homestay in the Lenggong valley world heritage Site. *Journal of Hospitality and Tourism Management*, 26, 72-81.
- Riquelme, I.P., Roman, S., & Iacobucci, D. (2016). Consumers' perceptions of online and offline retailer deception: a moderated mediation analysis. *Journal of Interactive Marketing*, 35, 16-26.
- Russo, I., Confente, I., Gligor, D., & Cobelli, N. (2019). A roadmap for applying qualitative comparative analysis in supply chain research: the reverse supply chain case. *International Journal of Physical Distribution & Logistics Management*, 49(1), 99-120.
- Sanchez, J., Callarisa, L., Rodriguez, R.M., & Moliner, M.A. (2006). Perceived value of the purchase of a tourism product. *Tourism Management*, 27(3), 394-409.
- Samudro, A., Sumarwan, U., Simanjuntak, M., & Yusuf, E. (2020). Assessing the effects of perceived quality and perceived value on customer satisfaction. *Management Science Letters*, 10(5), 1077-1084.
- Schoorman, F.D., Mayer, R.C., & Davis, J.H. (2007). *An Integrative Model of Organizational Trust: Past, Present, and Future*. New York: Academy of Management Briarcliff Manor.
- Shimizu, I. (2005). Multistage sampling. In P. Armitage & T. Colton (Eds), *Encyclopedia biostatistics* (2nd ed.). Hoboken, NJ: Wiley.

- Sica, C., & Ghisi, M. (2007). The Italian versions of the Beck Anxiety Inventory and the Beck Depression Inventory-II: Psychometric properties and discriminant power. In M.A. Lange (Ed.), *Leading - Edge Psychological Tests and Testing Research* (pp. 27-50). New York: Nova Science Publishers.
- Singh, G., Slack, N., Sharma, S., Mudaliar, K., Narayan, S., Kaur, R., & Sharma, K.U. (2021). Antecedents involved in developing fast-food restaurant customer loyalty. *The TQM Journal*, 33(8), 1753-1769.
- Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value and loyalty in relational exchanges. *Journal of Marketing*, 66(1), 15-37.
- Song, H., Wang, J., & Han, H. (2019). Effect of image, satisfaction, trust, love, and respect on loyalty formation for name-brand coffee shops. *International Journal of Hospitality Management*, 79, 50-59.
- Soper, D. (2006). Calculator: A-priori Sample Size for Structural Equation Models. Retrieved from <https://www.danielsoper.com/statcalc/calculator.aspx?id=89>
- Srivastava, K., & Sharma, N.K. (2013). Service quality, corporate brand image, and switching behavior: the mediating role of customer satisfaction and repurchase intention. *Services Marketing Quarterly*, 34(4), 274-291.
- Steenkamp, J., & Baumgartner, H. (2000). On the use of Structural Equation Models in marketing modeling. *International Journal of Research in Marketing*, 17(2), 195-202.
- Suhartanto, D., Brien, A., Primiana, I., Wibisono, N., & Triyuni, N.N. (2020). Tourist loyalty incentive tourism: the role of experience quality, value, satisfaction, and motivation. *Current Issues in Tourism*, 23(7), 867-879.
- Tabrani, M., Amin, M., & Nizam, A. (2018). Trust, commitment, customer intimacy and customer loyalty in Islamic banking relationships. *International Journal of Bank Marketing*, 36(5), 823-848.
- Turner, R., & Carlson, L. A. (2003). Indexes of Item-Objective Congruence for Multidimensional Items. *International Journal of Testing*, 3, 163-171. https://doi.org/10.1207/S15327574IJT0302_5
- Ulag, W., & Eggert, A. (2006). Value-based differentiation in business relationships: gaining and sustaining key supplier status. *Journal of Marketing*, 70(1), 119-136.
- University of Cambridge. (2019). Definition of academic misconduct. Retrieved from <https://www.plagiarism.admin.cam.ac.uk/definition>
- Vilares, M., & Coelho, P. (2004). The employee-customer satisfaction chain in the ECSI model. *European Journal of Marketing*, 37(11), 1703-22.
- Vo, N.T., Chovancova, M., & Tri, H.T. (2020). The impact of E-service quality on the customer satisfaction and consumer engagement behaviors toward luxury hotels. *Journal of Quality Assurance in Hospitality and Tourism*, 21(5), 499-523.
- Wahyoedi, S. (2017). The effect of religiosity, service quality, and trust on customer loyalty in Islamic banking in Bogor Indonesia. *International Review of Management and Business Research*, 6(1), 331-340.
- Woratschek, H., Horbel, C., & Popp, B. (2019). Determining customer satisfaction and loyalty from a value co-creation perspective. *The Service Industries Journal*, 1-23.
- Yunnan Normal University (2021). School profiles. Retrieved from <https://www.ynnu.edu.cn/xxgk/xxjj.htm>
- Zeithaml, V.A. (1988). Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22.
- Zeithaml, V.A. (2000). Service quality, profitability, and the economic worth of customers: what we know and what we need to learn. *Journal of the Academy of Marketing Science*, 28(1), 67-85.
- Zikmund, W. G. (2000). *Business Research Methods* (6th Ed). Fort Worth: Dryden Press.



The Influence of Online Comments on the Decision-making Behavior of Guangxi University for Nationalities' Traveling to Thailand

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Abstract

With the continuous improvement of the depth and breadth of Internet use, it has become a habit for people to browse online comment, when choosing products and traveling consumption. Therefore, it is necessary to study the influence mechanism of online comment on consumers' purchasing decisions. This paper takes the students of Guangxi University for Nationalities as the research object and adopts the method of questionnaire survey to conduct the research. Questionnaire survey is randomly distributed to 500 students of Guangxi University for Nationalities online and offline, hypothesis testing and correlation analysis are used to study 432 valid questionnaires. The results show that the number, differentiation, perceived usefulness and accessibility of online comments have a significant positive impact on college students' travel decisions. The more professional the recipient of online comments is, the stronger the relationship with the disseminator is, and the greater the influence is on the decision of college students to travel to Thailand. In addition, the participation degree of tourists and the online participation degree of online review recipients also had a positive impact on their travel decisions in Thailand. Based on the above research conclusions, this paper finally provides corresponding suggestions for online tourism operators and traditional tourism enterprises to make relevant decisions: (1) establish user participation and interactive experience mechanism. (2) Provide customized products and services. (3) Develop game products.

Introduction

With the continuous development of China's intelligent technology and 5G technology, online commentary has profoundly changed the way of information transmission and people's life behavior. As

the most important source of online information for Chinese netizens, online comments not only influence consumers' firefighting decisions, but also provide a large amount of product or enterprise information feedback. Through online comments, The Chinese people can know

everything about the world without going out.

Arreza (2021) and phengkona (2022) pointed out that Thailand's tourism industry has inherent advantages: superior geographical location, pleasant natural environment, rich and diverse cultural heritage and delicious dishes. With the support of the government, the hospitality of the people and perfect tourism facilities, Thailand has become the preferred destination for foreign tourists. In 2018, more than 38 million foreign tourists visited Thailand, an increase of 7.2% over the same period in 2017. According to the National Tourism Administration of Thailand, tourists mainly come from China, Japan, South Korea and Singapore, as well as Europe and North America. China is Thailand's most important source of international tourists, accounting for the highest proportion of more than 10.5 million people. A considerable number of Chinese tourists are college students. On the one hand, due to the friendly relations between the two countries, many overseas Chinese live in Thailand. On the other hand, the consumption level in Thailand is not high, so students can get the best travel experience according to their consumption ability.

Literature review

In "Role of product-related conversations in the diffusion of a new product" (1967) pointed out that consumers' willingness to spread word of mouth is directly related to their satisfaction level. The higher the satisfaction level is, the stronger the willingness will be. In addition, when there is a novel event or make consumers surprised to the effect of products and services, the stimulation of word of mouth is stronger.

In "The role of argument quality in the elaboration likelihood model" (1988) pointed out through investigation that tourists' purchase behavior of services or products has a large perceived risk, and they have little evaluation on product experience characteristics, which is also the key to prominent credibility of Internet tourism word-of-mouth. In "Establishing trust in electronic commerce through online comment: An examination across genders" (2008) conducted in-depth communication with backpackers by means of interview, and found that 86% of respondents chose "often" and "occasionally" to be influenced by word-of mouth information.

In "A review of empirical research on online reviews" (2012) took the point of purchase intention as a starter, considering the inherent characteristics of tourist products (intangible, experience, etc.), in order to

reduce the risk of product purchase, tourists will collect group or close ones' product experience evaluation information as the key criteria of product purchase decisions. In "The influence of perceived usefulness of online reviews on purchasing intention of online consumers" (2016) took the image cognition of tourist destinations as the entry point of analysis, and made an in-depth explanation of the relations among online comment information, image perception of tourist destination and choices.

Wu Xuefei (2010) took the cognition of tourism destination image as the starting point of analysis, and analyzed the relationship between the online comment information, tourists' destination image cognition and choice. Thirdly, Cheng Xia (2010) took the information characteristics and information source channels as the analysis perspective, and analyzed empirically the relationship between the online comment, the choice of tourist destination and scenic spot. Some scholars also consider that because of the anonymity and the interference of false information, online comment is weak in persuasion, and its positive effect cannot be fully exerted. In addition, tourism word of mouth has two-way attributes, and the specific impact on persuasion effect is also poor.

Objectives

The purpose of this paper is to explore the impact of online reviews on tourists' decision-making, that is, to explore what kind of consumption behavior will be caused by the spread of tourism word of mouth on the Internet. In Guangxi university for nationalities as the research object, analyze network comments on tourism decision-making behavior among college students in Guangxi university for nationalities, adopt the method of questionnaire investigation, using online and offline random questionnaire survey was conducted among 500 students of Guangxi university for nationalities, and recycling and analyzing the questionnaire data, related Suggestions are given finally.

Concept Framework

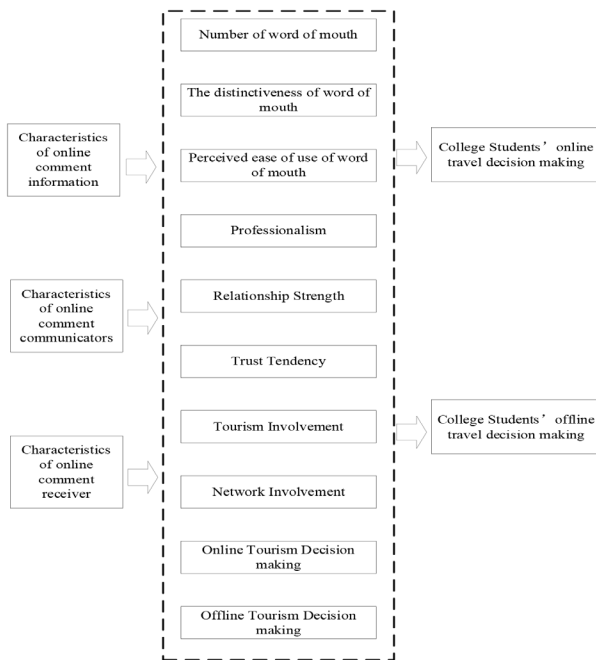


Figure 1 Concept Framework

Research Methodology

1. Population and sample

The purpose of this study is to understand the impact of online comments on tourism decision-making behavior of students in Guangxi University for nationalities. Therefore, select the appropriate research object of Guangxi University for online or offline questionnaire survey. The selection of research objects must meet the following two conditions: first, the research objects should have the conditions and ability to use the Internet. Second, the research object should be able to access online comments on tourism destinations, tourism products and other tourism related information. The online questionnaire was sent to all departments of Guangxi University for Nationalities in the form of online e-mail. A total of 500 questionnaires were distributed online and offline.

2. Research instruments

On the basis of the above literature review, considering the purpose and context of this study, the operational definition of each variable is finally formed. In the specific measurement of variables, it is mainly based on the measurement items widely used in the academic circles. Combined with the specific situation

of this study, 11 variables are number of word of mouth, the distinctiveness of word of mouth, perceived usefulness of word of mouth, perceived ease of use of word of mouth, professionalism, relationship strength, trust tendency, tourism involvement, network involvement, online tourism decision-making and offline tourism decision-making, the details are shown in Table 1. The final formal questionnaire includes four parts. The first part is the explanation of the questionnaire; The second part is the basic personal data of the survey object; The third part is to investigate some performances of college students in the use of Internet before traveling; The last part is the main part of the questionnaire, namely, the measurement items corresponding to 11 variables of the research model, So as to formulate a questionnaire based on online comments on the impact of Guangxi University for Nationalities on tourism decision-making behavior in Thailand

Table 1 Variables Measurement Scale

Variable name	number	Questions
Number of Word of mouth	A1	There are a lot of messages supporting the word of mouth
	A2	The word of mouth has been copied to many web pages
	A3	The publisher of word of mouth also released many similar word of mouth information
	A4	Lots of similar word of mouth is also able to be found in the network
The Distinctiveness of Word of mouth	B1	The attitude (for or against) of the word of mouth is clear
	B2	The word of mouth is very vivid with pictures and texts
	B3	This word of mouth can attract me
	B4	The meaning of the word of mouth is very clear and easy to understand
Perceived Usefulness of Word of mouth	C1	The word of mouth is what I need
	C2	The word of mouth to enhance my understanding of tourist destination or tourism products
Perceived ease of use of Word of mouth	D1	The word of mouth is practical
	D2	The word of mouth will be easily used in practice
	D3	It is not difficult to interact with the publisher
Professionalism	E1	The publisher has rich tourism knowledge or experience
	E2	The publisher is a professional in tourism related fields
	E3	Other people highly appraised the word of mouth
Relationship Strength	F1	I have something in common with the publisher
	F2	I will leave a message / reply online, or communicate with the publisher directly online
	F3	If I have the opportunity, I would like to join hands with the publisher
Trust Tendency	G1	I trust people generally
	G2	I usually trust the product information provided by others
	G3	I'm usually willing to rely on information provided by others for decision-making

Table 1 (Continue)

Variable name	number	Questions
Tourism Involvement	H1	Traveling is fun for me. It's a kind of enjoyment
	H2	It is very troublesome to choose a tourist destination or tourist products
	H3	If the choice of tourist destination or tourism products is not suitable, I will be very distressed
Network Involvement	I1	I'm interested in the Internet itself
	I2	The Internet is very important to me
	I3	I spent a lot of time and energy on the Internet
Online Tourism Decision-making	K1	I will continue to check other information to verify the word of mouth
	K2	I will contact word of mouth publishers online for more comments or information
	K3	I will choose to book online or purchase the tourism products recommended by this word of mouth
Offline Tourism Decision-making	L1	I will discuss the word of mouth with my family and friends for advice
	L2	The word of mouth had a great influence on my original view or attitude
	L3	This word of mouth has helped me to make practical decisions

3. Collection of data

3.1 The formal questionnaire's first part is the introduction of the questionnaire, the second part is the basic personal data of the survey objects, namely college students, the third part is the investigation into some performances of college students in the use of Internet before traveling, the last part is the main part of the questionnaire, which uses the scale from 1 to 7 to indicate the attitudes towards total disagreement, disagreement, partial disagreement, general (neutral or uncertain), partial agreement, agreement and total agreement.

3.2 The questionnaire survey lasted from September 2020 to November 2020 for three months, with a total of 500 copies. A total of 432 valid questionnaires were collected in this survey, including 200 paper questionnaires and 174 valid questionnaires, with an effective recovery rate of 87%. A total of 232 online questionnaires were collected, of which 223 were valid. The effective questionnaire recovery rate was 96.1%.

4. Data Analysis

In order to study the influence of online comment on the tourist decision-making behavior of college students from Nanning, this paper chose to obtain data by questionnaire surveys, and described the frequency in the options of the questionnaire by frequency analysis, and analyzed which option is more frequently selected by the interviewees. It is necessary to extract the main components, delete the non-main indicators, and simplify the research process. Correlation

analysis is a statistical analysis method to study the correlation between two or more random variables in the same position. It describes the closeness of the relationship between objective things and expresses it with appropriate statistical indicators. The analysis of reliability and validity were used to judge the effect of the questionnaire surveys.

Results

1. The questionnaire survey

This study carried out a questionnaire survey from September of 2020 to November of 2020, which lasted nearly three months. A total of 432 valid questionnaires were collected in this survey, including 200 paper questionnaires and 174 valid questionnaires, with an effective recovery rate of 87%. A total of 232 online questionnaires were collected, of which 223 were valid. The effective questionnaire recovery rate was 96.1%.

Gender: according to the National Statistical Yearbook 2019 issued by the National Bureau of Statistics, female college students are slightly more than male college students in general, and the proportion of female college students is 50.66%, higher than 1.3 percentage points. In contrast, the proportion of female students in this study is 49.3%, while male accounted for 50.7%, which has a small deviation from the data shown in the National Statistical Yearbook, and can be considered to be within a reasonable proportion.

Age: The age distribution of the research samples mainly concentrated in the age range from 19 to 23 years old (78.47%, which is related to the fact that the survey samples are mainly composed of college students and undergraduates; following are sample groups aged 24-27, over 27 and under 19, accounting for 18.29%, 1.85% and 1.39%.

Education Background: In the research, the undergraduates accounted for half of the total samples, accounting for 58.56%, which is related to the fact that the collection of sample data mainly comes from the undergraduate colleges. In addition, the proportion of the samples of junior college students, masters and doctors is as follows: 30.56%, 9.03% and 1.85%. Compared with the distribution of education background of college students in China, except for the proportion of junior college students in the sample is significantly different from that of the whole country, the proportion distribution of other types of education background is relatively consistent.

Monthly Living Expenses of Samples: The survey results show that the average monthly expenses of less than 500 yuan only accounts for 12.73%, while the monthly expenses of most students ranged from 500 yuan to 1500 yuan, of which 501 yuan to 1000 yuan and 1001 yuan to 1500 yuan accounted for 40.97% and 26.85%. 16.67% of the students spent 1501-2000 yuan per month and 2.78% more than 2000 yuan per month.

Tourist Frequency: The survey results show that, on the basis of excluding 28 students with no trips in a year, nearly half of the college students travelled once a year and about one-third of the college students travelled twice a year. 15% of college students travelled three times and 6% more than three times in a year.

After the questionnaire was collected, the reliability of each variable of the scale was tested first. Reliability analysis is a very common dimension, it is mainly used to inspect the reliability of the results of the analysis, the value of Cronbach's Alpha is often used in reliability analysis to measure tone. Check the reliability of the questionnaire. In general, if the questionnaire's clone Bach consistency coefficient value reaches above 0.9, the question should be asked. The reliability of volume survey is better; the consistency coefficient of Kronbach is above 0.8, indicating that the reliability of the questionnaire is good. It is generally believed that the questionnaire reliability between 0.5 and 0.7 is reasonable. If the kronbach consistency coefficient value is lower than 0.5, the results of this questionnaire are considered to be unreliable. This method will be used in the 11 variables in this article. Through quantitative analysis of each index, it was concluded that each variable index exceeded 0.8, which meant that the reliability of the data obtained in this study met the requirements, as shown in Table 2.

Table 2 Reliability analysis results of questionnaire data

Variables	Measurement Items	Cronbach α
Number of Word of Mouth	4	0.845
The distinctiveness of word of mouth	4	0.924
Perceived usefulness of Word-of-Mouth	2	0.911
Perceived ease of use of Word of mouth	3	0.862
Professionalism	3	0.900
Relationship Strength	3	0.907
Trust Tendency	3	0.922
Tourism Involvement	3	0.881
Network Involvement	3	0.876
Online Tourist Decision-Making	2	0.843
Offline Tourist Decision-Making	2	0.857

Among the 11 variables, the reliability coefficients of the six variables, namely, the number of word-of-mouth, perceived ease of use of Word of mouth, tourist involvement, Internet involvement, online tourist decision-making and offline tourist decision-making, are between 0.80-0.9. The reliability coefficients of the five variables of the distinctiveness of word of mouth, perceived usefulness of word-of-mouth, professionalism, relationship strength and trust tendency are greater than or equal to 0.9, reflecting the high structure validity of the questionnaire, which is suitable for further statistics and analysis.

2. Behavior characteristics of network samples before travel were used.

Channels to Gain Tourism Information: The main channels to obtain tourism information were recommendation from relatives and friends, Internet info and travel agencies.

Table 3 Main Channels to Gain Tourism Information

Information Channels	Number of Samples	Percentage	Information Channels	Number of Samples	Percentage
Travel Agency	285	66.0%	Network	372	86.1%
Newspapers and Magazines	72	16.7%	Friend Recommend	391	90.5%
Television Broadcasting	126	29.2%	Other	48	11.1%

Table 4 Online Comment Accessibility before Travelling

			Travel Agency	Newspaper Magazine	Television Radio Broadcasting	Internet	Relatives and Friends Recommendation	Others
Online Comment Access	Often	Number of Samples	139	26	56	232	207	36
		Percentage	59.9%	11.2%	24.1%	100.0%	89.2%	15.5%
	Occasionally	Number of Samples	110	22	34	128	142	12
		Percentage	69.6%	13.9%	21.5%	81.0%	89.9%	7.6%
Now for the First Time	Number of Samples	36	24	36	12	42	0	
	Percentage	85.7%	57.1%	85.7%	28.6%	100.0%	0.0%	

The Accessibility of Online Comment before Travelling: Most respondents search for online review information before traveling. In addition, the research also found that the formulation of tourism design is not based on the accessibility of online comments before the sample travel, and recommendations from relatives and friends and travel agencies are still the main channels for the sample to obtain information, which is consistent with the situation of the main channels for respondents to obtain tourism information.

Information of Using Online Tourist Booking Platform: 222 of the respondents have ever used the online tourism booking platform, and the main channels to obtain information for these groups are the Internet, recommendations from friends and relatives and travel agencies. In contrast, less than or nearly half of the respondents have not used the online tourism booking platform, and their main channels to obtain information are recommendations from friends and relatives, travel agencies and Internet.

This paper has tested 11 variables in the terms of the information characteristics, communicator characteristics and receiver characteristics of online comment,

and concluded that the KMO statistics is 0.848, and the Bartlett sphere test results reject the null hypothesis. Through the two test results, it can be judged that all variables are suitable for the next factor analysis. Therefore, the Correlation Analysis is used to analyze the 11 variables.

3. Hypothesis Testing

3.1 Influence of All Factors of Online Comment Characteristics on Tourist Decision- Making of College Students

Correlation Analysis: In this study, Pearson's correlation analysis is used to analyze the correlation among the variables in the theoretical model.

The results of Table 6 show that each factor of online comment information has a significant positive correlation with online tourist decision-making and offline tourist decision-making at the level of 0.01 (bilateral), that is, the number of online comments, word of mouth distinctiveness, perceived usefulness and perceived ease of use of word of mouth do have a significant positive impact on college students' online tourism decision making and offline tourism decision making. In addition, at the significance level of 0.01,

Table 5 Information of Using Online Tourist Booking Platform

			Travel Agency	Newspapers Magazines	Television Broadcasting	Internet	Friend Recommendation	Others
Condition of Using Online Tourism Booking Platform	Yes	Number of Samples	135	24	54	222	203	30
		Percentage	60.8%	10.8%	24.3%	100.0%	91.4%	13.5%
	No	Number of Samples	150	48	72	150	188	18
		Percentage	71.4%	22.9%	34.3%	71.4%	89.5%	8.6%

Table 6 Result of Correlation Analysis on Online Comment Information Characteristics Factors and Tourist Decision-making Behavior of College Students

		Number of Word of Mouth	Word of Mouth Distinctiveness	Perceived Usefulness of Word of Mouth	Perceived Ease of Use of Word of Mouth	Online Tourism Decision Making	Offline Tourism Decision Making
Number of Word-of-Mouth	Pearson Correlation	1					
	Significance (bilateral)						
The Distinctiveness of Word-of-Mouth	Pearson Correlation	.449**	1				
	Significance (bilateral)	0.000					
Perceived Usefulness of Word of Mouth	Pearson Correlation	.511**	.417**	1			
	Significance (bilateral)	0.000	0.000				
Perceived Ease of Use of Word-of-Mouth	Pearson Correlation	.346***	.473**	.214**	1		
	Significance (bilateral)	0.000	0.000	0.000	0.000		
Online Tourist Decision-Making	Pearson Correlation	.554**	.627**	.335**	.643**	1	
	Significance (bilateral)	0.000	0.000	0.000	0.000	0.000	
Offline Tourist Decision-Making	Pearson Correlation	.674**	.713**	.530**	.604**	.812**	1
	Significance (bilateral)	0.000	0.000	0.000	0.000	0.000	0.000

In the Table 6, ** indicates significant correlation at 0.01 level (bilateral); * means significant correlation at 0.05 level (bilateral)

there is also a significant correlation between the four variables of information characteristics of online comment, namely, the number of online comment, the distinctiveness of word of mouth, the perceived usefulness and perceived ease of use of word of mouth.

Regression Analysis: It can be seen from Table 7 that in model 1, after the number of online comment, online comment distinctiveness, perceived usefulness and perceived accessibility of online comment all enter the regression equation, the multiple correlation coefficient R is 0.607, and the adjusted judgment coefficient (R^2) is 0.603, indicating that the variable of word of mouth information characteristics can explain 60.3% of the variation of online tourism decision-making behavior. The F statistical value of the model is 164.782, and significance probability is 0.000, so the linear relationship of regression equation is significant by F test. Therefore, in general, the hypothesis of regression model is acceptable.

Table 7 Regression Overall Effect of Online Comment Information Characteristics on Tourist Decision-making Behavior of College Students

Model	R	R ²	Adjusted R ²	F	Sig.F
1	0.779a	0.607	0.603	164.782	0.000
2	0.858a	0.737	0.734	298.85	0.000

a. Predictive variables: the number of word-of-mouth, the distinctiveness of word-of-mouth, perceived usefulness and perceived ease of use of word-of-mouth.

b. In model 1, the dependent variable is online tourist decision-making. In model 2, the dependent variable is offline tourist decision-making.

In model 2, after the number of online comment, online comment distinctiveness, perceived usefulness and perceived accessibility of online comment all enter the regression equation, the multiple correlation coefficient R is 0.737, and the adjusted judgment coefficient (R^2) is 0.734, which showed that the variable of word of mouth information characteristics could explain 73.4% of the variation of the influence of offline tourism decision-making behavior. The F statistical value of the model was 298.85, and the significance probability was 0.000, so the regression effect is significant, which is consistent with the result of model 1. Therefore, in general, the setting of regression model 2 is within the acceptable range.

It can be seen from model 1, according to the Beta value of the standard regression coefficient, the regression effect of the number, distinctiveness, perceived usefulness and perceived ease of use of word of mouth on online tourism decision-making behavior is significant, and the significance probability is 0.000, 0.000, 0.000 and 0.001 respectively, which are all less than 0.01. The perceived usefulness and perceived ease of use of word of mouth have the greatest impact on and contribution to online tourism decision making, followed by the number and distinctiveness of word of mouth.

Table 8 Regression Matrix of Online Comment Information Characteristics Factors on Tourism Decision-making Behavior of College Students

Model	Predictive Variables	Nonstandard Coefficient		Standardization Coefficient	t Value	Sig	Multicollinearity Diagnosis	
		B	Standard Error	Beta			Tolerance	VIF
1	Constant	-0.943	0.246		-3.831	0.000		
	Term Number of Word-of-Mouth	0.324	0.042	0.288	7.647	0.000	0.651	1.537
	The Distinctiveness of Word-of-Mouth	0.296	0.035	0.323	8.531	0.000	0.643	1.555
	Perceived Usefulness of Word-of-Mouth	0.234	0.029	0.342	8.859	0.001	0.623	1.443
2	Perceived Ease of Use of Word of Mouth	0.450	0.040	0.398	11.361	0.000	0.652	1.330
	Constant	0.671	0.154		4.360	0.000		
	Term Number of Word-of-Mouth	0.290	0.026	0.337	10.945	0.000	0.651	1.537
	The Distinctiveness of Word-of-Mouth	0.258	0.022	0.369	11.908	0.000	0.643	1.555
	Perceived Usefulness of Word-of-Mouth	0.123	0.025	0.144	4.829	0.000	0.693	1.443
	Perceived Ease of Use of Word of Mouth	0.244	0.025	0.282	9.861	0.000	0.652	1.330

a. In model 1, the dependent variable is online tourist decision-making.

b. In model 2, the dependent variable is offline tourist decision-making.

3.2 Influence of All Factors of Word-of-Mouth Communicator Characteristics on Tourist Decision-Making of College Students

Correlation Analysis: This paper uses Pearson correlation analysis to explore the influence of relationship strength and specialty of word-of-mouth communicators on college students' tourism decision-making behavior. The results show that relationship strength and professionalism are significantly positively correlated (bilaterally) with online and offline travel decision making at 0.01 level. That is

Table 9 Result of Correlation Analysis on Word-of-Mouth Communicator Characteristics Factors and Tourist Decision-making Behavior of College Students

		Professionalism	Relationship strength	Online Tourism Decision Making	Offline Tourism Decision Making
Professionalism	Pearson Correlation Significance (bilateral)	1			
Relationship Strength	Pearson Correlation Significance (bilateral)	0.511**	1		
Online Tourist Decision-Making	Pearson Correlation Significance (bilateral)	0.526**	0.664**	1	
Offline Tourist Decision-Making	Pearson Correlation Significance (bilateral)	0.609**	0.603**	0.812**	1

In the Table 9, ** indicates significant correlation at 0.01 level (bilateral); * 0.05 indicates a significant correlation

Table 10 Regression Overall Effect of Word-of-Mouth Communicator Characteristics on Tourist Decision-making Behavior of College Students

Model	R	R ²	Adjusted R ²	F	Sig.F
1	0.699a	0.488	0.486	204.419	0.000
2	0.698a	0.487	0.484	203.499	0.000

a. Predictive variables: relationship strength, professionalism

b. The dependent variable of model 1 is online tourism decision making. The dependent variable of model 2 is offline tourism decision making.

to say, relationship strength and degree of specialization do have a significant positive impact on college students' online and offline travel decisions. In addition, at the 0.01 level of significance, there was a significant correlation between relationship strength and professionalism.

Regression Analysis: The above analysis has confirmed that professionalism and relationship strength have a significant positive impact on college students' online tourism decision making and offline tourism decision making. In this paper, the regression analysis was done with professionalism and relationship strength as variables, and online tourism decision making and offline tourism decision making as dependent variables, to test the hypothesis.

As can be seen from Table 10, in Model 1, after the relationship strength and professionalism enter the regression equation, the multiple correlation coefficient (R) is 0.488, and the adjusted judgment coefficient (R²) is 0.486, indicating that the characteristics of word-of-mouth disseminators can explain 48.6% variation of online tourism decision-making behavior. The F-statistic value of the model is 204.419. Significance probability

Table10 Regression matrix of characteristic factors of network comment communicators on college students' tourism decision-making behavior

Model	Predictive Variables	Nonstandard Coefficient		Standard Coefficient	t Value	Sig	Multicollinearity Diagnosis	
		B	Standard Error	Beta			Tolerance	VIF
1	Constant Term	1.223	0.179		6.830	0.000		
	Professionalism	0.248	0.039	0.253	6.307	0.000	0.639	1.353
	Relationship Strength	0.511	0.038	0.534	13.296	0.000	0.639	1.353
2	Constant Term	2.846	0.137		20.774	0.000		
	Professionalism	0.305	0.030	0.407	10.127	0.000	0.719	1.353
	Relationship Strength	0.289	0.029	0.389	9.729	0.000	0.719	1.353

It can be seen from Table 19 that, in the model, the regression effect of relationship strength and professionalism on online tourism decision-making is significant, and the probability of significance is 0.000, that is, both are less than 0.01. The influence and contribution of relationship strength on online tourism decision-making is greater than specialty. On the basis of the above analysis, tolerance method and variance inflation factor (VIF) were used to test the multicollinearity of regression analysis. It can be seen from Table 13 that the tolerance of all variables in the regression equation model is 0.639, which meets the condition of greater than 0.01 and not close to 1. In addition, the value of variance inflation factor (VIF) is less than 10, so the multicollinearity between relationship strength and specialization is not obvious. In model 2, the regression effect of relationship strength and professionalism on offline tourism decision-making is significant, with a significance probability of 0.000. However, contrary to model 1, specialization has greater influence and contribution on offline tourism decision-making than relationship strength. The tolerance and VIF are the same as model 1, and there is no obvious multicollinearity problem. So it's a test that the hypothesis is true.

is 0.000, that is, regression effect is significant. In Model 2, the multiple correlation R is 0.487, and the adjusted judgment coefficient (R2) is 0.484, after both relationship strength and professionalism are included in the regression equation. This indicates that the variable of word-of-mouth information characteristics can explain the influence of 42.9% of the variation of offline tourism decision-making behavior. The value of F statistical model is 1203.499, and the probability of significance is 0.000, which means that the regression effect is significant. Therefore, the Settings of regression model 1 and model 2 are within the acceptable range.

3.3 Influence of All Factors of Word of Mouth Recipient Characteristics on Tourist Decision- Making of College Students

Correlation Analysis: Pearson correlation analysis was also used to explore the impact of trust tendency, travel participation and network participation on college students' travel decision-making behavior. There is also a significant positive correlation between trust tendencies, tourism investment and Internet investment at 0.01(bilateral) level, that is, trust tendency, tourism investment and Internet investment have a significant positive impact on college students' online and offline tourism decision-making. In addition, there is a significant correlation between trust tendency, travel participation and Internet participation. The results are shown in Table 12.

Table 12 Result of Correlation Analysis on Word of Mouth Recipient Characteristics Factors and Tourism Decision-making Behavior of College Students

		Trust Tendency	Tourism Involvement	Internet Involvement	Online Tourism Decision Making	Offline Tourism Decision Making
Trust Tendency	Pearson Correlation	1				
	Significance (bilateral)					
Tourism Involvement	Pearson Correlation	0.226**	1			
	Significance (bilateral)	0.000				
Network involvement	Pearson Correlation	0.018	0.177**	1		
	Significance (bilateral)	0.704	0.000			
Online Tourism Decision Making	Pearson Correlation	0.01	0.401**	0.431**	1	
	Significance (bilateral)	0.837	0.000	0.000		
Offline Tourism Decision Making	Pearson Correlation	0.142**	0.380**	0.480**	0.812**	1
	Significance (bilateral)	0.000	0.000	0.000	0.000	

Regression analysis: In order to test the hypothesis, this paper takes trust tendency, tourism investment and Internet investment as independent variables, and college students' online and offline travel decisions as dependent variables to conduct regression

analysis. The experimental results are shown in Table 13.

Table 13 Regression Overall Effect of Word of Mouth Recipient Characteristics on Tourism Decision-making Behavior of College Students

Model	R	R ²	Adjusted R ²	F	Sig.F
1	0.548a	0.300	0.296	61.283	0.000
2	0.570a	0.325	0.320	68.584	0.000

As can be seen from Table 13, in Model 1, after the propensity to trust, both tourism participation and Internet participation enter the regression equation, with multiple correlation coefficient (R) of 0.300 and adjusted judgment coefficient (R2) of 0.296, indicating that the audience's word-of-mouth characteristics can only explain 29.6% of the variation of online tourism decision-making behavior.

In Model 1 and Model 2, the regression effect of tourism participation and Internet participation on online and offline tourism decision-making is significant, and the probability of significance is 0.000, less than 0.01. The multicollinearity diagnosis results show that there is no obvious multicollinearity problem. It is worth noting that the probability of trust propensity for t value of standard regression coefficient in Model 1 and Model 2 is 0.066 and 0.093 respectively. The multicollinearity diagnosis results of the two models show that the multicollinearity problem is more obvious than the other variables, both of which are greater than 0.7.

According to the above analysis, it can be concluded that the assumption that the tendency to trust has a significant influence on the online and offline travel decision-making behavior of college students is invalid. Therefore, the research hypothesis is valid as shown.

Table 14 Regression Matrix of Word of Mouth Recipient Characteristics Factors on Tourism Decision-making Behavior of College Students

Model	Predictive Variables	Nonstandard Coefficient		Standard Coefficient	t Value	Sig.	Multicollinearity Diagnosis	
		B	Standard Error	Beta			Tolerance	VIF
1	Constant Term	-0.532	0.444		-1.202	0.03		
	Trust Tendency	-0.088	0.049	-0.075	-1.841	0.066	0.749	1.054
	Tourism Involvement	0.411	0.049	0.352	8.361	0	0.619	1.089
	Internet Involvement	0.511	0.056	0.372	9.023	0	0.668	1.032
2	Constant Term	0.974	0.335		2.918	0.004		
	Trust Tendency	0.062	0.036	0.068	1.681	0.093	0.749	1.054
	Tourism Involvement	0.259	0.038	0.302	6.969	0	0.619	1.089
	Network Involvement	0.452	0.044	0.429	10.586	0	0.668	1.032

Discussion

This study takes the students of Guangxi University for Nationalities as the research object. In the process of College Students' tourism decision-making in Thailand, through online search for comments on tourism destination or product information, this study jointly carries out online questionnaire survey and offline questionnaire survey. It uses statistical analysis software to analyze the data obtained. The results show that the number, uniqueness, perceived usefulness and perceived ease of use of word-of-mouth have a significant positive impact on College Students' tourism decision-making. The more professional the receiver of online comments is, the closer the relationship with the promoter is, and the greater the impact on the decision-making of college students to travel to Thailand. In addition, the tourism participation and online participation of comment recipients, that is, college students of Guangxi University for nationalities, also have a significant positive impact on their tourism decision-making in Thailand, while college students' personal trust tendency has no significant impact on their tourism decision-making. This is related to the research of Zhou (2017). Zhou found that among all kinds of online tourism information, online word-of-mouth has a particularly significant impact on tourists' decision-making. Tourists generally believe that online word-of-mouth is more authentic and reliable than the information provided by tourism service providers, and they are more inclined to adopt word-of-mouth information. However, Lin (2019) found that it is easier for tourists to adopt comments made by highly educated commentators who have visited tourist destinations.

Suggestions

According to the network comments, the tourism decision-making behavior of Guangxi University for

Nationalities is studied, that is, through the analysis of 11 variables; the following three suggestions are summarized for your reference.

1. Building Mechanism for User Involvement and Interactive Experience

First, improve the construction of tourist community. Communication platforms should be established to promote the positive interaction among college student netizens, and provide a online platform for college student tourists to exchange experience and evaluate tourism products and services, so that tourist websites or tourism suppliers can listen to college students and analyze their needs and preferences, so as to better improve tourism products and services, At present, Baidu Post Bar and Douban Post Bar are good communities.

Second, fully consider the needs for personalized experience of college students. Various forms of expression such as travel notes, photo sharing and tourist evaluation can be combined. New channels such as micro-blog or online video and small video can also be closely integrated with traditional channels, to create a smooth experience for tourists. It is suggested that they cooperate with the most popular we media and short video platforms such as the Tiktok to establish the largest level of contact with the Internet users, promote the exchange and sharing of information between each other, and enhance their relationship strength. In addition to the above measures, they can also carry out a series of incentive measures and interactive activities, such as points for prizes and red packets, so as to attract more people to know and actively participate in these activities. They can also find some "active figures" in the forum to drive the vitality of the whole website, and enable college students to strengthen their emotional ties in the process of contact, communication and interaction, gradually forming a relatively strong relationship.

2. Providing Customized Products and Service

Online tourist websites need to highlight their personal characteristics and provide all-round, multi-level personalized and characteristic services. For example, for the current simple online tourist product combination “air ticket + hotel”, they can try to provide one-stop services such as air ticket booking, train ticket booking, ticket booking for tourists attractions, car rental, visa service, insurance service, hotel booking, etc., so as to promote the complementary advantages of all kinds of tourism products, so that college students can not only understand the tourist destinations and product information through the website so as to arrange the travel itinerary, but also directly place orders online for all kinds of products needed in the whole process of tourism, so as to stimulate college students’ awareness of self-help tourism. At the same time, they should lower the requirements for network technology, and provide more convenient, simple and attractive website operation pages and functions, so as to improve college students’ enthusiasm and interest in using tourism websites, and maximize the promotion of college students’ online tourist booking or purchasing behavior.

3. Developing Game-oriented Products

The more prominent the word-of-mouth distinctiveness is, the more easier college students’ tourism decision-making behavior is to be affected by online comment, which is verified by the hypothesis in the previous chapter. With the gradual improvement of the current tourism websites, it is worth considering how to adjust the overall layout structure and color matching to improve the visual impact of e-commerce platforms, or add distinctive elements to attract college students. For example, the buyer evaluation index system of Taobao, a well-known shopping website, can be fully used for reference. That is, after completing the transaction, the buyer evaluates the transaction from the following aspects: commodity description index, seller attitude index, delivery speed index and logistics speed index. Online tourism websites can set “authenticity” index, “cost performance” index and “easy to use” index in the result pages of ticket search, accommodation search and scenic spot ticket search to score netizens. The final score of the product is the weighted average of these index scores, so as to improve the interactivity and credibility of the website pages. At the same time, they can also help college students choose tourist products and destinations by adding some game products, such as tests, constellations, gossip or games, which are favored

by young people, so as to boost the interest and attraction of the websites.

References

- Arndt, J. (1967). Role of product-related conversations in the diffusion of a new product, *Journal of marketing Research*, 4(3): 291-295.
- Areni, C. S., & Lutz, R. J. (1988). The role of argument quality in the elaboration likelihood model, *ACR North American Advances*.5(3):356-371.
- Awad, N. F., & Ragowsky A. (2008). Establishing trust in electronic commerce through online word of mouth: An examination across genders, *Journal of Management Information Systems*, 24(4): 101-121.
- Cheng, X. (2010). Research on the Influence of Internet Word of Mouth on Consumer Price Sensitivity. *Price: Theory & Practice*, 06, 77-78.
- Cao, H. H., & Jiang J. H. (2012). A review of empirical research on online reviews, *Journal of Information Systems*, 4(2):125-136.
- Jutamas, P., & Paithoon, M. (2022). Motivation-Based Segmentation and Online Behaviors of Tourists Participating in Community-Based Tourism: A Case Study of Thailand, *Journal of Multidisciplinary in Social Sciences*, 18(1): 23-36.
- Jin, L. Y. (2007). The Effects of Online WOM Information on Consumer Purchase Decision: An Experimental Study. *Economic Management*, 22, 36-42.
- Lin, Z. G. (2019). Study on the impact of inbound tourists' tourism information acquisition on tourism decision-making behavior——Taking Korean tourists to China as an example. *Tianjin University*, 1-208.
- Kallayane, K. (2019). Thailand as a Tourist Destination for Nightlife: Comparison of Asian and Western Tourists' Attitudes, *Journal of Multidisciplinary in Social Sciences*, 15(3): 42-51.
- Gong, S. Y., Liu, X., & Liu, Y. (2012). Does Online Word of mouth Determine Product's Fate -- An Empirical Analysis of Online Book Reviews. *Nankai Business Review*, 15(4):118-128.
- Liu, Y. M, Zhang W. L., & Hui, D. Y. (2012). Research on the Influence of Internet Word of Mouth on Consumer Price Sensitivity. *Price:Theory & Practice*, 06:77-78.
- Mariae, Khrisna. Arreza. (2021).Tourism Marketing: The Influences of Social Media to the Tourist Destination, *Journal of Multidisciplinary in Social Sciences*, 17(2): 18-24.
- Xiao, K. & Wang, M. L. (2016). The influence of perceived usefulness of online reviews on purchasing intention of online consumers, *Technology Innovation Monthly*, 29(9):29-32.
- Wu, X. F. (2010). An Empirical Study on Consumer's Online Word of Mouth Communication Based on the Network and Trust Theory. *Zhejiang University*, 1-106.
- Zhou, J. M. (2017). Research on the impact of online word-of-mouth on tourism decision-making. *Nanjing University*, 1-65



Factors Influencing the Decision of Thai Visitors to Travel to Nakhon Ratchasima Province, Thailand, Amid the COVID-19 Pandemic

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Abstract

The COVID-19 pandemic from the end of 2019 to the end of 2021 resulted in the tourism industry of Thailand being negatively affected. Almost every province in the northeastern region has been severely impacted, with Nakhon Ratchasima Province experiencing a reduction in Thai visitors of up to 38%. Consequently, entrepreneurs and other people in Nakhon Ratchasima Province relying on tourism for a living have experienced income loss and a deterioration in their quality of life. Therefore, this study aims to determine the factors influencing the decision of Thai visitors to travel to Nakhon Ratchasima Province, Thailand, amid the COVID-19 pandemic, to identify the important factors for tourism development in the area using primary data collected via a questionnaire. A sample of 400 Thai visitors were asked to complete the questionnaire between March and December 2021, with the collected data then analysed using the following statistical values: frequency, percentage, standard deviation, mean, and a logistic model (or binary logistic regression) according to the statistical significance level of 0.01. The suitability of the logistic model was determined based on the statistical values of a -2log likelihood (Cox and Snell R^2 ; Nagelkerke R^2 ; Hosmer and Lemeshow), with 87.30% accuracy. The results indicated that the following factors influenced the decision of Thai visitors to travel to Nakhon Ratchasima Province, Thailand, amid the COVID-19 epidemic: 1) Gender; 2) Average income per month; 3) The safety of the province in terms of health and protecting life, including property; 4) There are many tourist attractions within a short distance which are easy to travel to; 5) Accommodation prices are reasonable; 6) Goods and souvenir prices are reasonable; 7) The prices for visiting attractions are reasonable; 8) Tourist attractions have an effective and suitable infrastructure; 9) Tourist attractions are safe in terms of health and protecting life; 10) Tourist attractions have strict and effective measures to prevent the spread of COVID-19; 11) Tourist attractions have appropriate goods and souvenirs; 12) The promotion of price reduction for accommodation; and 13) The promotion of various privileges for visitors.

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Introduction

The tourism industry is regarded as having an important role in the economic and social development of Thailand. Tourism is the main industry in Thailand, generating significant Gross Domestic Product (GDP), as well as being the primary source of income for the country. The tourism industry brings a substantial amount of foreign investment into Thailand, benefiting the economy through business products and services as well as infrastructure development. Moreover, the tourism industry drives economic competitiveness between Thailand and other countries, benefiting the economic, social, cultural, and environment of the country (Wannathanom, 2009). However, in 2021, the tourism industry in many provinces of Thailand was significantly affected by the COVID-19 pandemic. From January to December 2021, the number of cumulative infected people in Thailand was 2,217,640. The highest number of infections occurred in three time periods: August, September, and July 2021, with 607,686, 398,746, and 337,986 people affected, respectively, according to the information available as of 31 October 2021 (Ministry of Public Health, 2021), as presented in Figure 1.

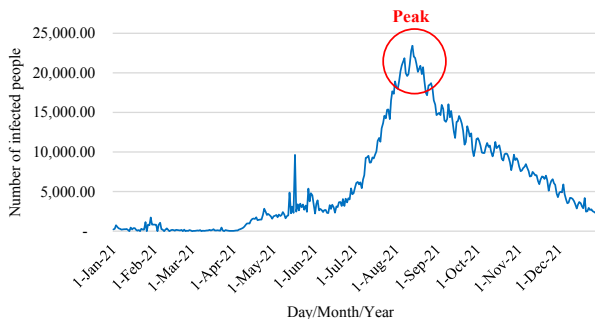


Figure 1: Trend of COVID-19 pandemic in Thailand between January and December 2021

Source: Ministry of Public Health, 2021

Accordingly, Thailand's government has deemed it necessary to implement emergency measures to prevent the spread of COVID-19 infection in the country by issuing regulations under Section 9 of the emergency decree on Public Administration in Emergency Situations B.E. 2548 (2005). These regulations aim to prevent people from entering areas of risk and requiring places at risk of spreading COVID-19 to close. Other regulations include social distancing, working from home, and

closing the channels of entry for foreigners into Thailand (Office of the Council of State, 2021). Furthermore, Thailand's government-imposed restrictions on each province in the form of dark red and red areas to vary the level of measures in each area. The change in colour intensity depends on the number of infected people in each province (Thai Quarantine Monitor, 2021). These measures have had a direct effect on the tourism industry since 2020, with the number of foreigners and Thai visitors decreasing continuously in every province. Foreign visitors are unable to travel across borders in Thailand, except those who have received two vaccinations, but they still have to stay in state quarantine for at least 14 days. However, Thai visitors are able to travel across provinces. Therefore, the tourism industry has turned its focus to Thai visitors and domestic tourism. The third-largest number of Thai visitors, excluding Bangkok, came from three provinces in 2021 (January to December), namely Kanchanaburi, Chiang Mai, and Nakhon Ratchasima, respectively (Ministry of Tourism and Sports, 2022). Further details are provided in Table 1.

Table 1: Number of Thai visitors and rate of change in 2021 (January to December) for the first three provinces excluding Bangkok

Provinces	2021 (January to December)		
	Number of Thai visitors (2021)	Number of Thai visitors (2020)	Rate of change (%)
Bangkok	11,946,480	18,795,401	-36.44
1) Kanchanaburi	4,112,075	5,989,625	-31.35
2) Chiang Mai	3,703,008	5,443,027	-31.97
3) Nakhon Ratchasima	3,454,694	5,637,594	-38.72

Source: Ministry of Tourism and Sports, 2022

According to Table 1 and Figure 2, excluding Bangkok, it can be observed that all other provinces of Thailand still experienced a large number of Thai visitors amid the COVID-19 pandemic. In 2021, during the COVID-19 pandemic, the first three provinces with the highest number of tourists were Kanchanaburi, Chiang Mai, and Nakhon Ratchasima, with 4,112,075, 3,703,008, and 3,454,694 Thai visitors, respectively. However, of these three provinces, Nakhon Ratchasima was found to experience the largest decrease in Thai visitors of 38.72%, followed by Chiang Mai (31.97%) and Kanchanaburi (31.35%), respectively (Ministry of Tourism and Sports, 2022). Since Nakhon Ratchasima Province had a total of 29,985 infected cases of COVID-19 during the third wave of the outbreak (April to October 2021), it was classified in the red area by Thailand's government

according to the information available as of 31 October 2021 (Office of Nakhon Ratchasima Province, 2021), and the province has not recovered. Moreover COVID-19 pandemic has affected to the level of Gross Provincial Product (GPP) decreased in 2019 and 2020 at the level of 300,133 and 294,604 million baht, respectively, or a decrease of 1.84%. Gross Provincial Product per capita (GPP per capita) also decreased in 2019 and 2020 at the level of 119,530 and 117,521 baht, respectively, or 1.68%, according to the latest information (Office of the Economics and Social Development Council, 2021). Consequently, the COVID-19 pandemic has had a significant negative effect on Nakhon Ratchasima Province. If this situation is allowed to continue in Nakhon Ratchasima Province, its tourism industry and the overall economy will be severely impacted.

Therefore, it is necessary to study the factors influencing the decision of Thai visitors to travel to Nakhon Ratchasima Province, Thailand, amid the COVID-19 pandemic. Identifying the factors having an impact on the tourism industry of Nakhon Ratchasima Province and those influencing the decision of Thai visitors to travel back to the province amid the COVID-19 pandemic would be an interesting topic of study, and the results could be used as a guideline for determining the policy and strategy for the tourism industry in the province in both the short and long term. Stimulating the tourism industry in Nakhon Ratchasima Province would enable it to fully recover from the effects of COVID-19, bringing the same number of Thai visitors back to the province as before the pandemic. The tourism industry and economy of Nakhon Ratchasima Province will then become strong again in the future.

Objective

To study and analyse the factors influencing the decision of Thai visitors to travel to Nakhon Ratchasima Province, Thailand, amid the COVID-19 pandemic.

Conceptual framework

According to the literature review, Chaowalitthamrong, Y. (2010); Boonmasungsong et al. (2012); Nootayasakul & Pasunon (2016); Maneesaeng & Wall (2017); Koedmeemul (2018); Jariyachamsit (2019); Chuaikrut et al. (2020); and Kulsantiwong (2021), use guidelines to design the conceptual framework and questionnaires to find a correlation between the predictive variables and dependent variable. The predictive variables are based on personal factors and marketing

mix factors (4Ps). The dependent variable is the decision of Thai visitors to travel to Nakhon Ratchasima Province, Thailand, amid the COVID-19 pandemic, as shown in Figure 4.

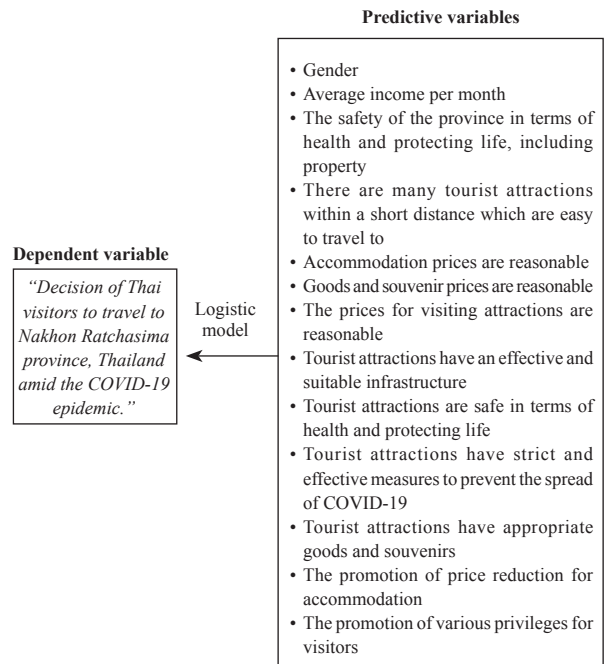


Figure 4: Conceptual framework

Research methodology

1. Data collection

This study used a questionnaire to collect primary data from the sample of Thai visitors deciding to travel to Nakhon Ratchasima Province, Thailand, amid the COVID-19 epidemic between March and December 2021 (first to fourth quarters of 2021) using nonprobability sampling. The questionnaire is divided into two parts: 1) personal factors and 2) marketing mix factors (4Ps).

2. Population and Samples

In this study, the exact size of the population is unknown, but the researcher is aware that many people live in the area. Therefore, the sample size is calculated from the population of Thai visitors travelling to Nakhon Ratchasima Province, Thailand, by setting the reliability level at 95%. Equation 1 is used to calculate the sample size when the exact population size is unknown, as proposed by Srisa-ard, B. (1995).

$$n = \frac{P(1-P).z^2}{e^2} \quad (1)$$

Where: n is the sample size, e is the discrepancy level of the sample size = 0.05, and z is the reliability or significance level. If the reliability level is 95% or the significance level 0.05 according to the values obtained from the normal distribution table is equal to 1.96, the substitution and calculation can be written as Equation 2 below.

$$n = \frac{0.5(1-0.5).1.96^2}{0.05^2} = 384.16 \approx 400 \quad (2)$$

According to the calculation, a sample size of 384.16 is appropriate for this study to avoid errors and incomplete questionnaires. Therefore, the primary data was collected from a sample size of 400.

3. Research instrument

The data obtained from the sample size is analysed using the following statistical values: 1) frequency, 2) percentage, 3) standard deviation, 4) mean, and 5) a logistic or binary logistic regression model. The logistic model is processed as follows.

3.1 Logistic model

The logistic model is used to analyse and predict the independent variables or data on the predictive variable from the questionnaire. Where the dependent variable (y) has values of 0 and 1, representing the correlation between the dependent variable and predictive variables, it has a characteristic curved shape resembling the letter "s". Therefore, the form of the logistic model can be written as Equation 3 (Charoensit, 2017).

(3)

When: $P_{(y)}$ is the probability that events are of interest. $Q_{(y)}$ is the probability that no events are of interest. Where: $P_{(y)} \geq 0.5$ refers to events of interest and $P_{(y)} < 0.5$ refers to events of no interest.

If the correlation between the dependent variable and predictive variables is not a straight line or linear, it must be adjusted to be in linear form. In the form of odds or odds ratio, it can be written as Equation 4.

$$\text{odds} = \frac{P(y)}{P(\bar{y})} \quad (4)$$

Odds represent the event of interest, namely how many times it is not an event of interest. Therefore, in the logistic model, it is written in the form of log odds as Equation 5.

$$\log\left(\frac{P(y)}{P(\bar{y})}\right) = b_0 + b_1x_1 + \dots + b_px_p \quad (5)$$

3.2 Statistical value for choosing a suitable logistic model

The choice of a suitable model is determined by the -2log likelihood (-2LL), with a low value indicating that the logistic model equation is appropriate. To test the suitability of the logistic model equation, the statistical value of χ^2 should be used where $df = p$. The hypothesis can then be tested as follows (Kaiyawan, 2012):

$$H_0: \beta_1 = \beta_2 = \dots \beta_p = 0$$

$$H_1: \beta_i \neq 0 \text{ at least 1 value; } (i = 1, 2, \dots, p)$$

Where: log likelihood

$$= \sum_{i=1}^N [y_i \ln(\hat{y}_i + (1 - y_i)) \ln(1 - \hat{y}_i)] \text{ and } \chi^2 = 2[LL(\beta) - LL(0)]$$

After testing, if χ^2 is significant or H_1 accepted, the group of predictive variables can jointly predict the event of interest ($y = 1$) at a confidence level of $(1-\alpha) \times 100\%$.

To assess the suitability of the logistic model, the method proposed by Hosmer and Lemeshow (*H&M*) was also considered. The hypothesis is tested using Equation 6.

$$\chi^2 = \frac{(O_i - E_i)^2}{E_i} \quad (6)$$

The two hypotheses are tested H_0 : the logistic model is suitable and H_1 : the logistic model is not suitable. Where: χ^2 is not significant or H_0 is accepted, the logistic model is considered to be suitable.

3.3 Coefficient test for the logistic model

The coefficient test for the logistic model determines whether the predictive variables affect the dependent variable by considering the Wald statistic. The hypothesis is tested in the following equation (Kaiyawan, 2012).

$$\text{Wald } (W) = \left[\frac{b_i}{SE(b_i)} \right]^2 \quad (7)$$

Where: $H_0: \beta_i = 0; i = 1, 2, \dots, p$ (the predictive variable does not affect the odds ratio) and $H_1: \beta_i \neq 0$ at least 1 value; $i = 1, 2, \dots, p$ (the predictive variable does affect the odds ratio)

4. Data analysis

The SPSS software was used in this study to

conduct qualitative statistical analysis and an onsite questionnaire distributed to 385 participants based on logistic regression involving three types of variables: interval, dichotomous, and polytomous.

Results

The data obtained from the questionnaire distributed to 400 Thai visitors was analysed to identify a suitable logistic model and select suitable predictive variables. According to the analysis, 13 suitable predictive variables influenced the decision of Thai visitors to travel to Nakhon Ratchasima Province, Thailand, amid the COVID-19 epidemic. The suitability test for the logistic model revealed that the logistic model equation of $-2LL$ was equal to 321.684, Rcs^2 equal to 0.388 (38.80%), and Rn^2 equal to 0.534 (53.40%). The H&M test indicated that χ^2 was equal to 11.280 and the significance level equal to 0.186. W was equal to 34.872, with the percentage collected equal to 87.30%. It can therefore be stated that the predictive variables in the logistic model equation were suitable. Details of the coefficient test for predictive variables and statistical values used in the logistic model are shown in Table 2.

Province, Thailand, amid the COVID-19 pandemic, can be constructed as in the following equation:

$$\text{Logistic}(y) = (-0.742) + (-1.015)Gen + (0.606)Inc + (1.062)Saf + (0.926)Dis + (11.443)Acc + (-4.577)Gsp + (-2.219)Pva + (-11.196)Tat + (5.270)Hlp + (1.328)Cov + (0.748)Ags + (-1.359)Rap + (-1.124)Vpt \tag{8}$$

Discussion and Conclusions

According to Table 2 and Equation 8, the factors influencing the decision of Thai visitors to travel to Nakhon Ratchasima Province, Thailand, amid the COVID-19 pandemic are statistically significant at the 0.01 level when predicting the probability by considering the $Exp(\beta)$ or Odds ratio. The influential factors can be divided into 1) personal and 2) marketing mix (4Ps).

Personal factors consisted of 1) Gender (*Gen*) and 2) Average income per month (*Inc*), with both having the statistical significance level of 0.01. Most of the Thai visitors were female (54.75%) and have a characteristic negative relationship with the dependent variable—the coefficient being equal to -1.015. When the gender (*Gen*) changes by 1 unit, it decreases the probability of Thai visitors deciding to travel to Nakhon Ratchasima

Table 2: Coefficient test of the predictive variables and statistical values used in the logistic model.

Predictive variables	<i>B</i>	<i>S.E.</i>	<i>W</i>	<i>P-value</i>	<i>Exp(β)</i>
1) Gender (<i>Gen</i>)	-1.015	0.301	11.362	0.001	0.362
2) Average income per month (<i>Inc</i>)	0.606	0.219	7.627	0.006	1.833
3) The safety of the province in terms of health and protecting life, including property. (<i>Saf</i>)	1.062	0.311	11.699	0.001	2.893
4) There are many tourist attractions within a short distance which are easy to travel to. (<i>Dis</i>)	0.926	0.195	22.505	0.000	2.524
5) Accommodation prices are reasonable. (<i>Acc</i>)	11.443	3.423	11.175	0.001	93,226.633
6) Goods and souvenir prices are reasonable. (<i>Gsp</i>)	-4.577	1.723	7.056	0.008	0.010
7) The prices for visiting attractions are reasonable. (<i>Pva</i>)	-2.219	0.414	28.769	0.000	0.109
8) Tourist attractions have an effective and suitable infrastructure. (<i>Tat</i>)	-11.196	3.283	11.634	0.001	0.000
9) Tourist attractions are safe in terms of health and protecting life, including property. (<i>Hlp</i>)	5.270	1.597	10.889	0.001	194.357
10) Tourist attractions have strict and effective measures to prevent the spread of COVID-19. (<i>Cov</i>)	1.328	0.301	19.401	0.000	3.772
11) Tourist attractions have appropriate goods and souvenirs. (<i>Ags</i>)	0.748	0.288	6.733	0.009	2.114
12) The promotion of price reduction for accommodation (<i>Rap</i>)	-1.359	0.343	15.735	0.000	0.257
13) The promotion of various privileges for visitors (<i>Vpt</i>)	-1.124	0.386	8.473	0.004	0.325

Constant = -0.742

-2log likelihood ($-2LL$) = 321.684

Cox & Snell R^2 (Rcs^2) = 0.388

Nagelkerke R^2 (Rn^2) = 0.534

Hosmer & Lemeshow ($L\&M$) = 11.280, Significant = 0.186

Wald (W) = 34.872

Percentage collect = 87.30%

Source: Calculations

Note: β is beta, *S.E.* is standard error, *W* is Wald statistic and $Exp(\beta)$ is the expected beta or odds ratio.

Table 2 shows that the logistic model equation for predicting and analysing the factors influencing the decision of Thai visitors to travel to Nakhon Ratchasima

Province 0.362-fold. Average income per month (*Inc*) has a positive relationship with the dependent variable, the coefficient being equal to 0.606. Most of the Thai visitors had an *Inc* ranging from 15,000–45,000 baht (57.50%), which affects their decision to travel to Nakhon Ratchasima. When the *Inc* changes by 1 unit, it increases the probability of Thai visitors deciding to travel to Nakhon Ratchasima 1.833-fold.

Marketing mix (4Ps) consists of 11 factors, all of which are statistically significant at the 0.01 level. Four factors are statistically significant at the level of 0.000, namely: 4) There are many tourist attractions within a short distance which are easy to travel to (*Dis*); 7) The prices for visiting attractions are reasonable (*Pva*); 10) Tourist attractions have strict and effective measures to prevent the spread of COVID-19. (*Cov*); and 12) The promotion of price reduction for accommodation (*Rap*). The factors *Dis* and *Cov* have positive relationships with the dependent variable, the coefficients being equal to 0.926 and 1.328, respectively. When the *Dis* and *Cov* factors change by 1 unit, it increases the probability of Thai visitors deciding to travel to Nakhon Ratchasima by 2.524 and 3.772-fold, respectively. In contrast, *Pva* and *Rap* have negative relationships with the dependent variable, the coefficients being equal to -2.219 and -1.359, respectively. When *Pva* and *Rap* change by 1 unit, it decreases the probability of Thai visitors deciding to travel to Nakhon Ratchasima by 0.109 and 0.257-fold, respectively.

The next four factors exhibiting statistical significance at the level of 0.001 are: 3) The safety of the province in terms of health and protecting life, including property (*Saf*); 5) Accommodation prices are reasonable (*Acc*); 8) Tourist attractions have an effective and suitable infrastructure (*Tat*); and 9) Tourist attractions are safe in terms of health and protecting life, including property (*Hlp*). The factors *Saf*, *Acc*, and *Hlp* have characteristic positive relationships with the dependent variable, with the coefficients being equal to 1.062, 11.443, and 5.270, respectively. When *Saf*, *Acc*, and *Hlp* change by 1 unit, it increases the probability of Thai visitors visiting Nakhon Ratchasima by 2.893, 93,226.633, and 194.357-fold, respectively. A change in *Tat* of 1 unit has no effect on the probability of Thai visitors deciding to visit Ratchasima due to the odds ratio being constant.

Three factors have a statistical significance level of 0.004, 0.008, and 0.009, respectively, namely: 13) The promotion of various privileges for visitors (*Vpt*), 6) Goods and souvenir prices are reasonable (*Gsp*), and

11) Tourist attractions have appropriate goods and souvenirs (*Ags*). The factors *Vpt* and *Gsp* have characteristic negative relationships with the dependent variable, with the coefficients being equal to -4.577 and -1.124, respectively. When *Vpt* and *Gsp* change by 1 unit, it decreases the probability of Thai visitors deciding to travel to Nakhon Ratchasima Province by 0.010 and 0.325-fold, respectively. Whereas 11) Tourist attractions have appropriate goods and souvenirs (*Ags*) has a characteristic positive relationship with the dependent variable—the coefficient being equal to 0.748. When *Ags* changes by 1 unit, it increases the probability of Thai visitors deciding to travel to Nakhon Ratchasima Province by 0.010-fold.

When predicting the probability of Thai visitors deciding to travel to Nakhon Ratchasima Province, Thailand, amid the COVID-19 pandemic, two conditions are considered: 1) $P_{(\text{Travel})} \geq 0.5$ (Thai visitors decide to travel to Nakhon Ratchasima Province, Thailand); and 2) $P_{(\text{no Travel})} < 0.5$ (Thai visitors decide not to travel to Nakhon Ratchasima Province, Thailand). The findings of the study reveal that the probability of Thai visitors visiting Nakhon Ratchasima Province is equal to 0.873 or 87.30%. It can therefore be concluded that Thai visitors are likely to travel to Nakhon Ratchasima Province, Thailand. However, the tourist industry in Nakhon Ratchasima Province needs preparation guidelines to cope with the COVID-19 pandemic and adapt to the “new normal”.

It can be concluded that the COVID-19 pandemic has affected the tourism industry in Nakhon Ratchasima Province, with airlines, hotel chains, tour companies, and tourism-related businesses being severely impacted. Therefore, tourism operators in Nakhon Ratchasima need guidelines to help them prepare and adapt to the new normal to support tourism following the COVID-19 outbreak. The following suggestions are proposed:

1) Personal factors consisting of gender (*Gen*) and average income per month (*Inc*). Businesses and entrepreneurs in the tourism industry of Nakhon Ratchasima Province should set a diversity policy and strategy that takes into account the gender of Thai visitors and responds to the needs of each appropriately. The price of products and services provided by businesses and entrepreneurs in the tourism industry of Nakhon Ratchasima Province should comply with the average income per month of Thai visitors. The price of various products and services should be adjusted to ensure they align with the average income per month of Thai visitors

to encourage them to pay more to travel to Nakhon Ratchasima Province.

2) Marketing mix (4Ps) factors. Businesses and entrepreneurs in the tourism industry of Nakhon Ratchasima Province should be able to ensure the safety of the province in terms of health and protecting life, including property (*Saf*), to facilitate stress-free travel to the local attractions since there are many tourist attractions within a short distance which are easy to travel to (*Dis*). By ensuring accommodation prices are reasonable (*Acc*) as well as goods and souvenir prices are reasonable (*Gsp*), including the prices for visiting attractions (*Pva*), the purchasing power of Thai visitors will increase, aligning with their average income per month. When tourist attractions have an effective and suitable infrastructure (*Tat*), they should be able to effectively support tourism activities, including the basic needs of Thai visitor. Moreover, businesses and entrepreneurs in both the public and private sectors involved in the safety of Thai visitors should make sure tourist attractions are safe in terms of health and protecting life, including property (*Hlp*). It is also important for all tourism-related sectors in Nakhon Ratchasima Province to take care of hygiene to ensure the tourist attractions have strict and effective measures to prevent the spread of COVID-19 (*Cov*). The promotion of tourism should focus on ensuring attractions have appropriate goods and souvenirs (*Ags*). Moreover, businesses and entrepreneurs involved in hotels, guesthouses, or resorts should implement the promotion of price reduction for accommodation (*Rap*). Ultimately, the promotion of various privileges for visitors (*Vpt*) should be designed to attract the attention of Thai visitors, making it an easy decision to travel to Nakhon Ratchasima Province and stimulate its tourism industry towards recovery.

Suggestions

The travelling behaviour of Thai visitors is outside the scope of this study, and the analysis does not therefore cover the significance of predictive variables in encouraging Thai visitors to travel to Nakhon Ratchasima Province amid the COVID-19 pandemic. The addition of these factors may make the study results more accurate and bring new interesting, comprehensive information. It would also be beneficial for entrepreneurs in the tourism industry in setting planning strategies and managing their businesses in the future. Furthermore, it would be interesting to study ways to enhance the

understanding of visitors on the behaviour of tourists under the new normal concept and the satisfaction of Thai visitors towards the use of tourist attractions in new normal conditions.

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References

- Boonmasungsong, D. T., Pornpakdee, S., & Nunnad, P. (2012). *Factors influencing the willingness to retouring, Amphoe Wangnamkheo, Nakhonratchasima Province*. (Research). Rajamangala University of Technology Isan, Nakhon Ratchasima.
- Chuaikrut, C., Phusanam, A., & Dejmanee, O. (2020). Factors affect to tourist behavior of Thai teenagers after invasion of COVID-19. *NEU Academic and Research Journal*. 10(3), 187-201.
- Charoensit, O. (2017). Binary logistic regression analysis for social science research. *SAU Journal of Social Sciences & Humanities*. 1(2), 1-9.
- Chaowalithamrong, Y. (2010). Behaviour and factors affecting Thai tourists' decision on travelling to Ratchaphra Dam Amphoe Ban Takhun Changwat Surat Thani. (Master independent study). Kasetsart University, Bangkok.
- Jariyachamsit, S. (2019). Factors influencing Asian tourists' decision in selecting Bangkok as their travel destination. *The 2019 International Academic Research Conference in Copenhagen*, 81-87.
- Kaiyawan, Y. (2012). Principle and using logistic regression analysis for research. *Rajamangala University of Technology Srivijaya Research Journal*. 4(1), 1-12.
- Koedmeemul, M. (2018). Factors affecting Thai tourists traveling to the accredited tourist attraction: a case study of Thung-hong Mauhom fabric learning center, Phrae Province. *NIDA Development Journal*, 58(1), 103-122.
- Kulsantiwong, C. (2021). Factors that influence travel decision-making of Thai generation Y tourists after COVID-19 pandemic. (Master independent study). Bangkok University, Bangkok.

- Maneesaeng, M. & Wall, W. P. (2017). Factors influencing tourist decision-making towards traveling to Luang Prabang. *Dusit Thani College Journal*, 11(3), 82-95.
- Ministry of Tourism and Sports. (2022). *Domestic tourism statistics*. Retrieved from https://mots.go.th/more_news_new.php?cid=594
- Ministry of Public Health. (2021). Trend of COVID-19 pandemic in Thailand between January and December 2021. Retrieved from <https://ddc.moph.go.th/covid19-dashboard>
- Nootayasakul, C. & Pasunon, P. (2016). Factors of decision marking of Thai tourists' traveling to Lampraya market Nakhon Pathom. *Dusit Thani College Journal*, 10(1), 132-150.
- Office of Nakhon Ratchasima Province. (2021). *The information of Nakhon Ratchasima Province during COVID-19 pandemic*. (Mimeographed).
- Office of the Council of State. (2021). *Regulation issued under section 9 of the emergency decree on public administration in emergency situations B.E. 2548 (2005)*. Retrieved from <https://www.krisdika.go.th/Regulation-Issued>
- Srisa-ard, B. (1995). *Introduction to research*. 6th ed. Bangkok: Suweeriyasarn Co., Ltd.
- Thai Quarantine Monitor (2021). *Seven Provinces are in the dark red area and 38 in the red area for COVID-19 pandemic control in Thailand*. Retrieved from <https://thaiqm.dopa.go.th>
- Wannathanom, C. (2009). *Planning and Tour Management*. Bangkok: Samlada.
- Office of the Economics and Social Development Council. (2021). *Gross regional and provincial product chain volume measures 2020 edition*. (Excel file). Office of the Prime Minister, Bangkok.



Evaluation on the Effect of Tourism Image Communication under the Background of New Media: A Case Study of Guangxi

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Abstract

The emergence of new media has played an important role in promoting the rapid development of tourism. Based on the rapid development, promotion and application of new media, this paper takes the communication effect of regional tourism image as the research content and identifies various factors that play a key role in the image. Taking "audience" as the analysis starting point, combined with the theoretical knowledge of communication, this paper systematically analyzes the process of tourism image communication under the background of new media, revealing the internal relationship between "audience effect". The author discusses the process of image communication, successively expounds the four elements of tourism image communication process under new media, identifies the factors affecting the communication effect, and preliminarily completes the construction goal of relevant factor analysis model. The research was a quantitative analysis using a questionnaire, Spearman correlation coefficient was used to measure the correlation of variables. The conclusions are as follows: there are many influencing factors on the communication effect of tourism image in Guangxi, such as the information expression content of the object, communication channels, user feedback and innovation recognition level. In accordance with the principles of pertinence, effectiveness, and rationality, put forward corresponding improvement strategies in order to improve and promote the publicity of Guangxi tourism image.

Introduction

In the era of new media, the ways and forms of tourism image communication have emerged diversely. Based on the functions and characteristics of the new media era, it has brought great impact on the communication process and has an effect towards the

traditional tourism image. In this context, the research issues are how to change the development ideas and strategies of tourism image communication in order to improve and promote the publicity of Guangxi tourism image. Therefore, it is necessary to carry out in-depth discussion on the issues, which can further enrich the

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research of the theoretical system. The study issues can be summarized as follows: What are the factors that have the key impact on the communication effect? How to ensure the optimization of communication effect. Because at the present stage, the academic circle domestically lacks the research breadth and depth of travel image communication, and it has not formed a complete and solid theoretical system. The research of this paper is based on communication as the breakthrough point, combined with three classical communication theories to launch a hierarchical analysis. The purpose of this paper is to provide the basis and guidance for constructing evaluation model of tourism image communication effect, evaluating communication effect and enriching theoretical system under the background of new media.

This paper identifies and analyze the major factors that affect tourism image communication, and take it as the main basis of the model construction, so as to provide auxiliary support for the implementers of tourism image communication to formulate and improve communication strategies. At the same time, the author uses the method of case analysis to determine the object of the case.

Under the background of the new media era, the author explores the current situation and existing disadvantages of the regional tourism image communication process, and puts forward corresponding improvement suggestions, as a method to contribute to the positive improvement of image branding of domestic tourism enterprises and the promotion of Guangxi tourism image around the world.

Objectives

1. The purpose of this paper is to explore the four elements of tourism image communication process and determine the process form and evolution direction of tourism image communication under the guidance of relevant theories.
2. On the basis of previous studies, complete the construction of influencing factor analysis model.
3. Combined with case analysis, put forward corresponding improvement strategies to enhance the communication and provide guidance for the future theoretical development.

Conceptual Framework

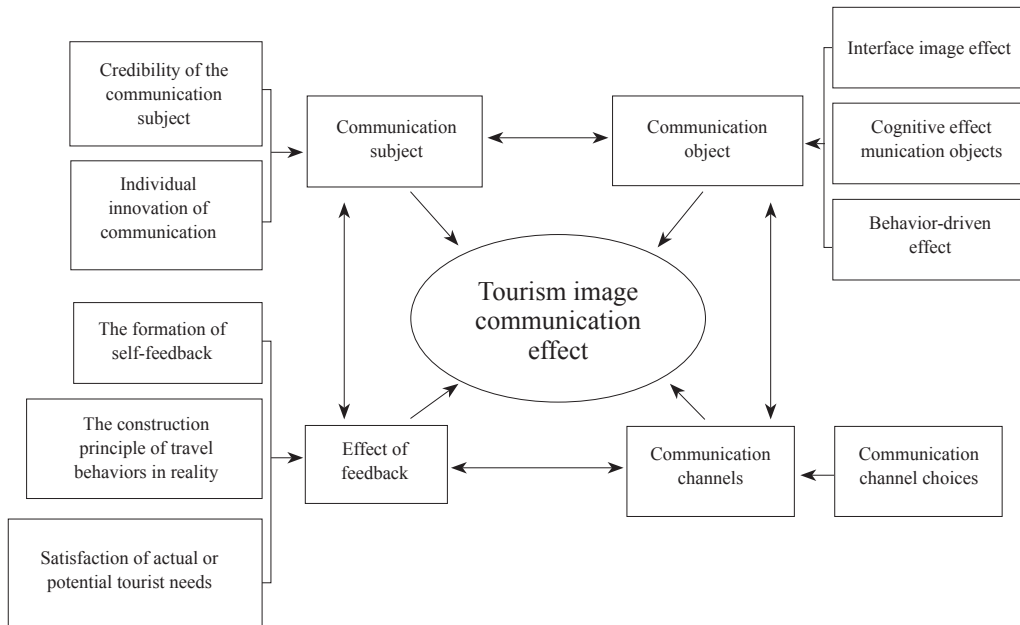


Figure 1 Conceptual Framework

Research Methodology

1. Population and Samples

Since the questionnaire is based on the info background of tourists in Nanning area, it mainly adopts the online surveying questionnaire form, and randomly distributes the questionnaires to the potential tourists in the Nanning area via the online travel agencies such as online Ctrip and Tuniu websites. The online survey started on April 10th of 2021, it was planned to release 400 questionnaires to potential tourists through the Internet and a total of 361 electronic questionnaires were received online before June 10, 2021. A total of 314 questionnaires were confirmed to be valid, with an effective rate of 86.9%, after removing the questionnaires with a filling rate lower than 85% and those with similar questionnaire answers.

2. Research Instrument

This research used methods such as mean value calculation, standard deviation and the frequency and proportion of data to estimate and analyze the factors that affect the tourism image communication in Guangxi Autonomous Region. It adopts the online surveying questionnaire form and a total of 361 online questionnaires were received online. In order to test the validity of the questionnaire, it was necessary to conduct a pretest before actual use. In this study, undeclared pretests were used, and the respondents were not told that it was a pretest. This type of prediction test allows the selection of analysis to be examined and the standardization of investigation. Narins. P (1999) points out that it is difficult to say how many participants are involved in each prediction. A rule of thumb is a sample of 25 to 75 for large-scale studies. It is mentioned that in the prediction test, the sample size should be large enough, but the confidence of a series of opinions should be given to the sample. A reasonable and sufficient sample size is a typical target audience of 50 participants.

Based on the references in this study, a pretest process for 50 participants was obtained. And the pretest process went well so as to obtain the valid results before the distribution of online questionnaires.

In this study, related online questionnaires were prepared and distributed in a certain period via some online tourist websites in order to guarantee the validity of survey. And confirmatory factor analysis was used to test the reliability and validity of the online survey. In confirmatory factor analysis, Cronbach's alpha was used to measure the reliability of two or more structural indicators. In addition, in confirmatory factor analysis,

in order to test the validity of the measurement model, the number of indicators was helpful for us. For example, in confirmatory factor analysis, the latent variable of factor loading should be greater than 0.7. So, conducting the confirmatory factor analysis helped the understanding of the data analysis.

3. Collection of Data

The data collection included the following activities:

Pre mining activities: The target data was obtained for preliminary use and the analysis method was determined.

Collection: The data were collected according to the sampling method. This study used online questionnaires to obtain and collect the data.

4. Data Analysis

(1) Frequency Analysis

In order to study the communication effect of tourism image in Guangxi Autonomous Region under the back ground of new media, this research selected to obtain data via questionnaire survey, and describes the frequency of the options in the questionnaire by frequency analysis, and analyzes which options the interviewees choose more frequently.

(2) Principal Component Analysis

In this study, in order to comprehensively analyze the impact of all indicators on the tourism image of Guangxi Autonomous Region, all variables were obtained, but not every variable can reflect the main information of the research subject in a better degree. Therefore, it is necessary to extract the main components, delete the non-main indicators, and simplify the research process.

(3) Correlation Analysis

Correlation analysis is a statistical analysis method to study the correlation between two or more random = variables in the same position. It is a process to describe the closeness of the objective things and express them with appropriate statistical indicators.

The analyzing methods were conducted in this research in order to obtain and analyze the data in a more standardized way. The accurate and valid data has laid a solid foundation for the paper research and findings as well as provide guidance for future related theoretical study.

Results

Related data analysis methods are shown in the following tables:

1. Questionnaire Design and Distribution

This questionnaire was based on the understanding of new media background, it adopted the online survey methods, and randomly distributed the questionnaire through online tourist agencies website and other social media platforms the online survey started on April 10th of 2021. The release of 400 questionnaires to potential tourists through the Internet and a total of 361 electronic questionnaires were received online before June 10, 2021. A total of 314 questionnaires were confirmed to be valid, with an effective rate of 86.9%, after removing the questionnaires with a filling rate lower than 85% and those with similar questionnaire answers.

2. Reliability Analysis of Questionnaire

In order to ensure the rationality and science of the questionnaire, this study mainly used Cronbach Alpha reliability (Q-coefficient) as the measurement reliability standard to test the reliability of the questionnaire data. The results are shown in Table 2 below:

Table 1 Statistical Magnitude of Variable Reliability Final Test

Variable	Cronbach's Alpha	Cronbach's Alpha Based on Standard Items	Number of Items
Holistic Scale	.920	.891	73
Image Communication Subject	.686	.623	20
Image Communication Object	.973	.974	18
Image Communication Channel	.567	.523	16
Feedback of Image Communication Effect.	.752	.607	11

It can be seen from the above table that the minimum a-coefficient of each variable is 0.567, higher than 0.5, and the a-coefficient of the total scale is 0.920. This shows that the reliability of the questionnaire has reached the standard, and the variables in the scale are relatively coordinated. Therefore, this scale can be used as an effective scale for further research

3. Descriptive Statistical Analysis of Variables

This paper mainly estimated and described the factors that affect the tourism image communication of Guangxi by calculating the mean value, standard deviation, frequency, and proportion of data.

Table 2 Statistical Magnitude of Communication Subject Reliability Description

	N	Minimum Value	Maximum Value	Mean Value	Standard Deviation
9 what do you think of the credibility of the following types of tourism image communicators? **government department	314	-2	5	3.02	1.451
9 what do you think of the credibility of the following types of tourism image communicator? Tourism enterprises or other enterprise.	314	-2	5	2.64	1.242
9 what do you think of the credibility of the following types of tourism image communicator? Tourism association or relevant social organization	314	-2	5	2.85	1.315
9 what do you think of the credibility of the following types of tourism image communicators? media	314	-2	5	2.77	1.262
9 what do you think of the credibility of the following types of tourism image communicators? (relatives and friends Valid N list)	314	-2	5	3.71	1.402

It can be seen from Table 2 that only the average credibility of government departments, relatives and friends reaches above 3. And the average credibility of interpersonal communication between relatives and friends reaches 3.72, which is far greater than the credibility of government departments. This shows that interpersonal communication in the process of tourism image communication is more persuasive than other communication in terms of emotion, so it has a higher degree of trust.

However, the average value of tourism enterprises, relevant social organizations and media is about 2.7, which does not reach the average level of 3. This shows that the credibility of tourism enterprise, relevant social organizations and media has not been recognized by most people.

In addition, in terms of standard deviation, these problems have reached more than 1, indicating that the respondents had different views on the credibility of these tourism subjects.

4. Communication Object Analysis

Table 3 Statistical Magnitude of Guangxi Tourism Image Description

Index	N	Minimum Value	Maximum Value	Mean Value	Standard Deviation
Social and cultural environment (high tourism safety)	314	-2	5	2.77	1.465
Social and cultural environment (hospitable residents)	314	-2	5	3.03	1.495
Social and cultural environment (good social security)	314	-2	5	2.66	1.522
Social and cultural environment (clean and tidy urban environment)	314	-2	5	2.90	1.536
Social and cultural environment (good social reputation)	314	-2	5	2.88	1.51
Tourism facilities and services (complete tourism catering facilities)	314	-2	5	2.74	1.555
Tourism facilities and services (excellent accommodation conditions)	314	-2	5	2.74	1.494
Tourism facilities and services (convenient transformation)	314	-2	5	2.74	1.476
Tourism facilities and services (rich and divers tourism activities)	314	-2	5	2.96	1.534
Tourist facilities and services (complete tourism shopping facilities)	314	-2	5	2.83	1.570
Tourism facilities and services (thoughtful tourism services)	314	-2	5	2.73	1.545
Tourism facilities and services (reasonable tourism consumption price)	314	-2	5	2.54	1.674
Tourism resources and environment (abundant tourist attractions)	314	-2	5	3.14	1.693
Tourism resources and environment (beautiful natural scenery)	314	-2	5	3.34	1.797
Tourism resources and environment (rich historical culture)	314	-2	5	3.06	1.702
Tourism resources and environment (distinctive ethnic characteristics)	314	-2	5	3.34	1.743
Tourism resources and environment (special diet)	314	-2	5	3.21	1.684
Tourism resources and environment (suitable climate)	314	-2	5	3.13	1.798
Climate Valid N list)	314				

As shown in Table 3, only the mean value of the six questions in tourism resources and environment and the residents' hospitality in social and cultural environment is above 3, and the mean value of other questions is at about 2.7. The results infer that the

resources and environment of Guangxi and the hospitality of the residents were recognized by the respondents, while the tourism facilities and services of Guangxi and the tourism safety, public security, urban environment, reputation and other cultural aspects were not recognized. In addition, the standard deviation of all the questions in the description of the communication object was more than 1, which indicates that the respondents' views on the description of cultural environment, facilities and services, resources and environment in Guangxi were still quite different.

5. Effect Feedback Analysis

Table 4 Statistical Magnitude of Tourism Behavior Descriptio

Index	N	Minimum Value	Maximum Value	Mean Value	Standard Deviation
A Yes. (how much does the tourism image of Guangxi affect you? Willingness to travel)	314	-2	5	0.42	2.671
A Yes. (how much does the tourism image of Guangxi affect you? Change the original travel plan)	314	-2	5	0.091	2.462
A Yes. (how much does the tourism image of Guangxi affect you? Extension of stay)	314	-2	5	0.17	2.552
A Yes. (how much does the tourism image of Guangxi affect you? Visit Guangxi again)	314	-2	5	0.12	2.57
A Yes. (how much does the tourism image of Guangxi affect you? Recommend to relatives and friends)	314	-2	5	0.23	2.658
B No. (how much does the tourism image of Guangxi affect you? Change the original travel plan)	314	-2	5	2.11	1.091
Valid N (list)	314				

Table 4 shows that the tourism image of Guangxi had little influence on the behavior of the users who had been to Guangxi. For the users who had not been to Guangxi, the impact of tourism image on their behavior is general, and the degree of dispersion was higher than that of the users who had been to Guangxi, which indicates that the promotion of tourism image under the current new media has a greater impact on the behavior of the real or potential tourists who have not been to Guangxi.

Questions 18-21 in the questionnaire are not only the independent variables assumed in this research, but also the dependent variables of the user adoption of tourism image communication effect in Guangxi. Among

them, questions 18 and 19 belong to the existing behaviors of the participants of tourism image, while 20 (continue to pay attention to the tourism image communication of Guangxi) and 21 (good tourism image publicity will be recommended to the surrounding people) are the follow-up behaviors of the tourism image recipients. At the same time, this study also made a descriptive statistical analysis on the effect of tourism image communication in Guangxi. Through the analysis of the questionnaire, it was found that in terms of the satisfaction degree of tourism image information of Guangxi at 45.22% were satisfied, and 3.18% very satisfied, while 24.84% were indifferent and 19.11% dissatisfied. This shows that the tourism image publicity of Guangxi still needs to step up and be deeply rooted in the hearts of the people. In terms of whether the tourism image communication pays attention to a wider range of people, 13.69% agreed totally, 9.23% disagreed strongly, and 28.03% agreed. These results infer that the current tourism image publicity was still relatively narrow, and there was still greater potential for tourism image publicity under the new media. The relevant tables are Table 5 and 6 and appear below.

Table 5 Satisfaction of Guangxi Tourism Image Information

Options	Subtotal	Proportion
A very satisfied	10	3.18%
B satisfied	142	45.22%
C indifferent	78	24.84%
D dissatisfied	60	19.11%
E very dissatisfied	24	7.65%
Number of Valid Answers	314	

Table 6 Tourism Image Communication Coverage

Options	Subtotal	Proportion
A agree totally	43	13.69%
B agree partially	76	24.20%
C agree	88	28.03%
D disagree	78	24.84%
E strongly disagree	29	9.23%

Table 7 Total Variance of the Interpretation

Ingredients	Initial Eigenvalue Total			Extraction Sums of Squared Loadings		
	Total	Variance%	Accumulation %	Total	Variance%	Accumulation %
1	2.699	53.976	53.976	2.699	53.976	53.975
2	0.847	16.91	70.886			
3	0.648	12.987	83.873			
4	0.452	9.02	92.893			
5	0.366	7.107	100			

6. Case Hypothesis Test

Table 7 shows that the eigenvalue of the former factor is greater than 1, and the accumulation accounts for 53.976%. Therefore, a factor is extracted as the main factor of the variable.

7. The extraction method was as follows: principal component analysis.

Factor analysis of the individual innovation of the communication subject. As shown in the following Table 8, the commonality of the extracted variables is greater than 0.4, indicating that most of the information in the variables can be extracted by factors, and factor analysis is effective.

Table 8

Index	Initial	Extraction
10. What important factors do you think will affect your reception of tourism image information?	1.0000	0.542
10. What important factors do you think will affect your reception of tourism image information?	1.0000	0.602
10. What important factors do you think will affect your reception of tourism image information?	1.0000	0.504
10. What important factors do you think will affect your reception of tourism image information?	1.0000	0.607
10. What important factors do you think will affect your reception of tourism image information?	1.0000	0.419
10. What important factors do you think will affect your reception of tourism image information?	1.0000	0.522
10. What important factors do you think will affect your reception of tourism image information?	1.0000	0.502

8. Factor Analysis of Communication Channel

The factors analysis of the communication channel is shown in Table 9 below. The commonality of the most frequently used media in the extracted variables is less than 0.3, indicating that most of the information in the variables cannot be extracted by the factors, the most frequently used media to obtain Guangxi tourism image should be abandoned.

Table 9 Common Factor Variance

Index	Initial	Extraction
13. Media with the highest usage in the process of obtaining the tourism image of Guangxi A. official website	1.0000	0.511
13. Media with the highest usage in the process of obtaining the tourism image of Guangxi B. search engine	1.0000	0.382
13. Media with the highest usage in the process of obtaining the tourism image of Guangxi C. social media	1.0000	0.666
13. Media with the highest usage in the process of obtaining the tourism image of Guangxi D. blog	1.0000	0.686

Table 9 Continue

Index	Initial	Extraction
13. Media with the highest usage in the process of obtaining the tourism image of Guangxi E. instant communication tool	1.0000	0.650
13. Media with the highest usage in the process of obtaining the tourism image of Guangxi F. interpersonal communication	1.0000	0.463
14. Please choose the new media with the highest usage in your daily life A. official website	1.0000	0.662
14. Please choose the new media with the highest usage in your daily life B. search engine	1.0000	0.594
14. Please choose the new media with the highest usage in your daily life C. social media	1.0000	0.690
14. Please choose the new media with the highest usage in your daily life D. blog	1.0000	0.661
14. Please choose the new media with the highest usage in your daily life E. instant communication tool	1.0000	0.604
15. What are the expression problems in the tourism image communication under the new media environment? stereotyped expression	1.0000	0.694
15. What are the expression problems in the tourism image communication under the new media environment? high positioning	1.0000	0.490
15. What are the expression problems in the tourism image communication under the new media environment? insufficient interaction with audience	1.0000	0.554
15. What are the expression problems in the tourism image communication under the new media environment? serious commercial expression	1.0000	0.598
16. In addition to Sina, Sohu, Netease and Tencent, will you vi sit local or professional tourism information websites	1.0000	0.535

9. Common Factor Variance

Factor analysis was conducted again. As shown in Table 10 below, the commonality of question 16 in the extracted variables is less than 0.3, indicating that most

Table 10 Common Factor Variance

Index	Initial	Extraction
14. Please choose the new media with the highest usage in your daily life A. official website	1.0000	0.709
14. Please choose the new media with the highest usage in your daily life B. search engine	1.0000	0.651
14. Please choose the new media with the highest usage in your daily life C. social media	1.0000	0.662
14. Please choose the new media with the highest usage in your daily life D. blog	1.0000	0.521
14. Please choose the new media with the highest usage in your daily life E. instant communication tool	1.0000	0.705
16. In addition to Sina, Sohu, Ctrip and Tuniu, will you visit local or professional tourism information websites	1.0000	0.275

of the information in the variables cannot be extracted by factors and should be discarded.

10. Common Factor Variance

Factor analysis was carried out for question 14. As shown in Table 11 below, the commonality of the extracted variables was greater than 0.6, indicating that most of the information in the variables can be extracted by factors, and factor analysis is effective.

Table 11 Common Factor Variance

Index	Initial	Extraction
14. Please choose the new media with the highest usage in your daily life A. official website	1.0000	0.717
14. Please choose the new media with the highest usage in your daily life B. search engine	1.0000	0.654
14. Please choose the new media with the highest usage in your daily life C. social media	1.0000	0.662
14. Please choose the new media with the highest usage in your daily life D. blog	1.0000	0.715
14. Please choose the new media with the highest usage in your daily life E. instant communication tool	1.0000	0.705

As shown in the Table 12 below, the eigenvalues of the first three factors were greater than 1, and the accumulation accounts for 69.318%. Therefore, the first three factors are extracted as the main factors.

11. Factor Analysis of Communication Effect

Factor analysis was carried out again. As shown in the following table, the commonality of the extracted variables was greater than 0.6, and variables have high commonality, which indicates that most of the information in variables can be extracted by factors, and factor analysis is effective.

Table 12 Common Factor Variance

Index	Initial	Extraction
A Have been to Guangxi. What is the impact of tourism image on your following behaviors? Change the original travel plan	1.0000	0.852
A Have been to Guangxi. What is the impact of tourism image on your following behaviors? Visit Guangxi again	1.0000	0.853
A Have been to Guangxi. What is the impact of tourism image on your following behaviors? Willingness to travel	1.0000	0.836
A Have been to Guangxi. What is the impact of tourism image on your following behaviors? Extension of stay	1.0000	0.853
A Have been to Guangxi. What is the impact of tourism image on your following behaviors? Recommend to relatives and friends	1.0000	0.761

Table 12 (Continue)

Index	Initial	Extraction
B Haven't been to Guangxi. What is the impact of the tourism image of Guangxi on your following behaviors? Willingness to travel	1.0000	0.661
B Haven't been to Guangxi. What is the impact of the tourism image of Guangxi on your following behaviors? Change the original travel plan	1.0000	0.742
18. The current network, mobile phone, digital TV can meet your needs for Guangxi tourism image information	1.0000	0.269
19. The communication of tourism image on the Internet, mobile phones and digital TV focuses on a wider range of people, such as migrant workers, white-collar workers, farmers and retirees.	1.0000	0.192
20. You will continue to pay attention to the tourism image communication of Guangxi	1.0000	0.569
21. When you receive good tourism image publicity, you will recommend it to the people around you	1.0000	0.621

As shown in the table, the eigenvalues of the first three factors were greater than 1, and the accumulation accounts for 78.057%. Therefore, only the first three factors were extracted as the main factors.

To sum up, a total of 12 effective factors were determined from the 65 independent variables set in this study, among which 4 effective factors were extracted from the credibility and innovation of communication subject. The communication object determined two effective factors from the aspects of social and cultural environment, tourism facilities and services, tourism

Table 14 Coefficients of Tourism Image Communication Effect

	18. The current network, mobile phone, digital TV can meet your needs for Guangxi tourism image information	19. The communication of tourism image on the Internet, mobile phones and digital TV focuses on a wider range of people, such as migrant workers, white-collar workers, farmers and retirees	20. You will continue to pay attention to the tourism image communication of Guangxi	21. When you receive good tourism image publicity, you will recommend it to the people around you
18. The current network, mobile phone, digital TV can meet your needs for Guangxi tourism image information.	1.000 0.314	0.103 0.068 0.314	-0.033 0.564 0.314	0.015 0.794 0.314
19. The communication of tourism image on the Internet, mobile phones and digital TV focuses on a wider range of people, such as migrant workers, white-collar workers, farmers and retirees.	0.103 0.068 0.314	1.000 - 0.314	0.066 0.246 0.314	0.101 0.073 0.314
20. You will continue to pay attention to the tourism image communication of Guangxi	-0.033 0.564 0.314	0.066 0.246 0.314	1.000 - 0.314	.343** 0.000 0.314
21. When you receive good tourism image publicity, you will recommend it to the people around you	0.015 0.794 0.314	0.101 0.073 0.314	.343** 0.000 0.314	1.000 - 0.314

Table 13 Common Factor Variance

Index	Initial	Extraction
A Have been to Guangxi. What is the impact of tourism image on your following behaviors? Change the original travel plan	1.0000	0.852
A Have been to Guangxi. What is the impact of tourism image on your following behaviors? Visit Guangxi again	1.0000	0.836
A Have been to Guangxi. What is the impact of tourism image on your following behaviors? Willingness to travel	1.0000	0.836
A Have been to Guangxi. What is the impact of tourism image on your following behaviors? Extension of stay	1.0000	0.866
A Have been to Guangxi. What is the impact of tourism image on your following behaviors? Recommend to relatives and friends	1.0000	0.762
B Haven't been to Guangxi. What is the impact of the tourism image of Guangxi on your following behaviors? Willingness to travel	1.0000	0.774
B B Haven't been to Guangxi. What is the impact of the tourism image of Guangxi on your following behaviors? Change the original travel plan	1.0000	0.778
20. You will continue to pay attention to the tourism image communication of Guangxi	1.0000	0.679
21. When you receive good tourism image publicity, you will recommend it to the people around you	1.0000	0.655

resources and environment. The communication channel only extracted three effective factors from the daily media factors used by respondents. Three effective factors were extracted from users' behavior and feedback needs.

13. Correlation Analysis

Correlation analysis is a statistical method to study the correlation between random variables. It studies whether there is an interdependent relationship between various phenomena and discusses the correlation

direction and degree of dependent variables. Because the variables studied in this paper are all ordered variables, Spearman correlation coefficient was used to measure the correlation of variables.

When the confidence level (bilateral) is 0.01, the correlation is significant.

Table 14 shows the results of the coefficients of tourism image communication effect and shows that the dependent variable "users' behavior of tourism image communication in Guangxi" had obvious correlation with the independent variable factors of the study. Especially the consistency of each independent variable had obvious correlation with questions 20 and 21 about whether to continue to pay attention to and whether to recommend, which fully showed that the selected factor had a good convergence effect. Secondly, there was a significant correlation between the dependent variable and the research variable of communication effect in question 20 and 21 about whether to continue to pay attention to and whether to recommend, which rejected the original hypothesis. However, questions 18 and 19 accepted the original hypothesis about the degree of media satisfaction and the extent of media attention and showed no significant correlation. This infers that the users' feedback of communication effect was closely related to the communication effect, while the relationship between the satisfaction and popularity of media and the communication effect was not obvious. Therefore, the influencing factors of tourism image communication effect of Guangxi were close to the above research conclusions and basically achieved the expected theoretical and practical construction purpose.

Discussion

Taking new media as the research background, this paper has carried out an in-depth study on the effect of tourism image communication in Guangxi area as the research subject. Some conclusions are discussed as following:

1. Factors affecting information communication involve various aspects, such as audience, communication channel, communicator, information feedback, etc., and the change of each factor also has a decisive influence on the communication effect. Based on relevant theoretical references (innovation diffusion theory, satisfaction theory, agenda theory), the author analyzed the issues of tourism information communication under new media from multiple

dimensions.

2. By means of questionnaire survey, the author discussed how to strengthen the effectiveness of tourism image communication in the certain region under the new media environment: First, abandon the traditional communication concept and take users as the center. Second, continue to optimize the content of communication and enhance the level of cultural connotation. Third, continuously improve the channels and quality of information communication on new media platforms. Fourth, in the tourism image communication system, information feedback and sharing mechanism should be established to enhance the interaction between audiences and between audiences and communicators.

With the accelerating speed of new media technology innovation, it is inevitable to derive a variety of media forms, and it also has a promotion effect on the innovation of tourism image communication. Although the external environment is changing, the communication concept of "audience as the core" should always be implemented in the follow-up communication of tourism image information, which is also the objective requirement and inevitable trend of future economic development. Through the constructing the tourism image communication effect factor model in the process, it uses some analyzing methods to obtain the valid data in order to serve to purpose of promoting and publicizing regional tourist image.

Obviously, due to the limited experience and ability of the author, there have some shortcomings in the process of survey design, data collection and paper writing, the theoretical research level has not been further deepened, the analysis of individual issues remains debatable, and quantitative case analysis and comparative analysis are sort of inadequate. But a good attempt to study could consider a nice model for related academic research in the future.

Suggestions

There are some suggestions to promote and improve the tourist image communication in Guangxi area.

1. Optimizing Communication Content and Enhancing Cultural Level

First, in-depth optimization of the communication content is the most effective means for Guangxi to highlight the characteristics of its own tourism information in tens of thousands of information to obtain the recognition of current and potential users.

Specifically, the information should stick to the reality and be easy to understand. Therefore, in terms of logo and brand design, major tourism enterprises should not only make them concise, but also highlight the characteristics, stimulate users' imagination and arouse users' desire to know. Second, maintain the characteristics of cultural connotation, so as to increase the attraction. Guangxi has rich cultural connotation which should be explored and integrated with modern fashion elements. While upholding the excellent traditional culture, they should make continuous innovation to match the needs of the contemporary audience to the maximum, which has a positive impact on improving the users' recognition and satisfaction.

2. Enriching Information Communication Channels and Content on New Media Platform

First, it should have a comprehensive understanding of the characteristics and elements of the new media platform and complete the construction of multi-level and all-round new media communication channels. Ensure the maximum matching of the channel selection and users' needs and preferences.

Secondly, according to the current situation of tourism development, follow up various innovative technologies and actively introduce these technological elements into the process of new media communication.

Third, the new media platform contains massive information data, which also makes it more difficult for people to pay attention to specific information. In carrying out information management, the tourism image information publishers of Guangxi should not only ensure the sufficiency and superiority of information, but also strictly control the quality of information, highlight the local characteristics and meet the psychological expectations of users.

3. Improving Interactive Mechanism for Tourism Image Information

First, the rapid innovation and application of big data and smart tourism cloud technology will make up for the lack of tourism information communication in Guangxi in the future. Guangxi should introduce modern technology on the basis of market segmentation and further classify the types of tourists, so as to formulate corresponding information publicity strategies according to different types of tourists and give play to the information guiding effect.

Second, Guangxi should constantly improve the feedback and interaction mechanism to provide space for the tourists to express their opinions and discussion.

Third, it is undeniable that new media has many advantages that traditional media does not offer, but there are also major risks and management difficulties. Therefore, the tourism enterprises and relevant organizations in Guangxi should strictly examine and regulate the release of information content, avoiding the fermentation and communication of negative and bad information on the Internet.

Reference

- McQuail D. 1987. *Mass communication theory: An introduction*. Sage Publications, 259-262.
- Golding P, Murdock G. 2000. Culture, communications and political economy. *Mass Media and Society*, 3, 70- 92.
- D.McQuail, "Mass Communication Theory," in Zhang Guoliang(ed.) *Classic Texts in Communication Studies in 20th Century Shanghai*: Fudan University Press, 2003 pp. 438-465.
- Zou Yan. Analysis on the Development Trend of New Media Communication Technology. *News Culture Construction*, 2020(13): 22-23.
- Liu Yan. Construction and communication strategy of Jiuquan tourism image under the media integration. *China Press*, 2020(18): 54-55.
- Chen Gang, Wu Qing. 2019. The Perception of Tourism Image of Urban Ecological Scenic Spots Based on Online Travel Notes: A Case study of Baiyun Mountain Scenic Spot in Guangzhou. *Journal of Landscape Research*, 011(006):131-135.
- Kim Sung-Eun, Lee Kyung Young, Yang Sung-Byung. 2017. Effects of tourism information quality in social media on destination image formation: The case of Sina Weibo. *Information & Management*, 54(6):687-702.
- Kim, Jong-Hyeong. 2018. The Impact of Memorable Tourism Experiences on Loyalty Behaviors: The Mediating Effects of Destination Image and Satisfaction. *Journal of travel research*, 57(10):856-870.



Factors Affecting Online Learning for Undergraduate Students in Medical Records Major, Mahidol University

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Abstract

An efficient online teaching and learning system will influence the learning outcomes of students based on a variety of elements, such as the teacher, the student, the equipment, the technology, etc. This study's aims were to investigate the knowledge and understanding of lessons learned, teaching satisfaction, factors impacting online learning, challenges and suggestions for improving online teaching and learning management, and satisfaction with teaching. All the students enrolled in online courses of the Bachelor of Science Program in Medical Record during the first semester of the 2021 academic year were surveyed. The sample consisted of 108 participants who completed an online questionnaire (Google Form) and a focus group interview with representations of students from all courses (2 individuals each year, for a total of 8 individuals). The results indicated that the overall knowledge and comprehension of online learning lessons for all subjects averaged a 6.62 score (10 score), with the highest level of satisfaction being associated with online teaching. Statistics Multiple regression analysis revealed that both the students' and teachers' levels of preparedness increased over time. This resulted in an increase in lesson comprehension that was statistically significant at the 0.05 level. The student readiness variables and the teacher's readiness for teaching and learning were capable of predicting the lessons' knowledge and comprehension. Student readiness (Beta = 0.485) and instructor readiness (Beta = 0.330) were highly predictive variables, together predicting 46.7 percent of the variance. The strategies for the development of online teaching and learning management systems should encourage teachers to be prepared for online teaching and learning. The use of Google Classroom in conjunction with the Webex program will assist in preparing teachers to use non-boring teaching techniques and modern technology to develop self-learning materials through E-learning or other knowledge sources such as Mux SPOC or MOOC, due to the fact that there are a variety of teaching styles and the ability to create content that can be applied to real-world situations. Teachers should promote connection or communication with their students.

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Introduction

Effective online teaching and learning depends on good content design, motivation, teacher-learner interaction, online student engagement, teacher support, and cutting-edge technology (Sobaih, 2020; Sun & Chen, 2016). Learners, teachers, and the institutions where they teach have an impact on online learning environment and satisfaction (Bolliger, 2008; Wiesenbergs & Stacey, 2005). In addition, the teaching skills and techniques of teachers are compatible with online systems (Coman et al., 2020). This study employs the concept of online learning, which includes students, instructors, courses, and organizational levels. Learners evaluate learner attributes, outcomes, and satisfaction. Courses and instructors evaluate the facilities, technologies, and characteristics of instructors. Organizational evaluations of accessibility and institutional support (Martin et al., 2020). Due to the nature of the students, they will assist in designing online courses to meet their needs. As success in online teaching can predict learners' learning outcomes (Kauffman, 2015), and learners' reflection (feedback) will lead to development, online learning may not be suitable for all students. In addition, learners' readiness for online learning consists of self-directed learning, motivation for learning, computer/Internet self-efficacy, learner control, and online communication self-efficacy (Hung, Chou, Chen, Own, 2010). Advantage of online learning is that students can learn at home and record lesson (Fatonia, et al., 2020). They do not have to travel. Some subjects are suitable for classroom learning to practice and to have face-to-face interaction between the students and the teachers.

With the prevalence of Coronavirus Disease 2019 (COVID-19) in Thailand, the number of epidemic outbreaks has increased. From March 2020 until the present, the government has a policy to prevent and control the spread of the infection in educational institutions by supporting the management of online learning (Webex). Online learning initiatives lack in being well-preparedness. All students and instructors need to adapt for online learning, for example, student readiness, teaching and learning technology, learner and instructor characteristics, and supporting facilities. This prompts teachers and students to modify their teaching methods, which may have an impact on student learning. The Bachelor of Science Program in Medical Records

emphasizes expected learning outcomes through a student-centered learning emphasis and a student-centered learning process. It also provides students with the opportunity to self-study, demonstrate knowledge, and construct self-knowledge (Constructivism) by allowing them to acquire practical and in-depth knowledge independently. The medical records course incorporates general education sciences such as basic science, medical science, medical disease coding, medical records, statistics, computers, and information technology, among others, into its curriculum. Effective online teaching and learning requires the availability of students, instructors, equipment, a suitable environment, and instructional techniques and methods. In addition, there are numerous modern teaching methods available today, such as online instruction via the Webex Meeting system in conjunction with Google Classroom or other forms of e-learning, etc. But the issue is frequently related to lesson knowledge, measurement and evaluation, student motivation and interest. In addition, this field offers both theoretical and practical classes in the classroom, including high-volume medical subjects, statistics with data analysis, and the use of computer programs, all of which require a comprehensive understanding and practice. The researcher is interested in studying the knowledge and understanding of the lessons reflecting learning outcomes, satisfaction, problems, and needs of students, as well as factors affecting online teaching and learning, because online learning requires students to adapt to their readiness to study. This is intended to serve as a guideline for the continued development of online teaching and learning of medical records management courses.

Objectives

1. Assess students' knowledge and comprehension of the online learning lessons.
2. Analysis of online teaching and learning satisfaction
3. Examine the factors influencing online learning.
4. Examine the issues and strategies surrounding the evolution of online teaching and learning management.

Conceptual Framework

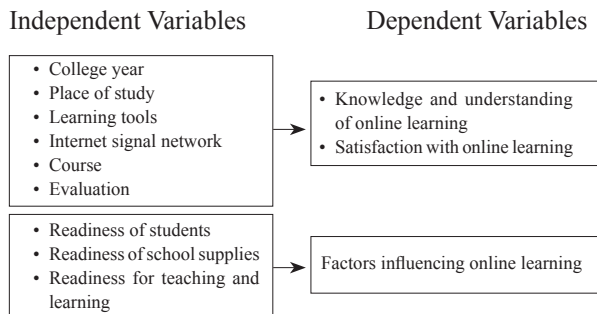


Figure 1 Conceptual Framework

Research Methodology

Population and Samples

The descriptive research analyzed all Bachelor of Science in Medical Record first-semester online students (188 students) enrolled in Years 1-4 during the first semester of the academic year 2021. A participant sample of 108 students were analyzed in the study and interviewed two student representatives per year, for a total of eight students. In particular, the positions of class leader and assistant class leader were selected in order to provide feedback, reflect on online learning issues, and adopt a preferred online instructional management style. This is a purposeful sampling, which includes the position of the class leader and the assistant head of the room, in order to provide feedback, reflect on the challenges of online learning, and determine the desired form of online teaching administration.

Research Instruments

An online questionnaire (Google Form) was used to obtain the following data: the knowledge, comprehension, student satisfaction, readiness of students, school supplies, teaching, and learning. using an online questionnaire The questionnaire was validated based on an index of item objective congruence (IOC=0.9) by three experts. The scale's reliability was 0.94 based on Cronbach's alpha reliability coefficient. The researcher consulted with experts to verify the appropriateness of language used in the research before usage. The qualitative data was conducted by interview form. The interview form was given to a qualified or relevant expert to verify content validity and was edited according to expert advice before usage.

Collection of Data

In the quantitative study data collection consisted of 108 students self-evaluation of the following topics: their knowledge, lesson comprehension, satisfaction, readiness for self-teaching, learning equipment, and teachers. In addition, access to course support, institutional support, problems, obstacles, requirements, and recommendations for online learning in all subjects, for a total of 23 subjects throughout the student's academic career. The 23 subjects can be divided into the following six subject groups: 1) Examples of general education subjects include General Education for Human Development, Social Studies for Human Development, Arts and Science for Human Development, English Language, Thai Language Arts, Common and Applied Mathematics, Introductory Biology, Life Skills for Modern Living, and Management Principles. 2) Examples of basic medical science subjects include Anatomy and Physiology, Medical Terminology, and Basic Clinical Science. Medical Coding Principles and Medical Coding in Diagnosis-Related Subjects are two academic medical coding groups. 4) Statistics courses are divided into the categories of Statistical, Analytical Statistics, and Research Methodology. 5) Programming for medical records and database management are two computer programming disciplines. 6) General knowledge subjects related to medical records include medical and public health information systems, medical and public health law, health care system knowledge management, and epidemiology.

In the qualitative data collection, students' opinions were obtained on learning problems in each subject, teaching and learning management, measuring and evaluating, and teaching characteristics were elicited through online interviews (Webex) and conducted with a focus group of students. The data was used to further explain the results of the quantitative data and as a guide for the development of teaching and learning management to meet the needs of each course's learners.

Variables studied

- General information, such as the college year, the location of online classes, the equipment used for classes, and the network signal used.
- Overall lesson comprehension score of 10.
- Student readiness (interests, intentions, location, time, and environment for online learning) overall score at 10.
- Availability of learning materials (online learning tools) overall score at 10.

- Readiness of teaching and learning management of teachers (methods and techniques of teaching, teaching media) overall score at 10.

- The readiness of teaching and learning management of teachers (teaching methods and techniques and teaching media) overall score at 10.

- There were five levels of satisfaction scores in each subject: highest (level 5), high (level 4), moderate (level 3), low (level 2), and lowest (level 1).

Data Analysis

Descriptive data analysis

- Lesson Cognitive Score (10 score) using statistics, percentage, mean, standard deviation, median

- Scores on student readiness, readiness of learning equipment, and teaching readiness of teachers (10 score) using statistics, percentages, averages, and standard deviations.

- There were five levels of satisfaction scores in each subject: highest (level 5), high (level 4), moderate (level 3), low (level 2), and lowest (level 1); using statistics, percentage, mean, standard deviation.

The analysis of factors affecting learning comprehension were students' learning readiness, learning equipment readiness, and teaching-learning readiness of teachers by using Multiple Regression statistics and analyzing qualitative data by content analysis method.

Ethics

This study was conducted through the Committee for Research Ethics, Faculty of Social Sciences and Humanities, Mahidol University (2020/122.2605).

Results

The sample consisted of 108 students studying in years 1-4 for a Bachelor of Science in Medical Record. The majority were first-year students (38.9%), followed by second-year (32.4%), third-year (14.8%), and fourth-year students (13.9%), respectively.. 33.4 percent of students used mobile devices, computers, and tablets to study online from their homes. 72.2 percent of students studied online via WIFI networks, with zero pupils exclusively using their mobile phones. 49.0 percent of students favored a hybrid model of online and on-campus instruction, followed by 41.7% of students who choose to learn at the facility and 9.3% of students who desired to study online (Table 1). The majority of assessment forms used several modalities, including Google forms, Google Classroom, presentations, reports, projects, and homework. Mux is utilized in certain courses, such as English language and Thai language.

Table 1 Sample group of medical record students

Sample group (n=108)	n	Percentage
Student		
First-year	42	38.9
Second-year	35	32.4
Third-year	16	14.8
Fourth-year	15	13.9
Online study location		
Private resident	95	88.0
University dormitory	3	2.8
Off-campus dormitories	10	9.2
School materials		
Notebook	11	10.2
Tablet	6	5.6
Mobile, Notebook	21	19.4
Mobile, Tablet	13	12.0
Notebook, Tablet	21	19.4
Mobile, Notebook, Tablet	36	33.4
Network		
Mobile Internet	28	25.9
WIFI	78	72.2
Lan	2	1.9
The learning style that students want		
Classroom learning	45	41.7
Online learning	15	9.3
Blended learning	53	49.0

The knowledge and understanding scores of online learning lessons showed that the overview of all courses had a cognitive score between 2 points and 10 points. General Education Courses and Knowledge of Medicine and Public Health Courses had the lowest scores. Medical Coding Academic Courses had the highest mean score of 8.23, followed by Computer Programs Academic Courses, Basic Medical Sciences Academic Courses, General Education Academic Courses, Statistics Academic Courses, and Medical and Public Health Knowledge Academic Courses, with mean scores of 7.75, 7.74, 7.47, 7.10, and 6.90, respectively (Table 2).

Table 2 Knowledge and understanding scores of online learning lessons classified by courses

Courses	Cognitive score (10 points)			
	Min	Max	Mean (SD)	Median (IQR)
General Education Courses	1	10	7.47(0.65)	8(7-9)
Basic Medical Sciences Courses	3	10	7.74(0.45)	8(7-9)
Medical Coding Academic Courses	5	10	8.23(0.12)	8(7-9)
Statistics Courses	3	10	7.10(1.05)	8(7-8)
Computer Programming Courses	2	10	7.75(0.67)	8(7-9)
Knowledge of Medicine and Public Health Courses	1	10	6.93(1.22)	7(5-8)
In the overview of all courses	2	10	6.62(1.51)	7(6-8)

The average satisfaction in the online teaching of all courses had high to the highest levels. The Medical Coding Course had the highest satisfaction level for

online instruction (mean score of 4.30), followed by the Basic Medical Sciences Course, the Computer Programming Course, the General Education Course, the Statistics Course, and the Medical and Public Health Knowledge Courses, with mean scores of 4.01, 3.91, 3.82, 3.70, and 3.68, respectively (Table 3).

and students, as well as students themselves, was distant and never occurred, particularly among first- and second-year students who had always studied online; this is a very problematic group project that must be coordinated with friends from different faculties, especially in general education courses. Instability in the internet signal can lead to difficulties during online

Table 3 Average level of satisfaction of online teaching classified by subject group

Courses	Satisfaction level *					Mean (SD)	Interpret
	Highest n (%)	High n (%)	Moderate n (%)	Low n (%)	Lowest n (%)		
General Education Course (n=473)	127 (26.85)	184 (38.9)	120 (25.37)	36 (7.61)	6 (1.27)	3.82 (0.95)	High
Basic Medical Sciences Course (n=103)	27 (26.21)	50 (48.54)	20 (19.42)	5 (4.85)	1 (0.97)	4.01 (0.86)	High
Medical Sciences course (n=40)	16 (40.00)	20 (50.00)	4 (10.00)	0 (0.00)	0 (0.00)	4.30 (0.65)	Highest
Statistics Course (n=78)	22 (28.21)	31 (39.74)	19 (24.36)	4 (5.13)	2 (2.56)	3.70 (0.98)	High
Computer Programming course (n=60)	14 (23.33)	24 (40.00)	17 (28.33)	4 (6.67)	1 (1.67)	3.91 (0.95)	High
Medical and Public Health Knowledge course (n=71)	16 (22.54)	27 (38.03)	21 (29.58)	2 (2.82)	5 (7.04)	3.68 (1.08)	High

* A mean score of 1.00–1.80 indicates the lowest level of satisfaction. A mean score of 1.81–2.60 indicates a low level of satisfaction. A mean score of 2.61–3.40 indicates a moderate level of satisfaction. A mean score of 3.41–4.20 indicates a high level of satisfaction. A mean score of 4.21–5.00 indicates the highest level of satisfaction.

When evaluating the preparation of teaching in the online system, it was determined that students were the least prepared, followed by instructors and learning equipment, respectively (Table 4).

Table 4 Online teaching readiness score

Courses	Readiness score (10 points)			
	Min	Max	Mean (SD)	Median (IQR)
Readiness of students	1	10	6.90 (1.82)	7 (6-8)
Availability of school supplies	2	10	7.73 (1.63)	8 (7-9)
Readiness of teaching and learning management of teachers	4	10	7.54 (1.26)	8 (7-8)

The study of factors influencing lesson comprehension revealed that as student and teacher readiness for teaching and learning improved, lesson comprehension increased statistically significantly at the 0.05 level. The student readiness variables and the teacher's preparedness for teaching and learning were capable of predicting the lessons' knowledge and comprehension. Student readiness (Beta = 0.485) and instructor readiness (Beta = 0.330) were the strongest predictive variables, together predicting 46.7 percent (Table 5).

The findings from the interviews with student representatives highlighted the challenges of teaching and learning administration in terms of teaching techniques, evaluation measures, learners' hurdles, and learners' requirements. The majority of respondents stated that the problem of interaction between instructors

Table 5 The results of a Multiple Regression analysis of factors influencing lesson cognition by using Multiple Regression statistic.

Variable	B	SE	Beta	t
Readiness of student	.401	.401	.485	5.149**
Readiness of school supplies	-.019	-.019	-.021	-.238
Readiness of teaching and learning management of teachers	.396	.396	.330	4.165**
Constant	1.015	.758		1.340

R = 0.683, R² = 0.467 F = 30.358, **p < 0.001

education or examinations. As for the availability of school supplies, it was discovered that disrupting settings, such as excessive noise and other obligations of the family, made it less important to concentrate on the lesson compared to when studying in class. In addition, students observed that the content of some courses was too extensive, that some courses overlapped, and that other courses had too many tasks. The majority of the time, each subject offered instructional resources for students or study aids for students to self-learn through Webex-recordable video replays. As for evaluation, there are a range of assessments in all topics, including scoring examinations, midterm exams, final exams, reports, presentations, and projects in some subjects. The majority are completed using Google Forms. The majority of respondents had no issues. Occasionally, the internet disconnected during tests. Some disciplines had no exams so students did projects instead. As far as equipment and tools in education are concerned, there are few issues. Since the institute supports WIFI internet

for certain students, those who do not have a computer can borrow one from the institute, and all students had access to the institute's services, such as Webex, Google Classroom, and so on.

According to student suggestions, teachers should utilize Google Classroom for communication, obtaining instructional resources, and collecting student work. Teachers should adjust course content to be applicable to work and daily life by employing non-boring teaching strategies and focusing on communication to foster students' comprehension of class activities, homework, and assignments. In addition, there is a transparent measurement and evaluation between the instructor and the student. Instructors should tailor their instructional activities to the online learning system. Creating LINE groups for each class subject to facilitate communication would be of great assistance. Students proposed that, if feasible, it is preferable to take tests at the university to prevent fraud in online exams, which are difficult to monitor.

Discussion

From a study of factors Affecting Online Learning for Undergraduate Students in Medical Records, the results can be discussed as follows:

1. Knowledge and comprehension of the online learning lessons

The knowledge and understanding scores of online learning lessons showed that General Education Courses and Knowledge of Medicine and Public Health Courses had the lowest scores. It can be explained that the two courses had broad content and used less. The Medical Coding Academic Courses had the highest mean score because all students paid attention to the specific and core knowledge. Previous studies found that effective online teaching and learning depends on good content design (Sobaih, 2020; Sun & Chen, 2016).

2. Online teaching and learning satisfaction

Most pupils study online at home, yet they prefer to study at school. Overall, the students' perceptions of their comprehension of the lessons and their happiness with each subject were rated as excellent.

This study indicated that the medical coding group had the highest degree of literacy in online learning, which corresponds to the highest level of happiness in the medical coding courses. It can be claimed that the students pay close attention since medical records are a specialized subject; having a teacher who is a medical professor who specializes in a specific field and

teaches in great detail provides students with a thorough grasp. In addition, the majority of the material consists of lectures and practical exercises. This is consistent with previous research indicating that the effectiveness of online instruction is dependent on format, teaching methods, subject content, student readiness, learning materials, instructor or instructor's expertise, teaching materials, classroom environment, students who enjoy learning, etc. (Nemanich et al., 2009; Burd & Buchanan, 2004). The Medical and Public Health Literacy courses had the lowest level of comprehension, which corresponded to the lowest level of satisfaction compared to the other courses, followed by the Statistics courses. According to student comments gleaned from interviews, the effectiveness of the instructor's lessons in certain disciplines is contingent on the repetition of certain content. This is a deficit that necessitates the growth of instructors and content in order to further enhance the curriculum. The communication between the teacher and the student on assignments is straightforward, particularly with measurement and evaluation. Learners' satisfaction is contingent upon learning results, instructional design, and learners' attributes (Kauffman, 2015).

3. Factors influencing online learning

When researching the elements influencing the knowledge and comprehension of the lesson, it was discovered that both the students' and instructors' preparedness for teaching and learning rose, resulting in a rise in the students' and instructors' knowledge and comprehension of the lesson. For the readiness of school supplies did not influence on knowledge and comprehension because of educational institutions supporting the management of online learning (Webex). This is consistent with previous study that found students, instructors, courses, and organizational levels affected on online learning (Martin et al., 2020). In addition, learners' readiness for online learning consists of self-directed learning, motivation for learning, computer/Internet self-efficacy, learner control, and online communication self-efficacy (Hung, Chou, Chen, Own, 2010).

4. Issues and strategies surrounding the evolution of online teaching and learning management

The student preparedness variable had a stronger influence on the teacher's readiness, which was consistent with student interviews in which they stated they could self-search the Internet to better comprehend lessons they did not grasp. Additionally, eager students

can study backwards from the internet video recordings of lectures. On the other side, the online learning of students whose circumstances are not suitable to study, such as loud noises, other distractions, or family obligations, can be impacted. This is consistent with previous research indicating that the effectiveness of online instruction is dependent on format, teaching methods, subject content, student readiness, learning materials, instructor or instructor's expertise, teaching materials, classroom environment, students who enjoy learning, etc. (Nemanich et al., 2009; Burd & Buchanan, 2004). Creating information that is student-friendly, increasing teacher-student interactions, aiding teachers, building online learning communities, and advancing technology are all goals of this initiative (Sun & Chen, 2016). Social technologies encourage interaction between students, instructors, and subject matter (Hamid et al., 2015). There is interaction in online classrooms (Tanis, 2020). Teach students to actively and visibly engage in positive interactions, and create a flexible classroom climate (Young, 2010). Quality of instruction in terms of the learning experience (Popa et al., 2020) Learners' learning efficiency will be enhanced through instructors' online teaching skills, teaching support, and the development of high-quality online subjects (Kim & Bonk, 2006).

This study performed in-depth interviews with students and analyzed quantitative data to provide extensive explanations for the assessment of all topics and year grades, allowing students to represent the course's overall learning outcomes. The drawback is that it is the student's self-evaluation, therefore the gathered information is the student's perspective. In addition, the sample group consisted of students from a single field of study, resulting in a lack of diversity due to a small sample size.

Suggestion

1. The guidelines for the development of online teaching and learning management systems should encourage teachers to be prepared for online teaching and learning. The use of Google Classroom in conjunction with the Webex program will assist in preparing teachers to use non-boring teaching techniques and modern technology to develop self-learning materials through E-learning or other knowledge sources such as Mux SPOC or MOOC, due to the fact that there are a variety of teaching styles and the ability to create content that can be applied to real-world

situations. Teachers should promote connection or communication with their students.

2. Teachers tailor their instructional activities to the online learning system. As for the correct distribution of tasks, it should be an individual assignment, not a group assignment. Each subject should have a line group for communication during the course, as well as an exam management system that prohibits tampering. Learners should ensure they have sufficient study time, a conducive study environment, study materials, learning tools, and Internet connectivity.

Recommendations for future research include a study comparing the anticipated learning results of online instruction and classroom management by measuring and evaluating prior to and after classes. Other factors affecting the effectiveness of online teaching and learning for Mahidol University's undergraduate students in all disciplines should be investigated.

References

- Bolliger, D.U., Wasilik, O. (2008). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Researching education*. <https://doi.org/10.1080/01587910902845949>
- Burd, B.A., & Buchanan, L.E. (2004). "Teaching the teachers: teaching and learning online", *Reference Services Review*, Vol. 32 No. 4, pp. 404-412. <https://doi.org/10.1108/00907320410569761>
- Coman, C., Tîru, L.G., Mesesan-Schmitz, L., Stanciu, C., Bularca, MC. (2020). Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective. *Sustainability*, 12, 10367.
- Hung, M.L., Chou, C., Chen, C.H., Own, Z.Y. (2010) Learner readiness for online learning: Scale development and student perceptions. *Computers & Education*. 55(3):1080-1090.
- Hamid, S., Waycott J., Kurnia, S., Chang, S. (2015). Understanding students' perceptions of the benefits of online social networking use for teaching and learning. *The Internet and Higher Education*. Volume 26, Pages 1-9.
- Heather Kauffman. (2015). A review of predictive factors of student success in and satisfaction with online learning. *Research in Learning Technology* Vol. 23. 26507, <http://dx.doi.org/10.3402/rlt.v23.26507>
- Fatonia, Arifiati N, Nurkayati E, Nurdawati E, Fidziah, Pamungkas G., et al. (2020) University students online learning system during Covid-19 pandemic: Advantages, constraints and solutions. *Sys Rev Pharm*.11(7):570-576.
- Kauffman, H. (2015). A review of predictive factors of student success in and satisfaction with online learning. *Research in Learning Technology*, 23: 26507 - <http://dx.doi.org/10.3402/rlt.v23.26507>

- Kim, K.J., & Bonk, C.J. (2006). The future of online teaching and learning in higher education: The survey says... Number 4, EDUCAUSE QUARTERLY. Page 22-30.
- Louise Nemanich, Michael Banks, Dusya Vera. (2009). Enhancing knowledge transfer in classroom versus online settings: The interplay among instructor, student, content, and context. *Decision Sciences Journal of Innovative Education*. Online 16 January 2009. <https://doi.org/10.1111/j.1540-4609.2008.00208.x>
- Martin, F., Sun, T., Westine, C.D. (2020). A systematic review of research on online teaching and learning from 2009 to 2018. *Computers & Education*. 159,104009, Available online 9 September 2020.
- Popa, D., Repanovici, A., Lupu, D., Norel, M., & Coman, C. (2020). Using mixed methods to understand teaching and learning in COVID 19 times. *Sustainability*, 12, 8726; doi:10.3390/su12208726
- Sobaih, A. E.E., Hasanein, A.M., Abu Elnasr, A.E. (2020). Responses to COVID-19 in higher education: social media usage for sustaining formal academic communication in developing countries. *Sustainability*, 12, 6520.
- Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education: Research*, 15, 157-190. Retrieved from <http://www.informingscience.org/Publications/3502>
- Tanis, C.J. (2020). The seven principles of online learning: Feedback from faculty and alumni on its importance for teaching and learning. *Research in Learning Technology*, 28: 2319 - <http://dx.doi.org/10.25304/rlt.v28.2319>
- Wiesenberg, F. & Stacey, E. (2005). Reflections on teaching and learning online: Quality program design, delivery and support issues from a cross-global perspective.
- Young, S. (2010). Student views of effective online teaching in higher education. *Researching education*. https://doi.org/10.1207/s15389286ajde2002_2



Reputation Management of Higher Education Institutions in Thailand

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Abstract

This review article proposes the concept of reputation management of higher education institutions in Thailand. The main purpose is to be a guideline for further development of a tertiary institution with continuous development, flexibility, stability and sustainability, social recognition and ready to face disruptive changes in the future. The detailed content of the article describes abiding by the university reputation management concept including components of university reputation, university reputation management, perspectives on university reputation, university reputation indicators and measurement, factors that impact on university reputation, and ranking of noted higher education institutions.

Introduction

Higher education institutions in Thailand have faced various problems for more than 10 years. For example, the rapid expansion and upgrading to be new universities, the entry of foreign higher education institutions, the declining of birth rate and the number of students, the changes in behavior and needs of students regarding subject selection values, the student admission system, the failures of the bureaucracy with the administration of higher education institutions, the good governance, the expectations of society and labor market towards higher education standards and educational quality, and the severe business competition to attract new students (Rattananakin, 2011).

One effective way to solve the problems of higher education institutions in Thailand is managing corporate reputation. The corporate reputation management strategy empowers and helps universities meet the challenges and disruptive changes impacted by

the globalization of higher education. A good corporate reputation has impacts on corporate performance as a sustainable competitive advantage because it makes the organization distinctive and different from other organizations under the same industry and then leads to the core competence of the organization. A good corporate reputation will transform to be an organization's assets or resources and reputational capital (Gaines-Ross, 2008: 6). If Thai higher education institutions have a good reputation and clear standpoint, they will be the best sources of qualified human resource development for the country.

Corporate reputation management is an organizational mission relying on the concepts and perspectives linked to other organizational management such as corporate strategy, corporate communication, corporate brand, corporate image, corporate quality, governance, human resource development, social responsibility, risks, conflicts, issues and crises, and

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markets, etc. (He & Pitprecha, 2011: 103; Santawee, 2012: 13). Corporate reputation management upholds the overall management of the organization's strategies, helps to improve organizational management skill set to be more effective and reflects the overall organizational performances (Haywood, 2005: xv; Jaicharnsukkit, 2009: 1).

Corporate reputation management is an investment for the future. A good corporate reputation can be achieved through the organization's vision, boldness, commitment, and integrity. As well as compliance with legislation, guidelines, and best practice standards. The better the reputation the organization has, the more it is a guarantee of its stability and strength, including financial strength (Sherman, 1999: 13; Haywood, 2005: ix). Corporate reputation is a virtue that the organization has long accumulation to make it credible, recognized, and trusted by various organizational target groups, including people in society, both local and abroad (Pitprecha, 2011: 2). Several studies have found that organizations with better reputations do better financially, attract and keep talent manpower at lower costs, have lower costs of capital, and more easily gain support from government and other stakeholders in times of need. (Drexel University's LeBow College of Business. Center for Corporate Reputation Management, n.d.)

Reputation is a perception of value or distinctiveness in relation to peers and competitors that is held in the mind of stakeholders and prospective stakeholders. Every organization will have a reputation, whether or not they help shape that reputation. People judge organizations in a variety of ways by what they do, by what they say they do, and by what others say they do. Those organizations that do not manage their reputations will have it managed for them by competitors, critics, or others. (Drexel University's LeBow College of Business. Center for Corporate Reputation Management, n.d.) University reputation requires an understanding of the construct of reputation and how various target audiences perceive and respond to reputation. Building a university reputation needs a wide range of proactive and reactive strategies and investments since the university reputation encompasses the perceptions of value held by a university's stakeholders.

A key and unusual aspect of universities' reputations are the links between collective and individual reputations. High-profile successful researchers and academics enhance a university's

reputation and there is the competition to attract the best academic staff. Universities gain financially in a competitive commercial environment from high-profile staff and the publicity surrounding research success. Where universities are quick to benefit from individual staff reputations and their research and teaching efforts, adverse individual reputations can damage universities. Scandals usually involve the conduct of one or a few rascals among university staff, but the damage can be widespread and the cover-up can be the major component of the scandal (Curtin, 2009; Brown, 2010).

Nowadays reputation is an increasingly vital component for higher education institutions. A university reputation is a major priority for academics changing jobs and the first consideration for internationally mobile students, beyond tuition fees and course content. Reputation is also a key factor in attracting collaborative partnerships and funding from alumni, philanthropists, and industry. However, university reputation can soon be built and lost in our technologically connected world where information travels fast and can have a global impact (Curtin, 2009).

University Reputation Management

This review article aims to describe the concept of reputation management of higher education institutions in Thailand. It also expected for all types of higher education institutions to use as a guideline for further development of the reputation management strategy to become a tertiary institution with continuous

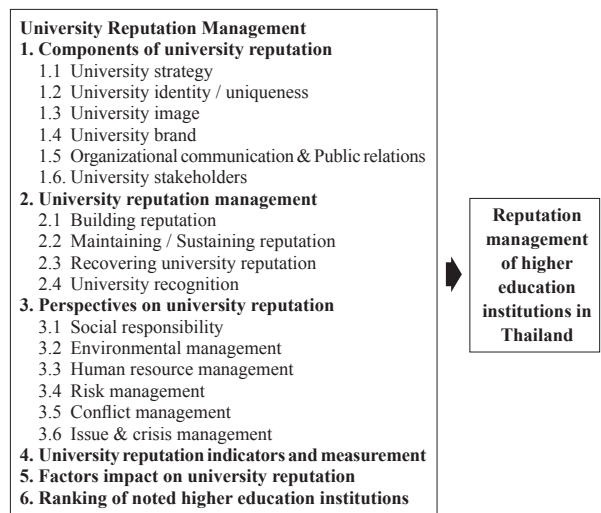


Figure 1 Conceptual framework of university reputation management (Chotevithayathanin, 2016: 16)

development, flexibility, stability and sustainability, social recognition and ready to face disruptive changes in the future. Last but not least, the university continues to be a higher education institution with pride and dignity at the local, national, regional and global levels. The detailed content of this review article presents in order abiding by the conceptual framework of university reputation management as follows:

1. Components of university reputation

A university reputation component is a tool for creating or pushing university reputation management. It consists of a university strategy, university identity / uniqueness, university image, university brand, corporate communication and public relations, and university stakeholders. All six elements of university reputation must be consistent and linked to the same direction to build university reputation.

It can be said that university reputation management is all about building awareness of the university brand with university stakeholders' perceiving for maintaining the university's good reputation stable, durable, and sustainable. Managing university reputation through communication should focus on building a university brand as the top priority. But considering through university management, university strategy is the most important matter. Early university reputation management stressed building the image of the university while in the later period focuses on building a university brand. No matter if the university reputation management emphasizes building a university image or brand, it must be aligned to overall the management of university parts. Also, university reputation management may start with a university identity.

1.1 University strategy

Corporate strategy can be defined as "overall guiding the organizations". It relates to the purposes and methods of the organizations of "what" and "how" they want to do to meet the achievement abiding by the vision of the organization (Wongkiatrat & others., 2005: 16; Wongkiatrat, 2011: 31). In other words, it means "a model or plan that organization seeks to create to compete for advantages over its competitors through its unique differences focusing on a plan for achieving the goals set out" (Kecharananta, 2009: 14-16).

To establish a reputation management strategy, universities should begin with exploring university identity/uniqueness through asking the question of "who we are" "what we are going to do". Universities that are unknown to their target audiences

or stakeholder groups should firstly create or develop a university strategy leading to build a university image or a university brand. The university strategies enable university staff or personnel to work aligning to university direction. However, university strategies can be changed when circumstances change.

1.2 University identity / uniqueness

The term "corporate identity" refers to the sum of the different ways that an organization chooses to publicly express. It may be an image or something that is defined by the organization. Products or services can reflect the essence of the organization and allow individuals to recognize and distinguish them from other organizations (Techakana, Interview January 27, 2016). The term "corporate identity" can also refer to the achievement of a focus or strength that reflects the distinctive character of the organization (Office for National Education Standards and Quality Assessment, 2012: 52).

University identity / uniqueness is the key to answering the question of the university "who we are". The university should operate any steps to reassure stakeholders of who they are. University identity / uniqueness is a medium to communicate with university target groups/stakeholders to create recognition. A good university identity/uniqueness is essential in extending a good reputation for the university. The university identity/uniqueness consists of tangible and intangible things, such as logos, colors, entrepreneurship, creativity, universality, etc.

1.3 University image

Corporate image refers to the image that people who may be consumers, competitors, retailers, or society think or understand what and how such an organization is. Image is what an organization wants to present to society to achieve understanding and recognition (Napoles, 1988: 19 cited in Sriwiboon, 2004: 25). In other words, it may refer to the assessment of people's beliefs and feelings towards an organization. Corporate image is all the connections consumers remember with organizations manufacturing products or services. Corporate image is also a factor influencing corporate reputation, both in good and bad ways (Dowling, 2002: 19).

The image of the university must be created from the university's real points that are the identity / uniqueness of the university. If the image of the university does not correspond to what it is, it will disappear and be lost in a very short period. Though the

image of the university is easier and takes less time to create than the university's reputation, it still takes considerable time to build. The image of the university also influences the prospective students' decisions to enter the university. A long-lasting good university image eventually evolves into a university reputation later. The main difference between university image and university reputation is time-consuming. It takes less time to get a good image than to get a good reputation. But both a bad image and a bad reputation are able to damage the university in a blink.

1.4 University brand

Corporate brand refers to an organization in which customers or stakeholders can perceive the mission and the organization operations both inside and outside. If the organization has a clear corporate brand, the corporate image will appear in the minds of customers and society. The corporate brand supports and helps the organization to be stable and sustainable (Ruenrom, 2013: 103 & 21-28). It can be said that the corporate brand is the mixed results of corporate image and corporate reputation. A good corporate image and corporate reputation can only be achieved through an obvious corporate identity and consistently communicating the good corporate image and corporate reputation to consumers (Keller, 2003 cited in Pattanabunboon & Anantachart, 2009: 124).

A university brand can be modified to modernize according to a changing social environment known as rebranding. Building a university brand requires coherent communication and public relations and should communicate the true identity to the stakeholders of the university. A clear university brand is accompanied by a designation of the university's position. The university brand is a difficult thing to replicate. University brand, university image and university reputation are related. A good university brand, image and reputation enables stakeholders' pride. A feeling of satisfaction and acceptance of building a recognized university brand should be developed for the university to have quality. There are several methods to create university brand awareness such as setting the tuition fee (price), facilitating, and delivering a positive experience / pride.

1.5 Organizational communication & Public relations

Corporate communication & public relations are the mission to deal with the effective coordination and participation in all parts of an

organization by setting a framework for internal and external communications propelling to a big goal, creating and maintaining a sound reputation among the different group of stakeholders that the organization relies on (Laphirattanakun, 2010: 145-148). As for public relations, it is a notice or clarification to disseminate, to prevent and correct misunderstandings and create popularity with the people, to protect and maintain the reputation of the organization, to create a better understanding, and to support marketing activities (Laphirattanakun, 2010: 152; Chinavorn, 2010: 4-6). Organizational communication is a tool to build and disseminate a good university reputation story as well as prevents a bad university reputation from relying on both internal and external communication. Organizational communication and public relations play an important role in building the university image and reputation. It is a presentation of information and knowledge about the university to each university stakeholder group. Universities should consistently communicate regularly to the stakeholder groups the university identity/uniqueness.

Building and maintaining the university reputation through organizational communication and public relations can be done both formally and informally. Universities should appropriately select media choices and should not focus on advertising because the university is an educational institution that mainly serves society. The key points to building the university's reputation should focus on creating value rather than business or making a profit. A university needs to communicate with clearness, consistency, fastness and select multi-channels. The advent of the era of social media or social networks has made it easier and more accessible form of communication for stakeholders to access university information through new media. Universities should follow up with famous university alumni information and publicize it to university stakeholders.

Internal communication between the university administrators at all levels is critical to managing university reputation. In particular, communication with the middle management level, including the dean, deputy dean, and head of the program, is considered the most important as it is the main driver to move the university forward. Internal communication with university staff / personnel must be unified and looked at in the same direction. Furthermore, it should inform the real situation about the university such as

serious competition of prospective student admission, university financial status, etc. because this brings to cooperation and participation into university operations.

The university's corporate communication department needs to choose how to disseminate university news affecting university reputation to preserve and increase reputation. The arrival of the social media age or social network has caused Word of Mouth (WOM) to be an influential communication strategy and PR has an important influence on current and future university reputation management. The university consequently needs to set a framework or guideline for online university reputation management.

1.6 University stakeholders

Organizational stakeholders refer to individuals or groups of people who influence organization decisions, policies, and operations. The organizational stakeholders have different expectations of the organization resulting in complex organizational decisions. Building a good reputation requires consideration of the expectations of different stakeholders of the organization (Pitpreecha, 2010: 15).

Each university has different target groups/stakeholders so university reputation management does not run on the same basis. University should make a difference to attract audiences / stakeholder groups such as graduates, parents, graduate users, to be satisfied with what is offered by the university or to meet the expectations of what the university operates. The university stakeholder groups expect differently, for example, students expect to achieve academic strength, outstanding research and famous alumni while faculty, staff / personnel need good practice from the university and society wants university production to excel qualified graduates to serve the society.

University administrators should manage expectations and experiences to make good memories with university audiences. University stakeholders, such as faculty, staff, students, departments, or companies that the university communicates with, are able to help a resilient university reputation through Word of Mouth (WOM) so providing the correct and real university information is so important. Besides, the reputation of university stakeholders themselves has affected the building of the university reputation. The good image and reputation of university stakeholders can provide further promotion for the university image and reputation and continue to lead university recognition and credibility.

2. University reputation management

Corporate reputation management refers to harmonizing the relationship between corporate identity and corporate image in the same way between the organization side and the customer side (Schultz & Werner, nd: 2). Perception refers to how all relevant stakeholders perceive the organization as being. Reality refers to the truths about the organization, including policies, practices, processes, systems, and performance.

University reputation management from a marketing perspective has been emphasized on the whole picture of the university and should be performed systematically and sequentially. University reputation in the aspect of factual management should be based on the truth about the university, not deceitful and should be understood between the university and its stakeholders. If university stakeholders trust the university performance, university reputation would be widely represented simply and effectively. University reputation management can be studied and emulated from the same type of famous and purposeful model universities. Reputation is not static so university management should be continuously revised or improved to reap competitors and has enough room in a highly competitive market among the same products or services. University has several aspects for building reputation but it should be equally managed in all aspects to prevent a more prominent reputation from dominating other areas of reputation.

The department of university organizational communication is responsible for managing university reputation covering building reputation, maintaining reputation, reviving reputation, and recognition and should operate under university strategy. Managing university reputation today and tomorrow is difficult and challenging since the social media and social networks enable university stakeholders as "Customer Generated Media" (CGM), they are able to create and disseminate information and knowledge by themselves. Hence, university stakeholders should be involved with university matters for managing university reputation.

The reputation level of universities might be divided into 3 levels: low, medium, and high levels. The degrees of the reputation of the university have an effect on the process and approaches of managing university reputation. At a low reputation level (Newly founded) - Building university reputation through faculty and students, differentiating outstanding teaching program, making cooperation with overseas universities, attracting

famous people to work with the university, and creating perception about university identity / uniqueness, etc. At a moderate reputation level (Short-time established) - The university has a reputation for academics already so it should build its reputation through other activities such as drawing talented and well-known athletes to study at the university, continuously generating awareness of university identity / uniqueness, etc. At the high reputation level (Long-time established) - Building a university reputation by providing lecturers to interview about academic matters on social impact issues or undertaking large-scale research projects periodically and continuously.

2.1 Building university reputation

Building a sustainable corporate reputation has many elements that will help create value and allow the organization to stand out above its competitors, namely personnel quality, management quality, financial performance, quality of products and services, market leadership, customer focus, the attractiveness of the organization, social responsibility, corporate ethics, and reliability. There are five tips for building a corporate reputation to be successful, namely the executives and the management team must be the main driving force in building corporate reputation, have good reasons for building a corporate reputation, have hard skills and soft skills in management, be able to meet the needs or offer products or services beyond the public's expectation, and every person in the organization has a sense of ownership of the organization or brand (Wilcox, 2007 cited in Pitprecha, 2008: 35).

The reputation of the university is a reflection of the real performance of the university. The crucial and empirical evidence includes the performance of students, faculty, and university social services, etc. University reputation stems from the virtue accumulation and managing various aspects of the university about university identity/uniqueness and communicating what the university performs to the university stakeholders. In other words, the university reputation originates from many dimensions of the university image, such as location, university administrators / management, personnel, governance, social responsibility, etc.

A good university reputation, which has been accumulated over a long period, would evolve into a reputation capital and it is difficult to destroy. Because the reputation becomes a defense or shield to prevent the university from being damaged or inflicted. The university's reputation attracts new graduates who want

to study at the university and retains faculty and talented people who are well qualified to teach or work with the university for a long time. Corporate communicators or publicists view university reputation as a result of the university image while marketers look at university reputation as a result of building a university brand. The administrators view the reputation of the university are due to the designation of identity / uniqueness.

University reputation should be built on its background, the beginning of establishing a university and for what purpose, that offers a clear and reflective university identity. The long history of the university is an advantage that has an effect or influence on building a university reputation. Building a university reputation links to delivering sustainability and lasting results that has to initiate from the development of the innate essence, looks for strengths by differentiating from other universities, applies Customer Relationship Management (CRM) techniques and is achieved through research, teaching, academic service, and the maintenance of art and culture, and communicates and promotes outstanding university performances to the university stakeholders to be recognized and appreciated.

To build a university reputation, universities require qualified and standardized programs or courses (products or services) that meet the needs of the labor market and customers (students and parents). University identity/uniqueness and university branding must align with the strength of the learning areas of the university, for example, business, entrepreneurship, creativity, universality, sovereignty.

Establishing a university reputation by joining a reputable organization or agency of the community, local, country, and world, such as signing a memorandum of cooperation, questing for famous partners to work together, entering the competition, participating in training on topics that have a wide and deep impact, etc. University faculty, staff / personnel, current students, and alumni are the most important influence group in building a positive and negative reputation for the university. Sharing the success stories and reputations of current students and alumni also play a significant part in building the university reputation.

2.2 Maintaining / Sustaining university reputation

One of the best and most appropriate methods for maintaining and sustaining a corporate reputation is to manifest corporate social responsibility. The key areas that organizations around the world

demonstrate their corporate social responsibility are: showing responsibility for the quality of life of customers, people, and the communities in which the organization is located or operated (Wilcox, 2007 cited in Pitpreecha, 2008: 35) and paying attention to world problems or global movements, for example, global warming, climate change, etc.

The university has to maintain and continuously improve the quality and standards of the university, looks after the bad image that damages or dilutes the reputation of the university, and maintain strength as a selling point to attract talented prospective students and people to study or work with the university. These enable to continue to help build a reputation for the university. Universities that are already known or have a good reputation need to maintain their good reputation forever or expand the scope of their good reputation to other relevant stakeholders through communication and public relations to reinforce the awareness and maintain the university image and the university brand to remain or to become even better. To maintain the university reputation, the university must adjust and embrace the uncertain situations by applying change management and CRM techniques. University faculty, staff / personnel, current students, and alumni are the most important influence group in maintaining or sustaining the reputation of the university.

2.3 Recovering university reputation

Recovering a reputation needs a lot of time approximately 4 years but it cannot guarantee that the reputation of the organization will be restored (Gaines-Ross, 2008: 150). Therefore, it is safer to protect the corporate reputation as long as possible. To protect corporate reputation requires both good preparation and building goodwill (Sherman, 1999: 13). Recovering university reputation entails the improvement of long-term relationships and attitudes between the university and university stakeholders. Damage to the university reputation takes time to recover or revive and it might take up to 10 years. So, proactive management is required to protect and prevent bad university reputations. Negative university news is the main cause of bad university reputation. To recover university reputation university should employ organizational communication and PR based on facts, Integrated Marketing Communication (IMC) and CRM.

The degree of a reputation affects the recovering or restoring of the university reputation, for example, when the same negative external incidents

affect the university reputation, the most famous universities are affected for a short time and suffer less damage than non-prestigious universities. The recovering of the university reputation has to be carried out in combination with both short-term and long-term rehabilitation plans. In the short term, a university should provide positive information that promotes a positive image of the university and accelerates the confidence and trust of the university stakeholders. In the long term, university should develop, improve and upgrade the quality of education management to embrace a standard that is acceptable at all levels.

2.4 University recognition

Recognition is an internal process within a person's mind in which the acceptance or rejection of the corporate reputation must depend on various factors including individuality, innovation, time, system and structure of society and communication. University recognition involves the improvement of long-term relationships and attitudes between the university and university stakeholders. The university recognition needs to be accumulated and cannot happen immediately but relies on long periods and other factors such as labor market, university stakeholder mindsets, etc. The quality of the university is the most significant element to build recognition. The university recognition also depends on very colorful communication and public relations to attract the university stakeholders. Universities enter a competitive atmosphere or university rankings to create recognition at the national, regional and world levels.

3. Perspectives on university reputation

Khlaiophas & Pitpreecha (2009: 129) noted that corporate reputation management covers several various areas of management, including social responsibility, environmental management, human resource management, risk management, conflict management and issues and crisis management. All universities operate on social responsibility, environmental management, human resource management, risk management, conflict management, and issues and crisis management but universities should align reputation management through university brand building under the university position.

3.1 Social responsibility

The guidance concerning social responsibility or ISO 26000 covers governance, human rights, labor practices, environment, fair operation, consumer issues, and social participation and

community development (Nonthnathorn, 2010: 67). The social responsibility of the university is reflected in university identity / uniqueness. This can foster a good university reputation if the university pursues a corporate social responsibility project but if the university does not operate as promised it will lead to conflicts and a bad reputation. The important reason why universities should take into account social responsibility is that social issues have a greater impact on the university's reputation both today and in the future. The examples of social responsibility of the university are teaching students to be good citizens of society, conducting research to assist communities and society, protecting the environment, creating a green university, etc.

3.2 Environmental management

One way to build a corporate reputation is by implementing an environmental management system in the organization. The organization is expected to invest in an environmental program, which can take a measure of the organization's environmental returns, such as a reduction in carbon emissions (Environment management system ISO 14001, n.d.). Universities should focus on environmental management as a social and world issue. And it links to the social responsibility of the university. If environmental management is neglected, it can lead to a serious impact on the university reputation. The university's reputation will decline directly or indirectly. The university should build a good relationship with the communities surrounding the university to provide a safe and livable environment around the university. Additionally, a university should provide a green environment within the university to be pleasant to live, study and work leading to good health and hygiene conditions of faculty, staff / personnel and students. Examples of environmental management in university are establishing green university policy, preventing chemicals leaking into the community, having a grease trap before releasing wastewater, using of resources economically, separating the wastes before disposing of, using environmentally friendly products, reducing greenhouse gas emissions and so on.

3.3 Human resource management

A survey of 10 reasons people "living" or "going" from an organization conducted by Watsons Wyatt (Thailand) Co., Ltd. with a group of 6,700 workers indicates that corporate reputation is the tenth reason most people choose to stay in their original workplace (Manager Weekly 360 Degree, 2005). Hence, universities should care about human resource

management because talented faculty, staff / personnel are considered as intangible assets of the university. The university is essential in ensuring faculties, staff / personnel understand the university reputation in order to protect university reputation management. These individuals might harm the university reputation. University should take care of staff / personnel so they can work in a good atmosphere. If staff / personnel make mistakes, work inefficiently and lack in quality, it will affect university reputation directly or indirectly. Poor human resource management could cause a moderate impact on the university's reputation. University needs to provide a morale-building system for staff / personnel, including the recognition of the person who creates the university to be famous.

3.4 Risk management

Establishing a corporate strategy and situation that affects the reputation of the organization is one type of risk because if the mistakes occurred, it would affect organizational operations as well as other risks. This concept is the origin of the Enterprise Risk Management (ERM) (Wong & Wattanajirat, MD cited in Khlaiophas & Pitpreecha, 2009: 129). Universities should emphasize reputation risk apart from operational risk, strategic risk, financial risk, and marketing risk. University reputation risk involves providing the right information to university stakeholders, managing by fact, informing the exact financial status. University must set or provide systematic proactive management because they might be uncontrolled external influences on the university reputation but they may not be realistic.

3.5 Conflict management

Conflict management has directly involved corporate reputation management and communication and public relations. After the organization dealing with a crisis and severe conflicts in the organization, the organization must swiftly be restored of confidence for being recognized and cooperating by the various parties. The method that can be used is reputation management (Cameron, Wilcox & others, 2008 cited in Pitpreecha, 2008: 32). Universities have to set good and efficient methods to handle internal and external conflicts. The university should not have conflicts with the people / villagers / communities surrounding the university because it would affect the university reputation at a very high level. Internal conflicts within the university should be controlled in the university because the university's reputation will become broad and severe. University administrators play a key role in managing conflicts both

internally and externally. To mitigate conflicts within universities, require coordinating each interest group and building understanding between each other through negotiations or discussions. Activities should be provided to reduce conflicts within the university, such as banquets, sporting events, meetings with the executive management team.

3.6 Issue & crisis management

Issue and crisis are interconnected and inseparable. To deal with issues is imperative since it is a defense before the problem escalates into a crisis and damages the reputation of the organization or harms the organization's reputation. Universities should set efficient measures for managing problems and crises otherwise it might lead to a high negative impact on the university reputation. Issues and crises are directly linked to the reputation of the university. When the university is in a crisis, university staff / personnel should not be those who further discredit the university. University's organizational communications department should have a means of communicating with creativity so that the crisis does not escalate or worsen. Universities should address issues before they expand into a crisis. University reputation management is more proactive than passive. In other words, it is risk management. The main problem of the university is related to quality and standards. Managing a university crisis is a matter of restoring university reputation. Each crisis should use a different method to solve. The same crisis happening at different times should also apply different solutions. Examples of problems and dilemmas in a university are corruption, freshmen adoption, etc. There are examples to solve university crises, such as inaction, press conference, presenting good news.

4. University reputation indicators and measurement

The reputation of the organization is difficult to measure but academics, professionals, and related media organizations have researched and suggested a wide range of corporate reputation indicators, such as the Cameron and others' good corporate reputation indicators (Cameron & others, 2008: 53 -55 cited in Pitpreecha, 2008: 33), most favorite companies by Fortune's Most Admired Companies (Pitpreecha, 2008 : 33), Harris-Fombrun Reputation Quotient: RQ by Harris-Fombrun, RepTrack @ System by the Reputation Institute, Customized Reputation Template by Doorley & Garcia (2011: 13), Corporate Reputation Dimension (Reddiar, Kley, & Abratt, 2012. : 33-35), Criteria for

ranking the most favorite companies by Tycoon Magazine / Brand Age (Thailand Most Admired Companies) and factors that influence the reputation of business organizations in Thailand (Santawee, 2012 : 99 - 100). University reputation indicators and measurement cover various elements of the university. For example, following up to date on both positive and negative news about the university from various media, including on social media or social networks every day, conducting research inquiring about needs or expectations with the university's stakeholder group every year, especially with students and parents, measuring brand awareness, brand positioning, and brand identity every year, tracking university rankings from trusted organizations or agencies, tracking of award-winning universities in the community, local, national, and world levels, increasing the number of international students yearly / the number of applicants enrolled each year, the number of research articles published each year, the works of instructors leading to the reputation of the university / the famous alumni contributing to the society.

5. Factors impact on university reputation

There are many dimensions of managing corporate reputation. Three factors affect current and future corporate reputation (Gaines-Ross, 2008: 16-24) namely, the information revolution, influence group and public trust. The arrival of social media or social networks today are extremely fast and strongly impact the university reputation management both in a positive and negative manner. For example, on the positive side, university stakeholders can reach the required fact datasheet of the university very quickly at anytime or anywhere. Whereas, on the negative side, university fake news leads to damage to the university and university management team. The university needs to plan, produce and monitor the flow of university information both inside and outside the university continually to protect and maintain the university's reputation.

Moreover, He (2010) indicated that university stakeholder and their students put the university reputation indicators into the following orders: (1) Product and Service (2) Leadership (3) Innovation (4) Workplace (5) Performance (6) Governances and (7) Citizenship whereas the general public put the university reputation indicators into the following orders: (1) Product and Service (2) Innovation (3) Workplace (4) Leadership (5) Performance (6) Governances and (7) Citizenship.

Several factors related to university reputation

management have effects on university development, thriving and prosperity but the most critical factor is people or university stakeholders, such as the university council committee, board of university administration, faculty, staff, current students, and alumni. Other factors include university background, policy, vision, mission, leadership, strategy, organizational culture, brand/position, image, organizational communication and public relations, the process of university management, authenticity, evaluation/ranking, technology and innovation, learning management, curriculum or program, and university social responsibility (Chotevithayathanin, 2016: 281-283).

6. Ranking of noted higher education institutions

The reputation of higher education institutions is partly attributed to the results of higher education institutions ranking. The ranking of Thai higher education institutions on the URANK website provides 10 indicators for ranking elements: faculty and teaching, atmosphere and environment, modernization and adequacy of the instrument and learning equipment, modern courses, support for activities and services to learners, scholarships, academic value, research, learner confidence, and reputation and recognition. The Times Higher Education World Reputation Rankings (2013) provides a five-component ranking metric: research, reference, teaching-learning environment, internationalization, and industry income.

A university can apply the ranking of noted higher education institutions to better university development or improvement, to lead collaboration or networking with a famous university abroad, to select talented or good students in every part of the world, and to make the university more well-known. The university rankings reflect the performance and reputation of the university but applying the university ranking results requires consideration of the indicators and processes of measurement. Furthermore, the agency or organization that ranks the university is reliable or not, the purpose of the university ranking focusing too much on business interests or not. If Thai universities stress too much on the indicators of university ranking, it may lead to the lack of the diversity of teaching and learning and strengths of the university.

Conclusions

University reputation can be created through university strategy by asking some questions, such as

what is the university, what the university does, what is the type of university, what is the university direction, what is the university characteristics, what is outstanding about the university, who are the university rivals, and what is the university prototype. Morrissey (2012) indicated that to build successful reputations, the university administrator team should focus on organization-level and steering through strategic thinking-frame.

Managing university reputation is imperative to know and understand university stakeholders' expectations and needs because each group of university stakeholders does not need the same things. Dowling (2002) and Schultz & Werner (n.d.: 2) explained that managing corporate reputation can be built by making the organization identity and image corresponding to stakeholders' expectations in a long term. Also, Pitpreecha (2010: 1) proposed that corporate stakeholders are individuals or groups of people who influence organization decisions, policy establishment and operation. All of them anticipate the organization in different needs.

The reputation of the university is the result of decisions made by stakeholders with the university through their perceptions of the behavior or actions of the university as being promised or not. However, the good reputation of a university takes a longer time to establish than its image. A good university image will lead to a good university reputation as well. Balmer & Grayser (2006); Fombrun & Shanley (1990); Glynn (2000); Markwick & Fill (1995); Suchman, (1995) cited in Dickinson-Delaporte, Beverland, & Lindgreen (2010: 1858) stated that corporate reputation is a total reflection of stakeholder decisions over a time on organizational communication and actions. Additionally, Martinez & Norman (2004: 26 cited in Rungrat Chaisamrej, 2013: 441) stated that corporate reputation is the sum of organizational appeal built into the feelings of all stakeholder groups. Corporate reputation has more complex dimensions, both in reputational components and longer periods. Kongsompong (2009: 130), described that a good corporate reputation is something that cannot happen by itself or by chance but the organization must continually invest in building a good reputation in the views of all stakeholders.

University reputation management requires organization communication and public relations as a mechanism and tool engulfing building, maintaining and recovering reputation, and recognition for enabling university stakeholders to reach and understand what the

university thinks and performs. Brown (2010: 58) illustrated that the study of corporate reputation involves the 3 big points. Firstly, building a reputation, if the university performance is best but both internal and external university stakeholders do not know, it will be useless. Secondly, maintaining reputation, it is crucial to ensure university stakeholders or group target are always aware of the university. Lastly, recovering reputation, if a university reputation is ruined or threatened, it is important to recover a good university reputation back but university administrators should always be aware that it is not easy to revive bad reputations because university stakeholders do not forget the university's notoriety.

The creation of a university image and a university brand enables the university reputation management to be complete and successful faster and easier. If a university can build a university brand that is famous and popular, it means the reputation of the university as a whole. Laukaikul (2007: 36); Saengratanadet (2010); Ruenrom (2013: 201) stated that corporate identity, corporate image, corporate brand, and corporate reputation are not the same thing, but they are very closely related and can reflect back and forth between each other. The aim of building a corporate brand is, at last, to create a corporate image and corporate reputation, respectively.

Each university has a different context or background according to philosophy, values, vision, mission, strategy, objectives, and goals, etc. Hence, the university reputation has several dimensions. There are numerous and varied quality criteria, standards, or indicators of the university reputation. The Oxford University Center for Corporate Reputation (2008) summarizes that the reputation dimension is multiple. The organizations are not famous in a single aspect but are based on individual's perspective of the reputation aspect. Reputation has impacted many different dimensions, and the degree of differences is the result of the intermediaries such as media, rule supervisors, rating companies, and professional consultants, etc.

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References

- Brown, R. (2010). Reputation management. *Business Information Review*, 27(1), 56–64 Retrieved 2013, February 23 from <http://bir.sagepub.com/content/27/1/56>
- Chaisamrej, R. (2013). *Corporate reputations: Survey of literature review and theoretical concepts for factor driven study on reputation in all business dimensions*. Retrieved 2015, March 2 from <http://www.ejournal.su.ac.th/upload/662.pdf>
- Chinavorn, A. (2010). *Public relations media*. Bangkok: Chulalongkorn University.
- Chotevithayathanin, N. (2016). Reputation management strategies for Rajabhat University. Doctoral dissertation. Department of Educational Policy Management and Leadership, Faculty of Education, Chulalongkorn University.
- Curtin, P. (2009). *Managing university reputations*. 4th Asia Pacific Conference on Educational Integrity (4APCEI) 28–30 September 2009 University of Wollongong NSW Australia. Retrieved 2014, November 14 from <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1033&context=apeci>
- Dickinson-Delaporte, S., Beverland, M. & Lindgreen, A. (2010). Building corporate reputation with stakeholders: Exploring the role of message ambiguity for social marketers. *European Journal of Marketing*, 44(11/12), 1856-1874. Retrieved 2013, March 18 from <http://www.emeraldinsight.com/journals.htm?issn=0309-0566&volume=44&issue=11&articleid=1891433&show=pdf>
- Doorley, J. & Garcia, H. F. (2011) *Reputation management: The key to successful public relations and corporate communication*. 2nd edition. New York, NY: Routledge.
- Dowling, G. R. (2002). *Creating corporate reputations: Identity, image, and performance*. Oxford: Oxford University Press.
- Drexel University's LeBow College of Business. Center for Corporate Reputation Management. n.d. *The importance of reputation*. Retrieved 2014, November 14 from <http://www.lebow.drexel.edu/academics/centers/reputation-management/importance-reputation>
- Environment management system (ISO 14001)*. (n.d.) Retrieved 2015, May 1 from <http://www.anav.co.th/iso14001.html>
- Gaines-Ross, L. (2008). *Corporate reputation: 12 steps to safeguarding and recovering reputation*. Hoboken: John Wiley & Sons.
- Haywood, R. (c2005). *Corporate reputation, the brand & the bottom line: Powerful proven communication strategies for maximizing value*. London: Kogan Page.
- He, H. (2010). *Indicators for reputation measurement of communication universities in China*. Communication Arts Thesis, Department of Public Relations, Faculty of Communication Arts, Chulalongkorn University.
- He, H. and Pitpreecha R. (2011). Indicators for reputation measurement of communication universities in China. *Journal of Public Relations and Advertising*, (4), 2, 102-123.

- Jaicharnsukkit, P. (2009). *Corporate image & brand management- When reputation is a capital worth greater than the property of the organization*. Retrieved 2013, June 2 from <http://www.drphot.com/images/journal/2552/brandmarketing52/Article%20Corp%20Image%20Apr%2009.pdf>
- Kecharananta, N. (2009). *Strategic management*. Revised. Bangkok: Se-Ed Book.
- Khlaiophas, N. & Pitpreecha, R. (2009). Corporate reputation indicator for life insurance business in Thailand. *Journal of Public Relations and Advertising*, 2(2), 127-147.
- Kongsompong, K. (2009). *Multicultural marketing management*. Bangkok: Sasin Graduate Institute of Business Administration, Chulalongkorn University.
- Laphirattanakun, W. (2010). *Public relations*. 12th edition. Bangkok: Chulalongkorn University.
- Laukaikul, S. (2007). *Sufficiency Branding*. Bangkok: Manager Weekly.
- Manager Weekly 360 Degree. (2005). *10 reasons why employees 'stay' or 'go' from the organization*. Retrieved 2013, June 2 from <http://www.manager.co.th/mgrWeekly/ViewNews.aspx?NewsID=9480000159373>
- Nonthnathorn, P. (2010). *Corporate social responsibility management: Creating sustainable competitive advantage*. Bangkok: ThinkbeyondBook.
- Office for National Education Standards and Quality Assessment (Public Organization). (2012). *Manual for higher education institutions the third-round of external quality assessment for higher education 2011-2015 (Revised November 2011)*. 2nd edition. Bangkok: Office for National Education Standards and Quality Assessment (Public Organization).
- Oxford University Centre for Corporate Reputation. (2008). *Research into all aspects of reputation*. Retrieved 2016, September 14 from <http://www.sbs.ox.ac.uk/faculty-research/reputation/research-and-publications>
- Pattanabunboon, P. & Anantachart, S. (2009). Influences of corporate image on service brand extension. *Journal of Communication Arts*, 27(2), 117-147.
- Pitpreecha, R. (2008). The concepts of corporate reputation management for lasting recognition. *Journal of Public Relations and Advertising*, 1(1), 28 -37.
- Pitpreecha, R. (2010). *Indicators for measuring business reputation in Thailand*. Bangkok: Communication Arts, Chulalongkorn University.
- Pitpreecha, R. (2011). *Indicators for measuring university reputation in Thailand*. Bangkok: Communication Arts, Chulalongkorn University.
- Rattananakin, S. (2011). *Vision and strategies for image building of Thai higher education institutions and higher education personnel*. Retrieved 2013, July 23 from <http://cuast.net/wp-content/uploads/2011/01/%E0%B8%9A%E0%B8%A3%E0%B8%A3%E0%B8%A2%E0%B8%B2%E0%B8%A2%E0%B8%9C%E0%B8%A8.%E0%B8%AA%E0%B8%B8%E0%B8%98%E0%B8%B5%E0%B8%A3%E0%B9%8C.ppt>
- Reddiar, C., Kleyn, N. & Abratt, R. (2012). Director's perspectives on the meaning and dimensions of corporate reputation. *South Africa Journal of Business Management*, 43(3), 29-39.
- Ruenrom, G. (2013). *Corporate brand success valuation*. Bangkok: CyberPrint.
- Saengratanadet, P. (2010). *How to build corporate brand?* Retrieved 2013, September 10 from <http://www.brandage.com/Modules/DesktopModules/Article/ArticleDetail.aspx?tabID=7&ArticleID=6518&ModuleID=701&GroupID=1532>
- Santawee, K. (2012). *The factors influencing corporate reputation and corporate reputation management in Thailand*. Doctoral dissertation. Faculty of Communication Arts, Chulalongkorn University.
- Schultz, HB & Werner A. (n.d.). *Reputation management*. Retrieved 2013, August 9 from http://www.oxford.co.za/download_files/cws/Reputation.pdf
- Sherman, M. L. (1999). Making the most of your reputation. In *Reputation management: Strategies for protecting companies, their brands and their directors*, 9-15. London: Kogan Page.
- Sriwiboon, S. (2004). *Corporate identity design*. 2nd edition. Nonthaburi: Core Function. Techakana. J., 2016, 27 January. Interview.
- The Times Higher Education World Reputation Rankings*. (2013). Retrieved 2013, July 14 from <http://www.time.shighereducation.co.uk/world-university-rankings/2013/reputation-ranking>
- Wongkiatrat, W. & others. (2005). *Strategic planning: The art of mapping organization towards excellence*. 3rd edition. Bangkok: Innographic.
- Wongkiatrat, W. (2011). *Principles and practices in strategic planning of government agencies in a performance-oriented budgeting system*. 3rd edition. Bangkok: Chulalongkorn University.

Book Review: Grounded Theory Research

Titaree Boontantrapiwat & Pakorn Akkakanjanasupar



Review by: Titaree Boontantrapiwat
Pakorn Akkakanjanasupar
Book name: Grounded Theory Research
Author: Siwaporn Poopan
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“Grounded Theory Research” was first published in 2022 by Dr. Siwaporn Poopan, a lecturer from the Department of Education, Faculty of Social sciences and Humanities, Mahidol University, Thailand, with the decisive goal of bringing readers to explore the unfamiliar world of the grounded theory research. As it is undeniable that the world is constantly changing due to countless social factors, and some are complex, existing theories might not be as effectively or appropriately applicable to explore the concerned research problems and advance the new one. This book is divided into three sectors: preliminary, main text, and end matter.

First, the preliminary section outlined the introduction that highlighted those existing theories might not be as applicable as they were supposed because of social changes, which led to the rising popularity of grounded theory under this first publication, acknowledgment, and content page.

Second, the main text comprises seven introductory chapters that begin with the background details and the different types of grounded theory, followed by the research design and procedures, and the critique and the future of this research design.

Chapter 1 Characteristics of grounded theory research. The author started with the basic information about grounded theory and the different names used and highlighted the objectives that researchers would gain by employing grounded theory. Then, a short history and the development of grounded theory where it was first started until the most recent development were introduced. The chapter ended with the seven base characteristics of grouped theory.

Chapter 2 Types of grounded theory research. This chapter provides details regarding the research approach,

coding method, data categorization, objective of data analysis, and presenting developed theory of the three types of grounded theory, including (1) systematic grounded theory, (2) emerging grounded theory, and (3) constructive grounded theory. Methods to select grouped theory were also addressed to help future researchers better understand and decide the most appropriate type of grouped theory.

Chapter 3 Research procedures for grounded theory research. There are many types of grounded theory. Each had its own distinguished research procedures; however, the author only focused on describing research procedures of a systematic grounded theory due to its popularity, clear, simple, and systematic process. The research procedures based on constructive grounded theory can be divided into eight steps: (1) analyzing research problem or research objective, (2) creating research procedures, (3) applying for IRB (institutional review board), (4), collecting data, (5) coding, (6) using selective coding and developing theory, (7) evaluating the developed theory, and (8) reporting the developed theory regarding constructive grounded theory.

Chapter 4 Data collection for grounded theory research. The author explained the process of collecting data for this qualitative research was separated into seven activities as of (1) determining locating site and participants, (2) gaining access and developing rapport, (3) selecting site and participant using purposeful sampling, (4) collecting data, (5) recording information, (6) minimizing filed issues, and (7) storing data securely.

Chapter 5 Data analyze for grounded theory. The author accentuated the unique quality of grounded theory research that the data collected can be analyzed simultaneously without completing the data collection process first. The grounded analysis was divided into two phases: coding and analyzing the data for theory development. First, the process of coding which divided into 8 steps: (1) preparing the document, (2) reading the data in detail, (3) coding, (4) creating the coding list, (5) grouping the code, (6) categorizing the theme, (7) creating conceptual map, and (8) developing narrative story. Second, analyzing the data theory development based on systematic grounded theory can be done through 3 stages: (1) open coding for categorizing the data, (2) axial coding for examining the connection of data in order to develop the central phenomenon, (3) selective coding for constructing the linkage of the data in order

to proposed a theory.

Chapter 6 Evaluating the quality, progress, and challenges of grounded theory research. To understand grounded theory research, the author explained the three dimensions of grounded theory research, methods to evaluate grounded theory research, advancement of grounded theory research, and limitations concerning grounded theory research.

Third, the end matter consisted of bibliography, index and information about the writer herself.

In summary, the book consisted of the fundamental information and guidelines for researchers interested in conducting this qualitative research approach. Since existed theory might not always be able to apply to the current research problems because of the change in time, environment and people, creating a new theory could give new insight and new knowledge toward the specific problem. Simple and clear explanations of grounded theory were given where the readers an opportunity to experience the whole process of planning, collecting data, analyzing data, and formulating the new theory. Several times, the author also emphasized unique characteristics of this research approach which involved recruiting experienced participants, the decision of the researcher to decide when the information is rich enough to create a new theory, and data analysis that could be concurrently accomplished with the data collection processes. This book is exceedingly recommended for anyone interested in conducting a grounded theory research as the author had given the understandable languages and terms explained with certain examples. It is also beneficial for researchers and graduate students to understand grounded theory research better as the information was well illustrated with details and real-world examples.

Reference

Poopan, S. (2022). *Grounded Theory Research*. Bangkok, Thailand: Borisuth printing Co., Ltd.

Guidelines for Writing and Submitting Original Manuscripts for Publication in Journal of Multidisciplinary in Social Sciences

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