

# The Mediating Effect of Social Media on the Relationship Between Travel Preference and Tourist Behavior of Local Tourists in Davao City

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This paper aims to determine the mediating effect of social media on the relationship between travel behavior and tourist preference. This paper utilized the mediation analysis design to determine whether social media significantly affects the independent and dependent variables. For the statistical tools, the proponents of the study utilized descriptive statistics, Sobel's test, mean and standard deviation. Also, the proponents of the study utilized data from questionnaires gathered through an online google form. Most of the respondents are single females, college-level, and use Facebook most of the time. Therefore, this is the social media platform that the majority utilize. It has been revealed in the study the three sets of correlated variables: Travel behavior vs. tourist behavior, travel preference vs. social media, and social media vs. tourist behavior, have a strong positive linear relationship between the two quantitative variables. Thus, the study proponents concluded that there is an indirect effect between the travel preference and tourist behavior of local tourists in Davao City via social media. Lastly, the study's findings reveal the fundamentals of how visitors make decisions, which are essential for enhancing the competitive advantages of cultural destinations. Significant findings from the study are beneficial to the growth of cultural tourism in Davao City.

*Keywords:* travel preference, tourist behavior, social media, mediating effect

## Introduction

Tourist behavior has drastically changed, especially during the early parts of 2020 because of the COVID-19 pandemic. This has caused the tourism and hospitality industry to adapt and change in order to comply with the demands of the government with its policies, along with the demands and behavior of the tourists and visitors (Awad-Nunez et al., 2021). The dynamics of tourists' travel behavior have been studied since the 1980s, mainly using panel data. However, most available research concentrates on a small portion of the entire life course and a small number of tourist travel behaviors, particularly discrete-type behaviors. Very few insights are obtained from real-life cycle data (Davis & Shiftan, 2020).

Numerous research concerns were uncovered during multiple research discussions through in-depth discussion, and it was confirmed that different life-oriented approach is essential for examining travel behavior

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across the course of a person's life. Numerous life experiences have been utilized as a form of an explanatory variable to explain variations in travel behavior (Adeke, Zava, & Etika, 2020). Furthermore, anticipating and understanding the behavior of tourists is highly essential, especially for making decisions, planning for transportation, making policies during the pandemic, and more based on the travel demands of people (Abdullah, Dias, Muley, & Shahin, 2020).

In the hospitality and tourism industry, consumer or tourist preference is a term used to describe the decisions visitors make in order to optimize individual level of pleasure when visiting a place or a tourist spot, and influenced by their motivations (Ralston & Tran, 2016). Meanwhile, tourist behavior refers to the overall attitude that tourists or visitors exhibit while participating in any activities in which the tourism and hospitality industry is involved (Juvan, Omerzel, & Maravic, 2017). Tourist preference and tourist behavior go hand in hand because preference is one of the factors that influence behavior and our desires (Aw, 2011). Thus, tourist behavior is the dependent variable, and tourist preference is considered an independent variable, the main variables studied in this study.

Numerous studies have been conducted to analyze the relationship between tourist behavior and preference which is why the researchers decided to introduce social media as a mediating variable. The mediating variable will help the researchers postulate that tourist preference will affect social media, which will affect tourist behavior. The utilization of the impact of social media on the two variables is a research gap because past research has yet to meddle with social media as a mediating variable for understanding tourist behavior and tourist preferences. Studying the mediating effect of social media is timely and relevant because online marketing plays a role in the hospitality and tourism industry. Through social media, people from different areas, cities, and countries can connect with many tourism-related enterprises. Aside from that, people utilize different social media platforms to gather knowledge and decide wisely on their trip plans, which saves them resources and time. Additionally, it enables users to communicate about their travel-related shared experiences. Tourists and travelers may discuss a good or bad trip they encountered at a restaurant, hotel, or other business. Social media is difficult to ignore since it acts like a customer service channel (Diana, 2022).

### **Theory of Planned Behavior**

During the 1980s, Azjen developed the theory of planned behavior. This theory contends that the choice of a specific individual to engage in or refrain from engaging in a particular action, such as shopping, smoking, going out, and others, can be influenced by their intention to do so (Brookes, 2021). Motivating variables that drive action were thought to be captured by a person's intentions, which also indicate how much effort a person is prepared to put forth to carry out the conduct. In general, an activity ought to be more likely to be completed if there is a higher motivation to indulge in it (Ajzen, 1985). Additionally, the intentions in the theory of planned behavior are affected by three factors: personal attitudes, subjective norms, and perceived behavioral control (Mbawana, 2018).

### **Preference Theory**

The fundamentals of individual choice behavior were studied by preference theory, including recognizing and measuring a person's preferences among various options and creating useful preference representation functions. The fact that preference theory was founded on strict axioms that describe people's choosing behavior is a vital aspect of the theory. These preference axioms justify the quantitative study of choice and are crucial for creating preference description functions. Additionally, it is essential to know that the decision sciences were built upon preference theory (Dyer & Jia, 2016).

Preference theory will benefit this research because it can explain the relationship between tourist preference and behavior. According to the preference theory, if a customer buys a particular bundle of products, then, assuming constant price levels and income, that set of choices is “revealed preferred” to any choice that the person could afford. An observer can deduce a model of the preferences of tourists by altering various factors (Robert & David, 2013).

## **Methodology**

### **Design**

The study utilized the descriptive research design. Descriptive research design is a quantitative research technique in which the researchers will thoroughly explain the topic issue. Descriptive research design is a type of research design that is entirely theoretical, with the researcher gathering data, processing it, organizing it, and then clearly presenting it (Anon, 2021). In contrast to a scientific research design, the researchers in this descriptive study approach will observe and assess the mediating effect of social media on the relationship between tourist preference and tourist behavior without changing or controlling any of them (Olivar, Ocio, & Sitier, 2022; Olivar & Tangonan, 2022; Olivar, Bulac, Genovia, & Sarip, 2023).

### **Instruments**

In assessing the mediating effect of social media, on the travel preferences, and tourist behavior of local tourists in Davao City, a survey questionnaire derived from the study of Javed, Tuckova, and Jibril (2020), entitled “The Role of Social Media on Tourist’s Behavior and Preference: An Empirical Analysis Millennials From the Czech Republic” was utilized. To best serve their target respondents, the researchers invested much time, energy, and teamwork in creating their questionnaire. A combination of appropriate questions adapted from previous studies and original questions developed by the researchers was used to produce the survey. The poll can be divided into five main sections, each with subsections that dealt with topics including participant usage of social media, tourist preferences, and tourist behavior. Furthermore, Likert scale type of questionnaire was employed to gauge whether a respondent agrees with or disagrees with a statement. The respondents received copies of the questionnaire once the professor approved it. Following the respondents’ participation, the researchers notified the respondents about the study’s specific and general objectives. The respondents’ participation was appreciated, and the researchers’ queries were addressed. Finally, the researchers then summarized the result of the survey forms the moment all of the participants are done responding.

### **Data Gathering and Treatment**

The information and data obtained from the online survey questionnaire were recorded, examined, summarized, and analyzed. The data gathered were totaled and processed for interpretation according to how often participants ticked each item on the online study instrument. The researchers used secondary resources, such as published papers and literature, in addition to primary data to support the survey results. Since the data that were gathered from the Likert scale were interval data, the researchers used mediation analysis and Sobel’s test. Mediation analysis is a statistical technique and method utilized to quantify the causal chain between an antecedent variable, a mediating variable, and a dependent variable. Meanwhile, Sobel’s test is a test used to determine whether the mediating effect is significant or not (MacKinnon & Valente, 2019).

## Results and Discussion

### Social Media Attitude

Table 1 shows the results of the test of social media attitudes of local tourists in Davao City. The results show that all the statements in this part acquired a relative value in terms of their mean and standard deviation. The statements “Social media influences my choice of destination” and “Social media influences my choice of attraction” acquired the highest mean with a value of 4.49, which indicates that most of the respondents agree with the statements in this part. The statement, “Posting a few old vacation photos from my post on social media may be affecting my desire to travel”, on the other hand, acquired the lowest mean value, with a value of 4.10, which still indicates that most of the respondents agree with the said statement. To summarize, the overall mean for the level of social media attitude has an overall mean value of 4.35, indicating that most participants agree with the statements in this part. Meanwhile, the overall standard deviation for the level of social media attitude is 0.697, which indicates that the data acquired are grouped around the mean, less spread out, and reliable.

Table 1

*Level of Social Media Attitude of Local Tourists in Davao City*

Items	Mean	Standard deviation	Description
1. Social media influences my choice of destination.	4.49	0.933	Very high
2. Social media influences my choice of attraction.	4.49	0.89	Very high
3. Social media influences my choice of accommodation.	4.45	0.954	Very high
4. Social media travel advertisements can influence travel decisions.	4.42	0.806	High
5. It raises your probability of traveling if you see a photo or video from vacation posted on social media pages.	4.42	0.788	High
6. I will be excited if any travel firm or agency offers discount promos on their social media platforms.	4.34	0.819	High
7. I relied on social media reviews of tourist destinations before planning my vacation.	4.26	0.851	High
8. Social media influences my choice of transportation.	4.13	1.113	High
9. Posting a few old vacation photos from my post on social media may be affecting my desire to travel.	4.1	1.01	High
Overall	4.35	0.697	High

The study of Zeng and Gerritsen (2014) proves the findings acquired. Complex data and judgment behaviors, tourist promotion, and the focus on guiding principles for engaging with customers are all significantly influenced by social media. Utilizing social media to advertise travel-related items has shown to be a successful tactic. Furthermore, information and communication technology are crucial to the tourist industry’s promotional efforts, sales, and maintenance of client relationships. The most crucial information is obtained via online interpersonal influence or word of mouth, especially when tourists choose a place (Zivkovic, Gajic, & Brdar, 2014).

Furthermore, high social media attitude implies that social media does play a massive role in people’s lives. This means that society, especially the local tourists in Davao City, heavily relies on social media in the modern day. Additionally, because of social media, people can be updated about different things, making them more aware of what is happening in different places even though they are just scrolling on their own respective phones. Therefore, it is also safe to imply that the society that we know today will be different and more comfortable and convenient with the presence of social media.

### Travel Preference

Table 2 shows the test results of the preference level of local tourists in Davao City. The results show that all the statements in this part acquired a relative value in terms of their mean and standard deviation. The statement “It is useful when tourism operators respond to traveler’s comments” acquired the highest mean with a value of 4.62, which indicates that most of the respondents agree with the statement. The statement “The ordinary traveler’s views of destinations cannot be relied on”, on the other hand, acquired the lowest mean value, with a value of 3.06, indicating that most of the respondents are neutral with the statement. To summarize, the overall mean for the level of travel preference of local tourists in Davao City has an approximate overall mean value of 4.00, which indicates that most of the participants agree with the statements in this part. Meanwhile, the overall standard deviation for the level of social media attitude is 0.606, which indicates that the data acquired are grouped around the mean, less spread out, and reliable.

Table 2

*Level of Travel Preference of Local Tourists in Davao City, n = 535*

Items	Mean	Standard deviation	Description
1. It is useful when tourism operators respond to travelers’ comments.	4.62	0.733	High
2. I prefer consumer reviews over a hotel’s description of itself.	4.51	0.84	High
3. It is best to rely on state tourism websites for information when planning a trip.	4.44	0.863	High
4. It is positive when a travel provider responds to traveler User-Generated Content.	4.41	0.834	High
5. State tourism websites would be better if travelers could contribute User-Generated Content.	4.28	0.822	High
6. Third part travel sites, such as tripadvisor.com, are the most reliable source of user-generated content.	4.11	0.893	High
7. User-Generated Content has limited use when I plan my travel.	4.08	0.852	High
8. I only take notice of User-Generated Content when it was provided by independent travelers (i.e., with no involvement from travel operators).	4.02	0.952	High
9. Travel recommendations provided by unknown people could be more helpful.	3.11	1.255	Low
10. Tourism operators should not incorporate User-Generated Content into their sites	3.07	1.156	Low
11. The ordinary traveler’s views of destinations cannot be relied on.	3.06	1.217	Low
Overall	3.97	0.606	High

The findings acquired are proven by the Study of Yuan et al. (2022); travel preferences and social media impact are shown to be correlated. By learning user segmentation across platforms, social media platforms will allow to draw in more visitors. Furthermore, destination marketers and the tourism industry should pay attention to and react to the demands of people on social media and potential tourist markets, as well as boosting the specific tourism destination’s choice approval percentage.

Furthermore, high travel preference implies that the decision-making and choice of preferences of local tourists in Davao City heavily rely on social media. This means that most of the time, people want to try or visit places others post on their social media. Social media became a customer channel for past customers and potential customers. In addition, potential tourists and visitors would prefer places that appear pleasing to social media customers. Therefore, it was implied that the high travel preferences of local tourists in Davao City was connected to their high social media attitude.

### Tourist Behavior

Table 3 shows the results of the test of tourist behavior of local tourists in Davao City. The results show that all the statements in this part acquired a close value in terms of their mean and standard deviation. The statement “I think I am capable of searching for a tourist destination over the internet (social media)” acquired the highest mean with a value of 4.59, which indicates that most of the respondents agree with the statements in this part. The statement “I based my actions on vloggers that I see on the internet”, on the other hand, acquired the lowest mean value, with a value of 3.93, which still indicates that most of the respondents agree with the said statement. The standard deviation value recorded on the 10 statements ranged from 0.748 to 1.083. To summarize, the overall mean for the level of social media attitude has an overall mean value of 4.31, indicating that most participants agree with the statements in this part. Meanwhile, the overall standard deviation for the level of social media attitude is 0.647, which indicates that the data acquired are grouped around the mean, less spread out, and reliable.

Table 3

*Level of Tourist Behavior of Local Tourists in Davao City, n = 535*

Items	Mean	Standard deviation	Description
1. I can search for a tourist destination over the Internet (social media).	4.59	0.75	Very high
2. Searching for exciting places on social media is something I intend to do.	4.57	0.752	Very high
3. I have the resource, knowledge, and ability to look for exciting destinations.	4.54	0.748	Very high
4. I have often used the Internet to search for tourist destinations.	4.49	0.818	Very high
5. I love visiting social media to see new places of interest.	4.44	0.814	High
6. I will use and recommend social media channels for friends and relatives in search of tourist destinations.	4.34	0.829	High
7. I use social media to search for how to behave appropriately in a tourist destination.	4.15	0.932	High
8. My behavior on different social media platforms is different from how I act in my daily life.	4.03	1.068	High
9. When visiting a tourist spot, I base my actions on how I want people to perceive me on social media.	4	1.051	High
10. I base my actions on vloggers that I see on the Internet.	3.93	1.083	High
Overall	4.31	0.647	High

The study of Han, Chung, and Koo (2016) proves the findings acquired. The reputation of the reviewers who originated, generated, and distributed the information impacts travelers who utilize it, in addition to the personal quality of the trip information. Online searches for travel information are now more socially connected than before the rise of social media. As a result, social media, as opposed to conventional media, is a new form of highly persuasive media that modifies the behavior of passengers. Additionally, the current study aims to explain how social media affects travelers' behavior while seeking information. In order to understand the behavior, this study takes a perspective that fully combines the theories of the reference group effect and the elaboration likelihood model (Zhang, Yang, Nie, & Yan, 2020).

Furthermore, high tourist behavior implies that their attitude regarding tourism activities heavily relies on their preferences and social media activity. If the positive feedback on social media and the expectation of local tourists' preferences are met, this will result in the tourists' positive attitude or behavior. Otherwise, it will be the other way around. Therefore, it is implied that the high level of tourist behavior is connected to their high level of travel preferences and their high level of social media attitude.

**Correlated Variables**

Table 4 shows the correlation between travel preference and tourist behavior, travel preference and social media, and social media and tourist behavior. It was observed that the three sets of correlated variables have a degree of freedom of 533. The r-value of the three sets of variables being correlated ranges from 0.690 to 0.766, which indicates a strong positive linear relationship between the two quantitative variables. It is important to note that the correlation is significant at 0.01 level in the two-tailed test. In terms of their p-value, the three correlated variables have a value of 0.00, which indicates that the null hypothesis was rejected, and the alternative hypothesis must be accepted.

Table 4

*Correlation Between Travel Preference and Tourist Behavior, Travel Preference and Social Media, and Social Media and Tourist Behavior.*

Variables correlated	r-value	Verbal description	df (n-2)	p-value	Decision
Travel preference vs. tourist behavior	0.690**	Strong positive relationship	533	0.000	H0 was rejected
Travel preference vs. social media	0.701**	Strong positive relationship	533	0.000	H0 was rejected
Social media vs. tourist behavior	0.766**	Strong positive relationship	533	0.000	H0 was rejected

Note. \*\* Correlation is significant at 0.01 level (two-tailed).

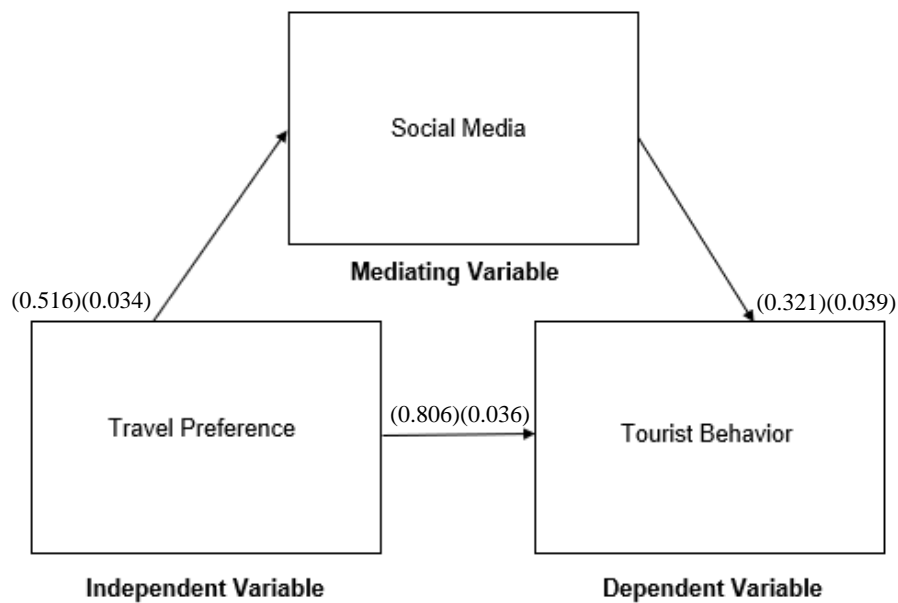


Figure 1. The mediating effect of social media on the relationship between travel preference and tourist behavior of local tourists in Davao City.

Notes. Point of effect = 0.4159; Sobel's test = 12.5623 with p-value = 0.000.

Figure 1 shows the mediation analysis with the effect size and Sobel's test. Paths A, B, and C coefficients in the mediation analysis diagram are 0.806, 0.516, and 0.321, respectively. At the same time, their standard errors (SE) are 0.036, 0.034, and 0.039, respectively. The effect size of the experiment resulted in 0.4159, which

signifies that there is a medium effect and means that the result has a medium practical significance. The results of this study also resulted in 12.5623 in the Sobel's test, with the p-value being equal to 0.00. Since the acquired result is more extensive than 1.96, the mediating effect is considered significant. Therefore, the study's proponents concluded that there is a significant indirect effect between the travel preference and tourist behavior of local tourists in Davao City via social media, which is statistically significant since the p-value is less than 0.05.

### Conclusions and Implications

The study revealed that there is a strong positive relationship between travel preference and tourist behavior, travel preference and social media, and social media and tourist behavior, indicating that social media really does play a big part in their decision-making when participating in any tourism industry activities. Furthermore, the proponents of the study have concluded that a high level of social media attitude is connected to a high level of travel preference and a high level of tourist behavior of local tourists in Davao City. This can mean that the travel preferences and overall attitude or behavior when partaking in tourism activities of local tourists in Davao City heavily rely on their social media activity. Therefore, local tourism companies must strategically improvise a method in promoting their social media accounts, such as a social media marketing manager that can adequately highlight their strengths and advantages against their fellow competitors so that their social media presence will effectively gather the attention of their potential clients and tourists.

### References

- Abdullah, M., Dias, C., Muley, D., & Shahin, M. (2020). Exploring the impacts of COVID-19 on travel behavior and mode preferences. *Transportation Research Interdisciplinary Perspectives*, 8, 100255.
- Adeke, P., Zava, A. E., & Etika, A. (2020). The impact of COVID-19 pandemic on travel behavior of commuters in Makurdi metropolis. *Cogent Engineering*, 8(1), Article 1960249.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In *Action control: From cognition to behavior* (pp. 11-39). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Anon. (2020). *Rappler*. Retrieved from <https://www.rappler.com/nation/full-time-students-part-time-workers-philippines/>
- Anon. (2021). *Voxco*. Retrieved from <https://www.voxco.com/blog/descriptive-researchdesign/#:~:text=Descriptive%20research%20design%20is%20a,problem%2C%20rather%20than%20the%20why>
- Awad-Nunez, S., Julio, R., Gomez, J., Moya-Gómez, B., & González, J. S. (2021). Post-COVID-19 travel behavior patterns: Impact on the willingness to pay of users of public transport and shared mobility services in Spain. *European Transport Research Review*, 13, Article 20.
- Aw, Y. C. (2011). Behavior and preferences in browsing travel and tourism websites. *2011 IEEE Colloquium on Humanities, Science and Engineering*. Penang, Malaysia.
- Brookes, E. (2021). *Simply psychology*. Retrieved from <https://www.simplypsychology.org/theory-of-planned-behavior.html>
- Davis, A., & Shiftan, Y. (2020). *ScienceDirect*. Retrieved from <https://www.sciencedirect.com/topics/social-sciences/travel-behavior>
- Diana, R. (2022). Social media impact on the tourism industry during pandemic COVID-19: Malaysia's experienced. Retrieved from [https://www.researchgate.net/publication/358068003\\_SOCIAL\\_MEDIA\\_IMPACT\\_ON\\_THE\\_TOURISM\\_INDUSTRY\\_DURING\\_PANDEMIC\\_COVID-19\\_MALAYSIA'S\\_EXPERIENCED](https://www.researchgate.net/publication/358068003_SOCIAL_MEDIA_IMPACT_ON_THE_TOURISM_INDUSTRY_DURING_PANDEMIC_COVID-19_MALAYSIA'S_EXPERIENCED)
- Dyer, J. S., & Jia, J. (2016). Preference theory. In *Encyclopedia of operations research and management science* (pp. 1156-1159). New York: Springer.
- Han, H., Chung, N., & Koo, C. (2016). Utilizing smart technologies to enhance tourists. *인터넷전자상거래연구*, 16(5), 1-19.
- Javed, M., Tučková, Z., & Jibril, A. B. (2020). The role of social media on tourists' behavior: An empirical analysis of millennials from the Czech Republic. *Sustainability*, 12(18), 7735.



- Juvan, E., Omerzel, D. G., & Maravic, M. U. (2017). Tourist behaviour: An overview of models to date. *MIC 2017: Managing the Global Economy; Proceedings of the Joint International Conference*. Monastier di Treviso, Italy.
- Liu, S., Mehraliyev, F., Liu, C., & Shuckert, M. (2019). The roles of social media in tourists' choices of travel components. *Tourist Studies*, 20, 27-48.
- Mbwana, K. A. (2018). Influence of social media marketing on performance of small and medium enterprises in Nairobi County, Kenya (Master thesis, University of Nairobi, 2018).
- MacKinnon, D., & Valente, M. (2019). Mediation analysis. *Oxford bibliographies*. Retrieved from <https://www.oxfordbibliographies.com/display/document/obo-9780199828340/obo-9780199828340-0245.xml>
- Nettleton, D. (2014). Selection of variables and factor derivation. In *Commercial data mining* (pp. 79-104). Oxford: Elsevier.
- Olivar, K. G., Ocio, R. L., & Sitier, N. J. S. (2022). Influence of managerial styles on career satisfaction and occupational stress: The mediating role of followership styles and the interaction effects of organizational citizenship behavior of three star hotels. *Archives of Business Research*, 10(10), 26-38.
- Olivar, K. G., & Tangonan, M. E. (2022). Effects of global leadership style on employee work engagement: Followership styles as mediator and perceived organizational support as moderator of MICE. *Journal of Production, Operations Management and Economics (JPOME)*, 2(2), 30-44.
- Olivar, K. G., Bulac, C. J. A., Genova, R. M., & Sarip, N. D. (2023). The influence of ecotourism performance on quality tourism experience and sustainable consciousness. *International Journal of Tourism & Hospitality Reviews*, 10(1), 40-46.
- Rahman, M. K., Gazi, M. A. I., Ahmed, M., & Rahaman, M. A. (2021). Effect of COVID-19 pandemic on tourist travel risk and management perceptions. *PLoS ONE*, 16(9), e0256486.
- Ralston, L., & Tran, X. (2016). Tourist preferences—Influence of unconscious needs. *Annals of Tourism Research*, 33(2), 424-441.
- Roepert, J. E., & David, M. (2013). *Britannica*. Retrieved from <https://www.britannica.com/topic/revealed-preference-theory>
- Tamsang, A., Kim, J., Lily, J., & Idris, S. (2020). Media content analysis on impacts of COVID-19 pandemic on the tourism industry in Malaysia. *Journal of Humanities and Social Sciences Research*, 2(2), 55-66.
- Thelwall, M., & Kousha, K. (2015). Web indicators for research evaluation. Part 2: Social media metrics. *El Profesional de la Informacion*, 24(5), 607-620.
- Yuan, Y., Chan, C. S., Eichelberger, S., Ma, H., & Pikkemaat, B. (2022). The effect of social media on the travel planning process by Chinese tourists: Their way forward to tourism futures. Retrieved from <https://doi.org/10.1108/JTF-04-2021-0094>
- Zeng, B., & Gerritsen, R. (2014). What do we know about social media in tourism? A review. *Tourism Management Perspectives*, 10, 27-36.
- Zhang, X. X., Yang, Z. J., Nie, F., & Yan, Q. L. (2020). Recent advances on the crystallization engineering of energetic materials. *Energetic Materials Frontiers*, 1(3-4), 141-156.
- Zivkovic, R., Gajic, J., & Brdar, I. (2014). The impact of social media on tourism. In *E-business in tourism and hospitality industry* (pp. 758-761). Retrieved from [https://www.researchgate.net/publication/266382179\\_The\\_Impact\\_of\\_Social\\_Media\\_on\\_Tourism](https://www.researchgate.net/publication/266382179_The_Impact_of_Social_Media_on_Tourism)