

From Plate to Payment: How Willingness to Pay Shapes Tourist Gastronomy Choices in Sarawak

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To Link this Article: <http://dx.doi.org/10.6007/IJAREMS/v14-i1/24238> DOI:10.6007/IJAREMS/v14-i1/24238

Published Online: 19 January 2025

Abstract

The mediating Role of Willingness to Pay (WTP) in Sarawak's Gastronomy (SG), intention to highlight the issue of the economic growth of the environmental factor, and tourist consumption behavior need more attention and examination in the gastronomy tourism in the setting of Sarawak region. In addition, this research aim is to investigate the relationship between the environmental factors and tourist consumption behaviour towards the Sarawak gastronomy using the WTP as the mediating variable. The findings of this research were obtained by a questionnaire survey of 400 visitors to the Sarawak region, during October and December 2023. The finding shows that the hypothesis is supported ($t=9.179$, $p<0.000$), as the results conclude that WTP as a mediates the relationship between environmental factor and tourist's consumption behaviour. Moreover, effect size (f^2) is analysed to measure the effect of independent variables towards the dependent variable, in the context of WPT, environmental factor indicates medium effect size. Additionally, in describing tourist consumption behavior, WTP shows a substantial effect size of 0.486 whereby finding indicates that the Q2 values for environmental factor (0.177), WTP (0.159) and tourists consumption behaviour (0.312) are higher than 0; thus, revealing that the model has predictive relevance and validity. Therefore, these findings potentially provide a reference for thorough development strategies for a gastronomy consumption in Sarawak especially in expanding this gastronomy fields to the other regional countries of Borneo.

Keywords: Willingness to Pay (WTP), Mediating Variable, Economic Growth, Gastronomy Tourism, Environmental Factor

Introduction

Food tourism research in Sarawak represents a critical area of study with immediate and far-reaching implications for regional development, economic growth, and cultural sustainability. In order to give visitors authentic culinary experiences that capture the core of a place's customs and culture, this niche type of travel includes a range of goods and services, such as

market visits, cooking classes, culinary tours, and food festivals (Kokkranikal & Carabelli, 2021; Nistor & Dezsí, 2022). The persistent need for this research divisions from the sector's substantial economic impact, where food and beverage expenditures constitute 15-35% of total tourism spending, making it a vital economic driver that demands thorough investigation and strategic planning (Gačnik & Vörös, 2020; Richards, 2015). While for local communities and businesses in Sarawak, understanding and leveraging food tourism effectively can mean the difference between mere survival and sustainable prosperity in an increasingly competitive tourism market.

The practical significance of this research is particularly evident in its direct applications across multiple sectors. Restaurant owners and food producers can utilize the findings to develop targeted business strategies that appeal to both international and domestic tourists while maintaining authenticity (Batat, 2021). Tourism operators can create more compelling and culturally sensitive food experiences based on research-backed insights into tourist preferences and behaviors (Suhartanto et al., 2019; Systems, 2002). Local governments can make informed decisions about infrastructure development and resource allocation, ensuring that investments in food tourism facilities yield maximum returns for the community. Moreover, educational institutions can develop specialized training programs that prepare the local workforce for emerging opportunities in the gastronomy tourism sector (Ford et al., 2016).

On the other hand, the tourism sector in Sarawak has played a pivotal role in driving the demand for facilities and services in the gastronomy field, as evidenced, according on the Sarawak's Gastronomic Tourism, Sarawak has gained a reputation for its gastronomic tourism, with the capital city of Kuching being honored as the 'Creative City of Gastronomy' by UNESCO in 2021 (Zainoren et al., 2023). This recognition highlights the significance of Sarawak's culinary heritage and its potential to attract tourists interested in gastronomic experiences. This research is crucial for developing evidence-based strategies that can transform this recognition into tangible benefits for local stakeholders. Small and medium enterprises (SMEs) in the food sector need this research to identify market opportunities, improve their service quality, and develop innovative culinary products that appeal to tourists while preserving traditional elements. The World Tourism Organization (UNWTO) recognizes gastronomic tourism as a driver for rural development, job creation, economic growth, and responsible consumption and production (Ghazali, 2020). This aligns with the government's efforts to boost local economic development through effective marketing and policy-making strategies as well as some of cultural organizations require these insights to develop programs that effectively showcase local culinary heritage while ensuring its preservation for future generations.

Gastronomy plays a pivotal role in the tourism industry, serving not only as a reflection of cultural heritage but also as a key factor in enhancing the tourist experience and boosting local economies. As part of the culture and traditions of a destination, gastronomy provides an immersive way for tourists to connect with the local identity through food and culinary practices. Prior studies emphasize that gastronomy significantly shapes tourist perceptions and satisfaction (Ovcharenko et al., 2021) positioning it as an integral component of tourism development strategies. With the growing trend of travelers seeking authentic and memorable experiences, gastronomy tourism has emerged as a thriving segment,

encompassing activities like tasting local cuisines and attending culinary workshops or training (Sormaz et al., 2016).

Sarawak, a state rich in diverse culinary traditions, presents an excellent opportunity to investigate the interplay between tourists' gastronomic consumption behavior and its impact on economic growth. Gastronomic tourism is particularly relevant to Sarawak's economy, as food experiences contribute significantly to tourists' overall spending, job creation, and cultural promotion. Research suggests that local food consumption enriches tourists' experiences by introducing them to the region's cultural and social environment, which in turn encourages higher tourist spending and economic benefits (Wan Sageng et al. 2020), food tourism is one aspect that contributes to a massive impact on countries' economies, this is because the tourists who travel regardless of leisure or work purposes will need to eat and drink. Despite these benefits, there is a scarcity of comprehensive research on how gastronomic tourism contributes to Sarawak's economy and the factors influencing tourists' willingness to pay (WTP) for gastronomic experiences (Zainoren et al., 2023). This study aims to bridge this gap by focusing on the mediating role of WTP in the relationship between environmental factors and tourists' consumption behavior in Sarawak's gastronomy tourism. WTP, which encapsulates the maximum amount a tourist is ready to spend on gastronomic experiences, provides a critical lens for understanding how perceived value, satisfaction, and destination image shape tourist behavior (Sánchez-Cañizares et al., 2021). Incorporating WTP as a mediating variable allows for a nuanced exploration of the factors driving tourist spending, offering actionable insights for stakeholders in the gastronomy tourism ecosystem.

Previous studies have identified various factors that influence tourist consumption behavior in gastronomy tourism, such as food quality, authenticity, variety, price, and service quality (Mak et al., 2012; Ryu & Han, 2010). However, the role of willingness to pay (WTP) as a mediating factor has received limited attention in the context of Sarawak's gastronomy. Willingness to pay refers to the maximum amount a tourist is willing to spend on a gastronomy experience, and it can be influenced by various factors, including perceived value, satisfaction, and destination image (Sánchez-Cañizares et al., 2021). This research aims to investigate the mediating role of willingness to pay in the relationship between predictors of tourist consumption behavior and actual consumption in Sarawak's gastronomy. By incorporating willingness to pay as a mediating variable, this research provides a more comprehensive understanding of the factors that influence tourist consumption behavior and the mechanisms through which these factors operate. this study addresses an essential gap by linking tourists' gastronomic consumption behavior and WTP with broader economic implications in Sarawak. The findings are anticipated to benefit not only local and national stakeholders but also contribute to the global understanding of the socio-economic benefits of gastronomy tourism. This research stands to enhance strategic decision-making, support sustainable economic growth, and reinforce Sarawak's position as a leading gastronomy tourism destination.

Review of Literature

Sarawak's Gastronomy

Within Malaysia, Sarawak is one of the most familiar states, with a truly unique religion, culture, and heritage due to its vast variety of racial groups. Sarawak, popularly known as the Land of the Hornbills, is one of Malaysia's two states located on the tropical island of Borneo (Wan Sageng et al., 2020; Maligan, Wee, & Assim, 2021; Mognard et al., 2021). While Sarawak

cuisine is a regional cuisine of Malaysia, corresponding to others from Malaysian cuisine and based on staples such as rice, it boasts a wide range of other ingredients and food preparations due to the influence of the diverse geography of the state and indigenous cultures, making it very distinct from regional cuisines in other parts of Malaysia (Lam et al., 2022; Hussain et al., 2022; Turner et al., 2022). Gastronomic tourism in Sarawak, a form of food-based tourism, is unique to the tourism industry. Studies indicate that Sarawak's cuisine plays a significant role in promoting gastronomic tourism and introducing Sarawak's culture to foreign tourists. According to Haigh (2020), traditional theories tend to apply to the food industry, which generates a wide range of possible tourist motivations for dining out, most of which are premised on ideas concerning differences between domestic and non-domestic dining in terms of social, psychological, and gastronomic experiences. The connections between food and tourism have gained substantial support and encouragement from several administrative agencies, who recognize the economic benefits of gastronomic tourism in Sarawak (New Sarawak Tribune, 2020).

According to an official message in conjunction with World Tourism Day 2021, the benefits of tourism growth will be felt at every level, from large companies to small businesses. The World Tourism Day 2021 theme, 'Tourism for Inclusive Growth,' highlights the significant attribute of tourism for inclusive growth. Therefore, the Tourism, Arts and Culture Ministry (Motac), in collaboration with the Sarawak government, is working to have Kuching recognized in the UNESCO Creative Cities Network (UCCN) under the gastronomy category. According to Datuk Seri Nancy Shukri, Malaysia's intention to propose Kuching as one of the creative cities is a pragmatic effort and will positively impact local socio-economic development. Hence, coordinated efforts from all parties are much needed to attain Motac's objective in association with the Sarawak government. While the phenomena of gastronomy tourism are developing as a necessary tourism topic of study, little research on gastronomy souvenirs and tourism in Sarawak has been performed (World Tourism Day, 2021).

Previous studies by Wan Sageng et al. (2020), are the merging importance of gastronomic tourism as a popular area of study. It highlights the lack of research on ethnic food and tourism in Southeast Asia, particularly in Sarawak, and discusses the field survey conducted to explore popular local food joints in different districts of Sarawak and promote Sarawak's ethnic cuisines to a global audience and suggests strategies for developing effective marketing campaigns to showcase the richness and originality of Sarawak's culinary heritage. To add, the study explores how coffee tourism can contribute to the development of Sarawak's image, create economic opportunities, and enhance the overall tourism experience. It suggests that promoting Sarawak as a coffee tourism destination can attract tourists seeking agricultural and gastronomic experiences, adding value to the state's tourism sector and development economic growth (M. S. Wang et al., 2023). However, from the previous literature, there are limited literature specifically focused on tourist's behaviour towards Sarawak gastronomy or gastronomic tourism in Sarawak in relation to Social Cognitive Theory which mediate by the WTP.

Environmental Factors (EF)

Gupta & Singh (2019), explores the impact of factors influencing environmentally responsive consumption behavior, including willingness to pay, on purchase decisions. It delves into variables such as environmental consciousness, attitude towards behavior, and perceived

behavioral control to understand their influence on environmentally responsive consumption behavior. The study provides insights into how environmental factors and willingness to pay can shape consumer behavior and purchasing decisions. To add the influence of environmental knowledge, risk perception, and other factors on sustainable consumption behavior can influence consumer behavior and willingness to pay for sustainable products (Cao Minh & Nguyen Thi Quynh, 2024). Meanwhile, the determinants that influence green product purchase intention and behavior, focusing on environmental factors such as environmental concern, environmental knowledge, and risk perception and its importance of environmental cognition in shaping green consumption behavior and its impact on consumer choices (Ogiemwonyi et al., 2023).

The "perceived social impact from others" is an important environmental factor in the Social Cognitive Theory (SCT). This refers to the degree to which an individual perceives the influence of others on their own behavior and decision-making (Abedini et al., 2023). According to Zhang et al. (2024), when individuals perceive a strong social impact from others, it can influence their willingness to pay for products or services for instances, if an individual perceives that their peers or community highly value and are willing to pay for sustainable or environmentally-friendly products, it can increase their own willingness to pay for such products. Hence, SCT emphasizes that the environmental factors, such as the conditions and support available, can influence an individual's ability to successfully complete a behavior (Abedini et al., 2023). The social cognitive theory emphasizes that the environmental factors, such as the conditions and support available, can influence an individual's ability to successfully complete a behavior (MacBlain, 2021). In the context of willingness to pay, the environmental conditions and support, such as the availability of information, accessibility of products, and financial incentives, can impact an individual's willingness to pay for certain products or services (Zhang et al., 2024). The social cognitive theory proposes the concept of reciprocal determinism, where the individual's behavior, personal factors, and environmental factors all influence each other in a bidirectional manner (Mimiaga et al., 2009). This suggests that the environmental factors, such as social norms, can shape an individual's willingness to pay, which in turn can influence the environmental conditions and support for certain products or services. To analyze the relationship between these environmental factors (independent variables) and tourist consumption behavior, researchers employ the mediating role which is WTP.

Tourists Consumption Behavior (TCB)

The literature review on Tourists Consumption Behavior (TCB) highlights the significance of understanding tourists' consumption patterns and the factors that influence their behavior. The studies emphasize the importance of considering both internal and external factors that shape tourists' consumption decisions. The literature suggests that external factors, such as the environment and social norms, also impact tourists' consumption behavior (Khanra et al., 2021; Mirzaei et al., 2023). For instance, the COVID-19 pandemic has led to significant changes in tourists' behavior, with a greater emphasis on hygiene and cleanliness (Mirzaei et al., 2023). Furthermore, the literature highlights the importance of understanding tourists' transformative experiences, which can lead to lifelong changes in their behavior and consumption patterns (Zhao & Agyeiwaah, 2023). The studies employ various theoretical frameworks to understand tourists' consumption behavior. For example, Herzberg's two-factor theory is used to explain the importance of hygiene factors in providing standard

services in the tourism sector (Mirzaei et al., 2023). The Theory of Planned Behavior is also applied to predict consumers' intention to visit green hotels (Khanra et al., 2021). The literature review on Tourists Consumption Behavior emphasizes the complexity of tourists' consumption patterns and the need to consider both internal and external factors that influence their behavior. The studies highlight the importance of understanding environmental factors and the role of mediating role in the theoretical frameworks explaining their consumption behavior.

The gastronomic experience can be a significant factor in tourists' decision-making process when choosing a travel destination (Kovalenko et al., 2023). Hence, according to Kovalenko et al. (2023), tourists' local food consumption value, including functional, emotional, social, and epistemic value, influences their attitude, food destination image, and behavioral intention. Herzberg's two-factor theory, which distinguishes between hygiene factors and motivators, can be used to explain tourists' gastronomic consumption behavior (Mirzaei et al., 2023). To added, Kovalenko et al. (2023), state that the Theory of Planned Behavior (TPB) has also been applied to predict tourists' intention to visit gastronomic destinations. The theory of planned behavior (TPB) is one of the most widely used theories to predict and explain tourists' consumption behavior and intentions in various tourism contexts (Balıkcıoğlu Dedeoğlu et al., 2022; Pahrudin et al., 2021; C. Wang et al., 2020; L. Wang et al., 2022). The TPB provides a robust framework for understanding and predicting tourists' consumption behavior and intentions across various domains, including food consumption, destination choice, and environmental behavior. However, there are, many from previous study didn't discover the influence of WTP as the mediating variable between the environmental and the consumption behavior among the tourist especially in the context of Sarawak region. Therefore, this research will investigate the mediate relationship among the latent.

Willingness to Pay (WTP)

The economic value of a change in an environment's current condition, expressed in monetary terms, is referred to as willingness to pay (WTP) (Sandra M. Sánchez-Cañizares et al. 2021). This concept can be defined as the monetary sum or expense that an individual is willing to pay for an improvement or enhancement in the quality of a product or service (Ramdas & Mohamed, 2014). WTP serves as a valuable tool for evaluating items or services that lack a clear commercial or market value, although this measure is subject to change due to new information acquired by the individual (Nowacki, 2013). Hultman et al. (2015) found that the inclination to engage in positive behavior towards ecotourism influenced WTP for this type of experience.

Impact their desire to purchase a product (Madden et al., 1992). Supported by an extended theory that serves as the foundational framework for this study, Ajzen (1991) developed the theory of planned behavior (TPB) to elucidate the psychological processes behind behavioral intention. According to TPB, intention is driven by purpose, determined by attitudes toward behavior (ATT), subjective norms (SN), and perceived behavioral control (PBC) (Ajzen, 1991). Willingness-to-pay (WTP) research serves as a typical empirical approach to investigating ethical consumerism. WTP represents the maximum amount a consumer is willing to spend to acquire an ethical product or service or to avoid an unfavorable outcome (Arnot, Boxall, & Cash, 2006). Although several studies of WTP have been conducted in both retail and tourism (e.g., Arnot et al., 2006; Ellis et al., 2012; d'Astous & Mathieu, 2008; Ha-Brookshire & Norum,

2011), only a few have been conducted in the setting of gastronomy tourism.

Another notable gap in current research on willingness-to-pay (WTP) is the lack of data on actual consumption behavior (Dodds et al. 2018). Examining real consumption behavior allows for a more comprehensive analysis of WTP, as traditional WTP methods, which often involve hypothetical scenarios, can lead to hypothetical bias (Dodds et al. 2018). When participants in studies lack real-world incentives, they tend to overestimate how much they would be willing to pay for a product (Andorfer & Liebe, 2015). Previous research has revealed numerous investigations demonstrating the significant impact of consumers' WTP. For example, WTP has been found to positively influence fair trade (Galati et al. 2019), Muslim WTP has influenced the demand for certified Halal food (Iranmanesh et al. 2020), and studies have examined WTP during various stages of epidemics (Sandra M. Sánchez-Cañizares et al. 2021). However, there is a lack of research demonstrating the significant impact of WTP on consumption behavior regarding Sarawak gastronomy. Therefore, the next hypothesis for the study is proposed as follows:

H1: WTP mediates the relationship between environmental factor and tourists' consumption behaviour towards SG.

Method

This study examined the study of relationship between willingness to pay, environmental factor and tourists' consumption behavior on Sarawak gastronomy. The basic research model of the study is provided by the extant literature. Figure 1 illustrates how willingness to pay (WTP), environmental factor (EF) and tourists' consumption behavior (TCB) and serve as the mediator, dependent and independent variables respectively.

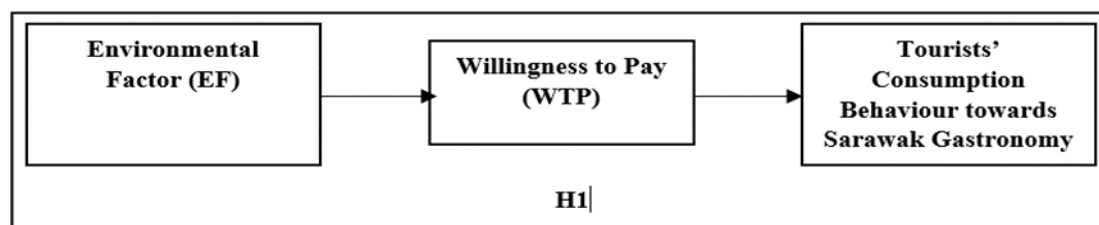


Figure 1 Conceptual model of environmental factor (EF), willingness to pay (WTP), and tourists' conceptual behavior (TCB)

Procedure and Sample

A cross-sectional survey was used in an exploratory manner as part of a quantitative data collection strategy (Udho, 2022). In order to conduct the pre-test, pilot test and real data collecting for the study, the researcher was able to approach the director of Sarawak Tourism Board (STB). Following a number of modifications from the pilot research, the official data gathering was completed. A total of 400 questionnaire were gathered in about 2 months, resulting in a 95% percent response rate. All domestic and international tourists were included in the study's sample of respondents. The study's participants were drawn from all the tourism spot around Sarawak, representing three region that having an easy transportation access in Sarawak, (Kuching, Miri and Sibul). As of November 2023, the tourists in Kuching provide the most recent arrival of visitors', which was 3,446,880 in total of international and domestic visitors according to the Ministry of Tourism, Creative Industry and Performing Arts Sarawak, (2023). The study employ the purposive sampling it is a non-probability technique where

subjects are selected based on specific criteria set by researcher for this study (Creswell et al., 2014) . The sample was chosen based on the aims to select a sample that is most relevant to answering the research question, which is fall under the criteria of screening on the majority age and if they have eaten the Sarawak food along the stay in Sarawak.

Survey Instruments

All assessments, unless specified otherwise, were on a 5-point Likert scale, where 1 represented a strong disagreement and 5 represented a strong agreement. The two primary portions of the instrument used for this study are intended to collect detailed information on the research variables and the respondents' demographics. Section B gathers demographic data, while Section A concentrates on evaluating the independent and mediating variables. The primary factors of the research are covered in Section A. It consists of two sets of questions, one dealing with the mediating variable and the other with the independent variable. With five carefully developed questions each set, each set uses a 5-point Likert scale that ranges from "Strongly Disagree" to "Strongly Agree." Section B consists of eight questions designed to collect respondents' demographic data. This part provides an overall profile of the sample by including basic information like age, gender, occupation, education level, and other relevant demographic factors. The instrument facilitates a thorough study of the research objectives by integrating data from both sections.

Environmental Factor

Following the work of Yu, Luo, and Zhu (2018), Raajpoot (2010), and Liu and Jang (2009), the 5 – item version scale was revised by T. Zhang, Chen, and Hu (2019) reflect the support in environmental factors. This study adopted the latter. The choice was made due to the questions developed by Zhang, Chen, and Hu (2019) are more gastronomy - based and place less emphasis on the sustainable environment as compared to other measurement. Participants responded to questions such as “Layout and facilities are beautiful and interesting”. The Cronbach alpha for this scale was 0.937. (how many items in this part)

Willingness to Pay

In the survey instrument, the variable of willingness to pay was provided to help respondents understand the social and environmental factors influence tourists WTP and WTP for Sarawak gastronomy. purpose of the purchasing. Willingness to pay is serves as a valuable tool for evaluating items or services that lack a clear commercial or market value, although this measure is subject to change due to new information acquired by the individual (Nowacki, 2013). The 5-item measurement developed by Dodds et al. (1991), and adopt by (Konuk, 2019) from past studies was used. Participants responded to questions such as “ It is acceptable to pay a premium to purchase Sarawak cuisine” Cronbach alpha for this scale was 0.93.

Tourists Consumption Behaviour

The tourists were asked to assess their Consumption on Sarawak gastronomy using Ting et al. (2019), 5- item intention to consume Dayak food measurement that been adapt to the current study. The tourists responded to questions such as “ I plan to consume local gastronomy while I am still in Sarawak”. The Cronbach alpha for tourists consumption behavior was 0.93.

Results

Table 1 presents the results for the hypothesized model. The table outlines the convergent validity, internal validity, and discriminant validity for all three latent variables in this study. Convergent validity refers to the extent to which items in a scale converge or load together as a single construct. The standardized loadings should be larger than 0.70, indicating that the indicators share more variance with their respective latent variable than with error variance. A good model fit in PLS is achieved when there is a significant path coefficient with accepted R^2 values and good construct reliability (Gefen et al., 2000). The model's predictability, reflected by the R^2 values, is another crucial determinant of the model's strength (Chin, 1998). For the evaluation of reliability, composite reliability and average variance extracted (AVE), shown in the table of factor loadings, are two significant measurements utilized in this study. Composite reliability should be higher than 0.70 (Hair, et al., 2016). The other measurement, AVE, indicates the amount of variance captured by the indicators relative to the amount due to measurement error (Chin, 1998). The proposed minimal critical value for AVE is 0.5 (Hair, et al., 2016). The composite reliability and AVE values shown in Table 1 for the factor loadings meet these requirements.

Table 1

Factor Loadings of the Hypothesised Model

Latent Variable	Convergent Validity		Internal Reliability		Discriminant Validity
	Factor Loadings	AVE	Composite Reliability	Cronbach's Alpha	HTMT confidence interval does not include 1,
	>0.50	>0.50	>0.70	>0.60	<0.9
EF	0.727 0.738 0.824 0.810	0.602	0.788	0.781	Yes
WTP	0.837 0.845 0.858 0.818	0.705	0.862	0.861	Yes
TCB	0.828 0.839 0.789 0.771 0.760	0.637	0.860	0.857	Yes

Note: EF (Environmental Factor), WTP (Willingness to Pay) and TCB (Tourists Consumption Behaviour).

Mediation Effect Assessment of WTP

Initially, the first model was presented with direct path from environmental factor to WTP and tourists consumption behaviour. Both links were significant at the 0.000 level with the path coefficient of 0.480 and 0.506 respectively. At this point, no indirect effect was hypothesized or evaluated (Refer Table 2). This was followed by the second model with WTP playing a mediating role between environmental factor and tourists consumption behaviour (Refer Table 3). The two distinct figures were made based on Baron and Kenny (1986) four-step

technique to assess the mediating effect. The two figures had:

- 1) A direct path from environmental factor to WTP;
- 2) A direct path from the environmental factor to tourists' consumption behaviour;
- 3) A direct path from the WTP to tourists' consumption behavior; and
- 4) A direct path from the environmental factor to tourists' consumption behaviour, and an indirect path from environmental factor to WTP and then from WTP to tourists' consumption behaviour.

Mediation is considered to occur when the direct path coefficient between the independent variable and the dependent variable decreases upon introducing an indirect path through a mediator variable. The direct path is evaluated in two ways: initially without the mediator, and then with the mediator included in the model. If the inclusion of the indirect path through the mediator leads to a reduction in the direct path coefficient between the independent and dependent variables, this indicates the presence of a mediating effect. The original direct path standardised beta of 0.506 has changed to 0.234 after the introduction of WTP as mediator. The amount of the decrease of the relationship between environmental factor and tourists consumption behaviour accounted by the mediator was 0.0272. According to (Hair Jr. et al., 2017), bootstrapping is the best analysis method to measure mediation variables and the current study proposed WTP as a mediator between environmental factor and tourists' consumption behavior. As indicated in Table 5, the finding shows that the H1 is supported ($t=9.179$, $p<0.000$), the findings conclude that WTP mediates the relationship between environmental factor and tourist's consumption behavior.

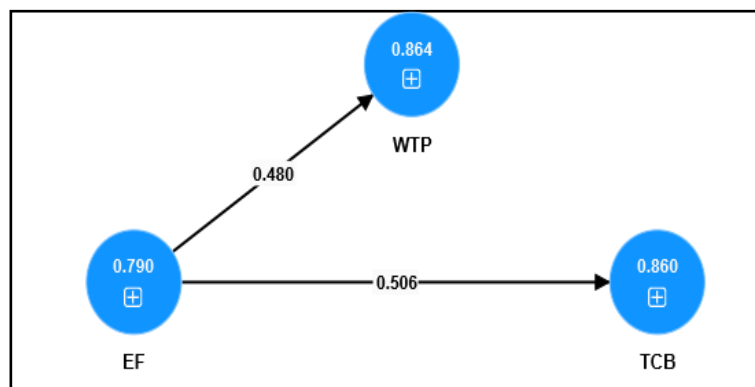


Figure 2 Direct Path Coefficient and R²

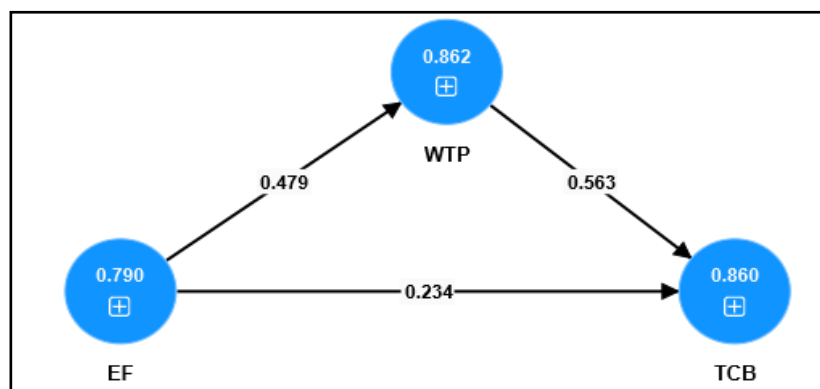


Figure 3 Indirect Path Coefficient and R²

Table 2

Path Coefficients Environmental Factor to WTP and Environmental Factor to Tourists Consumption Behavior

	Beta	t-value
EF – WTP	0.480	12.786
EF - TCB	0.506	14.498

Note: EF (Environmental Factor), WTP (Willingness to Pay) and TCB (Tourists Consumption Behaviour).

Table 3

Path Coefficients Environmental Factor to WTP, Environmental Factor to Tourists Consumption Behavior and WTP to Tourists Consumption Behavior

	Beta	t-value
EF → WTP	0.479	12.677
EF → TCB	0.234	5.730
WTP → TCB	0.563	14.273

Note: EF (Environmental Factor), WTP (Willingness to Pay) and TCB (Tourists Consumption Behaviour).

Table 4

Indirect Environmental on Tourists' Consumption Behavior

Indirect	Effect	SE	t-value	p-value
EF→WTP→TCB	0.270	0.029	9.298	0.000

Note: EF (Environmental Factor), WTP (Willingness to Pay) and TCB (Tourists Consumption Behaviour).

Table 5

Hyphotesis Result

Relationship	Original Sample	Sample Mean	Stand. Dev	t- value	p- value	Result
H4: EF -> WTP -> TCE	0.269	0.271	0.029	9.179	0.000	Supported

Note: EF (Environmental Factor), WTP (Willingness to Pay) and TCB (Tourists Consumption Behaviour).

Through the analysis of R^2 , the study can identify the model's predictive accuracy where R^2 will calculate the amount of independent construct which can be explained by the dependent construct (Hair Jr. et al., 2017). According to (Hair Jr. et al., 2017), the R^2 value of 0.75 for social sciences study is substantial, 0.50 is moderate and 0.25 is weak. The finding indicates that the value for environmental factor is 0.317 and WTP has the value of 0.229 which shows a weak level, while tourists consumption behaviour has 0.498 which is can consider at a moderate level. Moreover, effect size (f^2) is analysed to measure the effect of independent variables towards the dependent variable. As declared by Cohen (1986), there are four categories of effect size which are substantial (0.35), medium (0.15), small (0.02) and trivial (<0.02). In explaining environmental factor, gastronomy knowledge (0.010) and cultural awareness (0.071) shows a small effect size while gastronomy image (0.113) shows a medium effect size.

On the other hand, in the context of WPT, environmental factor (0.297) indicates medium effect size. Additionally, in describing tourist consumption behaviour, WTP shows a substantial effect size of 0.486.

Finally, the current study measures predictive relevance by using Stone-Geisser's Q^2 (Geisser, 1974; Hair Jr. et al., 2017; Stone, 1974). The finding indicates that the Q^2 values for environmental factor (0.177), WTP(0.159) and tourists consumption behaviour (0.312) are higher than 0; thus, revealing that the model has predictive relevance and validity.

Impact and Recommendations for Future Research

The impact of this study relies in its theoretical and practical implications for enhancing the gastronomic tourism's economic input in Sarawak. This study demonstrates how nurturing favorable environmental conditions may increase tourists' interest and expenditure on local cuisine, so benefiting local food producers and strengthening the area economy. It does this by highlighting the value of WTP as a mediating element. The study's conclusions provide relevant information on how to better support and advertise Sarawak's culinary offers to policy makers, regional companies, and tourism promoters. This study essentially highlights the potential of culinary tourism as an agent for long-term, sustainable economic growth, indicating that a more robust focus on environmental aspects and regional culture can result in a unique and appealing travel experience.

Even while this research offers fresh perspectives, several topics still demand more investigation. Subsequent research endeavors must to contemplate the integration of a multi-data and multi-methods strategy, which integrates qualitative and quantitative research techniques. This would give researchers more insight into the underlying causes of the associations found in the study and better understand how visitors feel and behave when it comes to the local cuisine. Furthermore, the geographical and sample size scopes could be extended to encompass a wider variety of places throughout the whole Sarawak region in addition to other regions of Borneo. This would make it possible to compare analyses between rural and urban locations, providing more detailed information about the differences in visitor behaviour in various contexts. Additional investigation may also examine the impact of additional mediating.

Discussion and Conclusion

The primary objective of this study is to establish an understanding of the mediating role played by WTP in the relationship between environmental factor and tourists consumption behaviour. A review of previous studies in the areas of environmental factor, WTP, and tourists' consumption behaviour was conducted. Initial findings revealed that environmental factor had a positive and significant direct effect on tourists' consumption behaviour. The study found that environmental factor influenced tourists' consumption behaviour, especially green consumption behaviors (Balaji et al., 2019; Wang et al., 2021), employees' energy-saving behaviors (Tang et al., 2019), and pro-environmental intentions (Kwon & Boger, 2021). These results align with previous studies (Aksu et al., 2022; Badu-baiden et al., 2022; Cheng et al., 2021; Georgescu & Herman, 2020; Razak & Sabri, 2019; Tang et al., 2022; Venciute et al., 2023) and suggest that the Ministry of Tourism, Creative Industry and Performing Arts Sarawak, especially Sarawak Tourism Board should develop or grow local food industry along with local cultural heritage to enhance economy contribution in Sarawak particularly in this sector . Specifically, the findings indicate that if the sustenance in the gastronomy field is enhanced,

local food producer will feel more empowered to be more productive. Furthermore, the results demonstrate that WTP plays a mediating role in the relationship between environmental factor and tourists consumption behaviour towards Sarawak gastronomy. It can be concluded that a higher level of environmental factor plays a crucial role for tourists, as it facilitates opportunities for WTP, which in turn leads to increase in tourists' consumption behavior on the local gastronomy.

The results suggest that in order to increase the influence of Sarawak gastronomy towards the economy growth and to enhance the contribution in other region in Borneo, thus the related organizations ought to focus on fostering greater support between local food producer and the environmental factors that can increase the good ambiance for the element of the foodscape. By synthesizing the findings from these sources, it can be inferred that the relationship between Sarawak gastronomy, willingness to pay, environmental factors, and tourist consumption behavior plays a crucial role in enhancing the economy and promoting gastronomic tourism in Sarawak and other regions in Borneo. The mediating variable of willingness to pay can potentially influence the relationship between environmental factors, tourist consumption behavior, and the economic impact of Sarawak gastronomy on the region. However, this study has limitations. Firstly, the quantitative approach adopted cannot explain the detailed reasons behind the relationships between variables (Xerri, 2012). Incorporating a qualitative approach may further enhance the findings and provide insights into the issues surrounding tourists' consumption behaviors towards Sarawak gastronomy. Additionally, the sample size in this study involved a small population of visitor's arrivals to Sarawak, confined to a three potential urban area in Sarawak. As such, this research cannot highlight specific comparisons across different types of gastronomy in overall Sarawak region. A more diverse location could be considered for future research.

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