



## Culinary Consumption in Digital Era: Tourists' Typology and their Characteristics

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### Authors' contributions

This work was carried out in collaboration among all authors. Author SSW designed the study, did field research, performed the statistical analysis and interpretation, wrote the first draft on the manuscript.

Author TK wrote the protocol and analyses of the study. Author DW and S wrote the protocol and managed the literature searches. All authors read and approved the final manuscript.

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### ABSTRACT

**Purpose of the Study:** Technological transformation has changed the consumption behavior of tourists in the digital era. The ease of access and the emergence of various media also have a significant impact on culinary tourism. This research aims to know the typology of tourists and their characteristics in local culinary tourism in the digital era, especially in Indonesia. By knowing this, it is expected that culinary businesses can adjust the strategy so that local culinary can be more explored by tourists. Furthermore, local culinary tourism can be further developed in potential destinations.

**Methodology:** The method used is quantitative research, with data collection techniques through an online survey (google form) supported by literature studies. The sampling technique is non-probability sampling which is purposive sampling. The number of respondents in this study was 482 people who have culinary tour to Yogyakarta and Solo, Indonesia at least one time, and data analysis techniques using descriptive statistics and Analysis of Variance (ANOVA).

**Main Findings:** The results show there are three clusters of tourist typology when on culinary tour in the digital era of Non-Culinary Tourist (NCT), Culinary Tourist (CT), and Gastronomic Tourist (GT). There are characteristic differences in each type of tourist from the parameters of attitude,

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perception, and culinary information-seeking behavior. The average value of attitudes, perceptions, and information-seeking behavior is increased from NCT, CT, to GT. The main media used in information seeking is digital media. The most widely used information reference sources are Instagram, friends, search engines, and family.

**Application of this Study:** This study provides theoretical implications related to tourist typology and its characteristics in local culinary tourism in the digital era. Meanwhile, the practical implications, this research can be used as an advice in developing gastronomic tourism in the world and especially in Yogyakarta and Solo, Indonesia. The government and businesses can make this research the basis for formulating local culinary tourism marketing strategies.

**Novelty/Originality of this Study:** This research is original and new in terms of context and methodology. There are few research focuses on the behavior of tourists in local culinary tourism, especially in the digital era. This study also uses a new method of looking at the differences in tourist typology, using analysis of variance (ANOVA).

*Keywords: Culinary tourism; tourist typology; gastronomic tourist; digital era; local culinary.*

## 1. INTRODUCTION

Food and beverages developed become a tourist attraction in the destination which is called by the term culinary tourism. Boyne, Williams, & Hall [1] stated that the relationship between food and tourism is very close. Food provides an experience then becomes the destination of travel [2]. Hjalager [3] stated that gastronomy is many used as a marketing tool for destinations worldwide, with local culinary as resources in the destination. Local culinary is a food that commonly consumed by certain people in specific destinations [4], the form can be snacks or main course, that food is often used as a marker of a specific location [5].

Globalization has affected the tourism sector, including culinary tourism. According Fayos-Sola & Bueno [6], globalization affects similarities in consumer demand and homogenization of products and services. In culinary tourism, the tendency of convergence of food consumption with culinary homogenization becomes a big challenge. There has been a growing global culinary around the world that dominates and shifts local cuisine. It is also one of the problems in Indonesia, the development of global culinary is one of the factors that cause local culinary to be less explored by tourists. In fact, according to Harsana & Triwidayati [7], Yogyakarta has 245 local culinary and Solo has 16 local culinary that can be developed into a tourist attraction [8]. This situation is a challenge so that destinations need to adapt with information technology. Globalization is also can be seen as an opportunity to adopt a global marketing strategy and increase the exposure of local culinary

through glocalization by adjusting the local menu in the restaurants.

The transformation of technology can be developed to promote local cuisine in the destination. The use of digital media as local culinary marketing in destinations needs to be the focus of attention today because of the changing of tourists' behavior. Nowadays, tourists have used the internet and social media as a source of reference information. Starting from the selection of destinations [9], accommodation [10,11,12], to culinary products [10,13].

Many research in gastronomy has been done, but mostly are discussing relationship between food and tourism [14,15]. In Indonesia, many research focused in local culinary innovations [16,17,18], and local culinary development strategies [19,20,21]. There are still gaps in previous research, both in general and specific in Indonesia, that is study of the tourists' consumption behavior, whereas personality can affect the consumption of local culinary in the destination, moreover in this digital era. Therefore, this research aims to identify the typology of tourists and their characteristics in local culinary tourism in the digital era. This study has theoretical implications that there are several segments and types of tourists in culinary tourism. In addition, this study also provides practical implications that can be used as a suggestion in designing marketing strategies for culinary businesses in the destination. By knowing this, businesses can understand better the current tourists' demand, so it is expected that local culinary can be more explored by tourists. In addition, it can also be used as a

suggestion for the development of culinary or gastronomic tourism in the digital era.

## 2. LITERATURE REVIEW

In general, there have been many studies on culinary tourism that have been carried out around the world. Some of them focus on the relationship between food and tourism [22,23,24]. Research on culinary also discusses a lot about the experience of culinary tourism, for example the research of Kivela & Crotts [25] which states that there is an influence of local gastronomy on the experience of tourists in Hong Kong. Other studies related to gastronomic experiences have also been carried out in several countries [26,27,28,29]. In Indonesia, other research focuses mostly on local culinary development strategies in destinations, such as the development of culinary tourism potential in Bali [20] and local culinary marketing as a selling point for Indonesian tourism [30].

Furthermore, a search was conducted on the Garuda portal as a digital reference for published research in Indonesia related to research with the theme of culinary tourism in Yogyakarta and Solo as the specific locations of this research. The 31 studies with the keywords "*Kuliner Yogyakarta*", no one has discussed tourist typology in culinary tourism [31]. Some of them discuss a lot about the development of culinary tourism information systems [32,33]. In addition, research on study sites discusses more about culinary marketing strategies. However, no one has discussed tourist typology and their characteristics in the digital era yet. Very few discuss tourist behavior, for example research by Hanggraito and Budiani [34] which discusses market segmentation and tourist motivation but is limited to one restaurant that sells traditional food, namely Gudeg Pawon.

Likewise, research on culinary tourism conducted in Solo, from 9 studies identified with the keyword "*Kuliner Solo*" on Garuda [35], more research discusses the study of the local culinary economy [36,37,38], facilities [39] and products [40]. There is only one study that discusses behavior but is limited to consumer attitudes towards culinary consumption preferences in Solo. The transformation of culinary consumption behavior in the digital era needs to be studied deeper. This issue is important to be known by the managers of tourist destinations and local culinary businesses to adjust the marketing strategy to the tourists' demand. In studying the

typology and characteristics of tourists in local culinary tourism in the digital era, some literature is used as the theoretical framework.

### 2.1 Culinary Tourism

Food and tourism developed into food tourism which is also called "culinary," "gastronomic," or "gourmet tourism" [41]. Meanwhile, according to Hall et al [42,43], culinary tourism that develops even more extreme is called gastronomic tourism. In identifying the typology and characteristics of tourists in this study, the theory used is based on Hall et al [42,43] about the level of interest of tourists to food in the destination. The levels of tourist interest are divided into four levels, as follows:

1. No interest, tourists visit culinary locations no more than just a need
2. Low interest, tourists visit culinary locations because it is something different, the term refers to rural/urban tourism
3. Moderate interest. Tourists visit culinary locations as part of their lifestyle, the term refers to culinary tourism
4. High interest, the primary motivation of their trip is to visit culinary locations.

Therefore, this research will identify the typology of tourists in culinary tourism in the digital era and formulate the following hypotheses:

H1: Tourist attitudes towards local culinary are significantly different for different types of tourists.

### 2.2 Local Culinary

Local cuisine is the main source of culinary or gastronomic tourism. Pieniak et al [4] explained that local culinary is a traditional food usually consumed by a group of people and served at a specific time. Local culinary usually refers to food with a characteristic and becomes an icon in a particular location [2,44]. Local culinary is also often described as an authentic cultural experience [45]. Local culinary offered in the destination can be a memorable experience [46]. However, in this globalization era, local culinary entrepreneurs need to adapt their products to the tastes and needs of tourists, likewise, by developing the right marketing strategy in this digital era. This strategy will make local culinary can be more explored by tourists. Several studies have shown that tourists' perceptions of local cuisine are based on several indicators,

including culture, authenticity, health value, uniqueness, and the atmosphere of local culinary restaurants [47,48].

There is a possibility that there are differences in the perception of tourists on the type of tourists with different levels of interest in local culinary so that the hypothesis is formulated as follows:

H2 : Tourist perceptions of local culinary are significantly different for different types of tourists

### 2.3 Culinary Travel Behavior in the Digital Era

Several studies show the influence of digital technology on the tourists' consumption behavior in consuming culinary products. As in Syahbani & Widodo [49] research, there is an influence of food bloggers on Instagram on student buying interest in recommended restaurants of 75.5%. Similar but not the same, Kusumaningrum et al [13] also found that food blogger content contributed to consuming healthy food by 23.6%. Another study was conducted by Wachyuni & Priyambodo [10] which showed the influence of celebrity endorsement in product decision-making at local restaurants. Then, the development of technology, online food delivery application (Go-Food) also influences purchasing bubble drinks [50,51]. Most of these studies discuss the influence of social media on purchasing decisions. There is still no research that discusses the tourists behavior and their characteristics in culinary tourism by describing in detail, starting from the tourist attitude towards Yogyakarta and Solo local culinary, their perception, and their local food-seeking behavior in the digital era. As for further finding out whether there are differences in food-seeking behavior in the digital era, the following hypothesis is formulated:

H3: Food-seeking behavior is significantly different for different types of tourists.

## 3. METHODOLOGY

This study uses a quantitative approach to analyze the demographics, attitudes, perceptions, and information-seeking behavior of each tourists' typology in local culinary tourism in the digital era. The research location is focused on Yogyakarta and Solo, Indonesia. However, due to the Corona Virus Disease (Covid-19) pandemic, data collection was carried out by an online survey using a google form which was

distributed in February-March 2021. The questionnaire was organized into four sections: demographics, attitudes, perceptions, and information-seeking behavior of local culinary. The measurement of the questionnaire used a Likert scale and validity and reliability tests were carried out to ensure the variable indicators in this study were valid and reliable.

Indicators of attitude include local cuisine as a tourist motivation, destination selection criteria, and part of travel satisfaction [26,27,52,53]. Meanwhile, the indicators of perception are culture, authenticity, health value, uniqueness, and the atmosphere of local culinary restaurants [47,48]. Information-seeking behavior includes searching for information on culture/traditions and local restaurants.

The data collected were 507 respondents. After cleaning, there are only 482 data from respondents that are valid and can be analyzed. Invalid data is caused by respondents who fill the questionnaire who does not include the sample criteria. The population in this study are Indonesian domestic tourists who consume local culinary while traveling. While the sample criteria in this study were Indonesian domestic tourists aged more than seventeen (17) years old, had consumed local culinary in Yogyakarta and Solo at least once.

The data analysis technique in this research uses descriptive statistics, i.e the distribution of frequencies and mean values. In identifying the typology of tourists, the mean value is converted to the level of achievement of respondents' (TCR) value. Meanwhile, to analyze the differences in attitudes, perceptions, and behavior of seeking local culinary information for each type of tourist, an analysis of variance (ANOVA) dan duncan's test was carried out.

## 4. RESULTS AND DISCUSSION

### 4.1 Results

Meanwhile, before processing the research data, the validity and reliability of the questionnaire was tested which had been filled out by 50 respondents to ensure that the instruments used were valid and reliable. The results of the validity test of all indicators of attitude, perception, and information-seeking behavior variables have a value of  $R_{count} > R_{table}$  (0.279) so that it is declared valid. Meanwhile, the results of the reliability test of the attitude (0.822), perception

(0.854), and information seeking behavior variables (0.773) showed that Cronbach Alpha value > 0.6, so that it was declared reliable.

**4.1.1 Respondents’ profile and characteristics**

The demographic survey in this study was conducted to determine the profile and characteristics of the respondents. Based on the survey results of 482 respondents, it can be seen in Table 1 that the respondents in this study were dominated by young people, in the age range of 17-26 years old (54.60%) and 27-33 years old (15.10%). The majority of respondents are women, as much as 58.10%. Because Generation Z dominates the respondents, most of them are not married yet. In terms of education, most respondents are highly educated because the education background are

dominated by bachelor’s degree (38.80%) and associate degree (31.3%). The majority of respondents are also still students (29.25%), while others have worked as entrepreneurs (26.30%) and private employees (23.00%).

Regarding travel frequency, most respondents had culinary trips more than three times in the last three years. Furthermore, most respondents use digital media in searching for culinary information (79.90%). Furthermore, respondents rely on word-of-mouth information (19.10%). In comparison, the use of printed media is only used by 1% of respondents. From the description of the data, it can be concluded that the majority of respondents are generation Z and millennial tourists who rely a lot on digital media for their travel activities.

**Table 1. Respondents’ profile and characteristics**

Profile and Characteristics	Option	Freq	Percentage (%)
Age	17-26 years old	263	54.60
	27-33 years old	73	15.10
	34-39 years old	50	10.40
	40-46 years old	43	8.90
	>46 years old	53	11.00
Gender	Woman	280	58.10
	Man	199	41.30
	Prefer not to say	3	0.60
Marital Status	Married	175	36.30
	Not married yet	295	61.20
	Prefer not to say	12	2.50
Education Background	Associate Degree	151	31.30
	Bachelor Degree	187	38.80
	Master Degree	117	24.30
	Doctoral Degree	27	5.60
Occupation	Government employee	41	8.50
	Private employee	111	23.00
	Entrepreneur	127	26.30
	Lecturer	15	3.10
	Freelancer	7	1.50
	Student	141	29.25
	Others	40	8.29
Frequency of culinary trips in 3 years	One time	34	7.10
	Two times	40	8.30
	Three times	41	8.50
	More than three times	367	76.10
Information Reference Media	Digital media	385	79.90
	Printed media	5	1.00
	Word-of-Mouth	92	19.10

**4.1.2 Typology of tourists in culinary tourism in the digital era**

Parameters of tourist attitudes are identified to find out how tourists are interested in local culinary. Attitude's indicators consist of 1) local culinary as the primary motivation for traveling; 2) Local culinary is the main criteria in determining the destination; 3) Local culinary as travel satisfaction. After getting the mean value of the three indicators, the mean value is converted to The Level of Achievement of Respondents (TCR). From the results of the TCR calculation, respondents were categorized into three groups, namely tourists with low interest (Non-Culinary Tourist/NCT), medium interest (Culinary Tourist/CT), and high interest (Gastronomic Tourist/GT). The results of TCR identification and categorization can be seen in Table 2.

**4.1.3 Tourist attitudes towards local culinary in the digital era**

As for knowing in more detail about the parameters of tourist attitudes towards local culinary in the digital era, the mean value of each statement on the attitude indicator is presented. It can be seen in Table 3 that the mean value of

the primary motive for traveling to enjoy local culinary at the destination increased from NCT, CT, then GT. NCT and CT do not agree that local culinary is the primary motive for traveling and is the main criterion in determining destinations, while GT strongly agrees. CT and GT will get the satisfaction of traveling after trying local culinary at the destination, but NCT disagrees with this.

**4.1.4 Tourist perception of local culinary in the digital era**

Parameters of tourists' perceptions of local culinary in the digital era are also identified to determine what indicators influence and dominate the dining experience in tourist destinations. In Table 4, it can be seen that different indicators dominate the dining experience in tourist destinations. For NCT, the health value is the most important indicator, followed by the authenticity of local cuisine and the restaurant's atmosphere. Meanwhile, at CT, the uniqueness of local culinary is the most important indicator, followed by health values and local culinary culture. Whereas in GT, the order of dominance of perception indicators is the uniqueness of local culinary, local culinary culture, and local culinary authenticity.

**Table 2. TCR and categorization of tourist typology in culinary tourism in the digital era**

Mean Value of Tourist Attitudes to Local Culinary	2.67	3.50	4.60
%TCR	0-64%	65-79%	80-100%
%Total of Respondents	10%	15.3%	74.7%
Category	<i>Non-Culinary Tourist</i>	<i>Culinary Tourist</i>	<i>Gastronomic Tourist</i>

**Table 3. The mean value of tourist attitudes towards local culinary in the digital era**

No	Statement	Mean Value		
		NCT	CT	GT
<b>A</b>	<b>Attitudes</b>			
1	My primary motive in traveling wants to enjoy local culinary at the destination	2.92	3.36	4.69
2	Local cuisine is the main criterion in determining the destination to be visited	2.41	3.38	4.50
3	I feel satisfied in traveling after trying the local culinary visited at the destination	2.69	3.78	4.61
	Total average value	2.67	3.50	4.60

**Table 4. The mean value of tourists' perceptions of local culinary in the digital era**

	<b>Perception</b>	<b>NCT</b>	<b>CT</b>	<b>GT</b>
	The indicators below affect the dining experience in culinary tourism destinations:			
1	Local culinary culture	3.66	4.26	4.66
2	The authenticity of local culinary	3.94	4.24	4.66
3	Health value	4.08	4.28	4.47
4	Local culinary uniqueness	3.88	4.39	4.71
5	Restaurant atmosphere	3.90	4.07	4.47
	Total average value	3.89	4,25	4.59

**4.1.5Local culinary information search behavior in the digital era**

In their behavior in seeking information, Table 5 shows that the higher interest of tourists in food at a destination, the more active they are in searching for information before going on a culinary tour. It can be seen in the first statement that the search for information on local culinary culture/traditions has increased from NCT, CT, and GT. The second statement also has a similar tendency, where the search for information related to restaurants that sell local culinary increases from NCT, CT, and GT. While in statement 3 related to the search for information after arriving at the destination, it decreases in order starting from NCT, GT, and CT. However, it can be concluded that all types of tourists actively search for information before their culinary exploration's activities.

**4.1.6ANOVA test results attitude, perception, and tourist information seeking behavior in the digital era**

Meanwhile, to find out whether there are differences in attitudes, perceptions, and tourist information-seeking behavior on different typologies of tourists, the Anova test is carried out. Table 6 shows that the three variables have a significance value of  $0.000 < 0.005$ . This result means H1, H2, and H3 are accepted that there are significance differences in attitudes, perceptions, and local culinary information-

seeking behavior in the digital era for different typologies of tourists. The three types of tourists show different behavior towards food at the destination.

Furthermore, to explain further about the differences between groups, the Duncan's test was carried out. Duncan's test results explain that there are differences in attitudes and perceptions between the three different types of tourists. Meanwhile, in the tourist information seeking variable there is a difference between GT and CT and NCT, but CT and NCT do not show any difference. Attitudes, tourist perceptions, and local culinary information seeking behavior tend to increase from NCT, CT, to GT.

**4.1.7Preference for local culinary information sources in the digital era**

As for knowing the sources of information that become tourist references in culinary tourism, a survey was conducted on each identified tourist typology. The first five media that become NCT's preference in searching for culinary information are friends, youtube, family, search engines, and Instagram. Meanwhile, in CT, it starts searching through search engines, friends, Instagram, family, and YouTube. Whereas in GT, the order of information sources starts from Instagram, friends, search engines, youtube, and family. Of the three types of tourists, NCT prioritizes word-of-mouth over digital media.

**Table 5. The average value of local culinary information-seeking behavior in the digital era**

	<b>Information seeking behavior</b>	<b>NCT</b>	<b>CT</b>	<b>GT</b>
1	I am looking for information related to local culinary culture/traditions at tourist destination before going on a culinary tour	3.60	4.04	4.54
2	I'm looking for information related to restaurants that sell local culinary in tourist destination before going on a culinary tour	3.69	4.05	4.57
3	I'm just looking for information after arriving at the destination	3.14	3.00	3.03

**Table 6. ANOVA test results of attitudes, perception, and tourist information seeking behavior**

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Attitudes	205.495	2	102.747	719.173	.000
Perception	33.438	2	16.719	71.733	.000
Information Seeking Behavior	12.567	2	6.283	13.564	.000

**Table 7. Duncan's test results of attitudes, perception, and tourist information seeking behavior**

Tourists' Typology	Notation		
	Attitudes	Perception	Tourist Information Seeking
Non Culinary Tourist	c	c	b
Culinary Tourist	b	b	b
Gastronomic Tourist	a	a	a

**Table 8. Preference for local culinary information sources in the digital era**

Information Source	Using Percentage		
	NCT	CT	GT
Family	11.72	10.83	9.58
Frien	12.89	11.75	11.69
Brochure	1.17	1.61	2.11
Television	3.13	5.53	3.73
Newspaper	0.39	1.15	0.79
Radio	0.39	0.46	0.74
Tourist Information Centre (TIC)	1.95	3.00	2.36
Search Engine	10.94	12.90	11.59
Tourist destination website	3.52	4.15	3.93
Tour Operators Website	0.39	0.46	1.18
E-Services	5.08	5.07	5.35
ministry of tourism website	0.78	1.38	1.18
Instagram	10.94	11.06	12.97
Facebook	6.25	3.23	3.44
Twitter	2.73	2.30	2.70
Food blogger Content in Blog	2.73	3.92	4.13
Food Blogger content in social media	8.20	7.14	7.37
Youtube	12.11	10.37	10.56
Online Order Application (Go-Food/Grab-Food/etc)	4.69	3.46	4.37
Others	0	0.23	0.25

**4.2 Discussion**

Many kinds of research on gastronomic themes have been carried out, but very few have focused on the consumption behavior of tourists. Most of the research discusses the relationship between food and tourism [14,23,52] studies related to gastronomy and gastronomic tourism [53,54], gastronomic tourism experiences [27,55,29]. Then, another focus in developing the strategy of local culinary [19,20,56,57].

Research that examines the consumption behavior of tourists is still rarely done. There is one study conducted by Bjork & Raisanen [51] which identified types of tourists with different levels of interest in food and beverages at destinations. However, the sample of this study was limited to *Finnish* tourists. In addition, the sample included in the study were tourists who visited the Travel fair, not specifically tourists who had culinary tours or visited local restaurants in destinations. So, in this study, we

will review the typology of tourists and their characteristics in culinary tourism in the digital era.

#### 4.2.1 Local culinary tourists by demographics

Based on the research survey results, respondents were dominated by young people in the age range of 17-26 years old and 27-33 years old. In generation theory, those born in 1995-present or aged under 26 years old are called generation Z, while those born in 1981-1995 or aged over 26 years old are called generation Y [58]. Another opinion that is not much different, Reeves & Eunjung [59], also states that Generation Z is born in 2001-present and the millennial generation was born in 1981-2000.

At this time, according to data from the Indonesia Central Statistics Agency (BPS) in 2020, the composition of the Indonesian population is dominated by Generation Z (27.94%) and Millennial Generation (25.87%). Some literature mentions that generation Z and the millennial generation tend to be fluent in technology [60]. The intensity of using technology and the internet has influenced the behavior of society in general, including tourists. Moreover, technological advances in the digital era allow communication and access to information to be increasingly unlimited.

Research by Wiweka, Wachyuni, Rini, Adnyana, & Adnyana [61] shows that millennial tourists tend to be inseparable from using the internet before, during, and after traveling. In [10], the internet is also used in making purchasing decisions for culinary products. This finding is interesting so that in this study, the typology of tourists and their characteristics in local culinary tours will be discussed more specifically in the Digital Era. This study can explain how tourists' consumption behavior in enjoying local culinary at the destination.

As a result of the dominance of generation Z and generation Y, the majority of respondents are not married yet and work as students, entrepreneurs, and private employees. The gender of the respondents is mostly female. That is means that women are more interest in local culinary at the destination, as in research of Agustina [62] which states that culinary tourism is enjoyed by women as much as 53%, and Harsana [63] also reported, that there is a tendency that culinary tourism is more attractive to women than men.

From the research data, the majority of respondents often do culinary tourism activities. It can be seen, mostly the frequency of culinary tour more than three times in the latest three year. Indeed, culinary tourism has become special interest tourism that is quite in demand by tourists worldwide. Eating has shifted from being a necessity to becoming a tourist attraction. The tourist attraction is a unique product because before tourists reach the destination, the product cannot be tried (intangible). Therefore, product information before visiting a destination is very important, supported by easy and fast access to information. In culinary tourism, 79.9% of respondents stated that digital media is the main reference source of information. After that, it was dominated by Word-of-Mouth (WOM), and lastly the printed media. Even though digital media is the main source of information currently, WOM is still a trusted source of information. Moreover, WOM is called the powerful marketing force [64].

#### 4.2.2 Characteristics of tourists in local culinary tours in the digital era

Based on respondents' responses, respondents' attitudes were classified based on their interest in local culinary. Interest in local culinary is measured by how much do they agree with three indicators: local culinary as the main motivation for traveling, criteria for selecting destinations, and part of travel satisfaction. After processing the data, most respondents had a high interest in local culinary, as much as 74.7%, while those with moderate interest were 15.3%, and 10% had a low interest. Based on Hall et al [42,43], the type of food tourism is classified based on the tourist's interest in local culinary at the destination. Low interest refers to urban/rural tourism, moderate interest in culinary tourism, and high interest in gastronomic tourism, where almost all activities are related to food. So based on the findings in this study, tourists are divided into three types, namely NCT, CT, and GT. Furthermore, it will be discussed in more detail, starting from attitudes, perceptions, and information-seeking behavior on different typologies of tourists.

##### 4.2.2.1 Tourist attitudes to different tourist typologies

The results of the Anova test in Table 6 show that H1 is accepted that there are differences in tourist attitudes towards different typologies of tourists. In statements related to local culinary as

the main motivation for traveling, the respondents' level of agreement increased from NCT, CT, and GT. While GT strongly agrees that their main motive for traveling is to enjoy local culinary, NCT and CT quite agree. According to Hall et al [42,43], high interest is usually characterized by tourism activities related to food/gastronomic tourism. In contrast to moderate interest/culinary tourism, who visits restaurants as part of a lifestyle, and low interest/no interest at all where food is only a fulfillment of needs or something different.

Currently, many destinations have developed local gastronomy in destinations because food has played an important role in holiday activities [65]. Furthermore, culinary tourism contributes to local economic development [15]. Indonesia has various delicious local culinary that tourists can enjoy and can be developed as gastronomic tourism. Moreover, based on this research, most respondents are Gastronomic Tourists (GT) who have a high interest in local culinary in their destination. In their research, Bjork & Raisanen [51] grouped three types of tourists based on their behavior towards food. Experiencers are the type of tourists who have the highest interest in the food at the destination. Food is the main criteria in determining a destination, and they usually search for information before visiting a destination. They look for uniqueness, novelty, and local cuisine in their destination.

According to Miroso & Lawson [66], many consumers still show interest in local culinary even though many global culinary are emerging in destinations. Therefore, many destinations develop local menus at restaurants in destinations [4]. Knowing more about tourist perceptions of local culinary at the destination will be discussed in the next section. Knowing their attitudes, perceptions, and behavior in searching for information can be a suggestion for local culinary entrepreneurs in destinations.

#### *4.2.2.2 Tourist perceptions of local culinary on different tourist typologies*

Knowing tourists' perceptions of local culinary can be seen what things can affect their dining experience. Experience is important because that is what tourists are looking for when traveling. In fact, according to Nield, Kozak, & LeGrys [67], the dining experience can be a factor of satisfaction and dissatisfaction of tourists at a destination. It can be seen from the ANOVA test in Table 6, H2 is accepted that there

are differences in tourist perceptions of local culinary in different typologies of tourists. It is described through the results of descriptive statistical tests, which show that all respondents agree with the five perception indicators in this study. The mean value of the perception indicator tends to increase in value from the NCT, CT, and GT. The highest mean score or the indicators that most influence NCT are health scores, local culinary authenticity, and restaurant atmosphere. The CT focuses on the uniqueness of local cuisine, health values, and local culinary culture. In contrast, the GT focuses on the uniqueness of local culinary, local culinary culture, and the authenticity of local culinary. GT agrees that the value of health is important in choosing culinary, but it is not a priority as in NCT and CT.

This result shows that GT is more open-minded to try various local foods that are different from what they usually eat. CT prefer uniqueness and authenticity of local culinary but has a more casual attitude in enjoying culinary. Similarly, NCT, focuses on the health value in comparison with different eating experiences. According to [42,43], CT makes food as their lifestyle, and for NCT, food is to fulfill physiological needs. The results of this study are reinforced by previous findings of Bjork & Raisanen [51] about local cuisine as a tourist attraction in Finland. Types of tourists who show a high interest in food (experiencers) make the value of novelty and uniqueness of local culinary destinations a tourist satisfaction. While the type of enjoyers who have low interest to food, eating is part of relaxation.

Meanwhile, based on the results, the type with the lowest interest value prioritizes food safety over the experience of eating. So, can be concluded from this study, there are three types of tourists who become different segments of culinary tourism in destinations. These findings can be a suggestion for culinary entrepreneurs to improve the tourists' attention.

#### *4.2.2.3 Information seeking behavior in different traveler typologies*

In the digital era, communication media and internet make it easier to get the information needed, including attractions in destinations. In culinary tourism, tourists can look for information related to local culinary before they visit the destination. Based on the study results, all types of tourists, both NCT, CT, and GT agreed that they seek information related to

local culinary culture/traditions and local culinary restaurants before going on a culinary tour. The mean value increases from the types of NCT, CT, and GT, which shows that the higher tourist interest in local culinary, the more intensively they search for information. It is because eating is a factor in their travel satisfaction.

The reference media they use in searching for information is dominated by digital media and WOM. However, what is interesting is that the first five media sequences used by NCT, CT, and GT are different. In NCT, the recommendation of friends is the main source, while in CT and GT, digital media becomes the main source and then friends. In the first place, search engines are the reference for CT, while Instagram is on GT. This finding is interesting because it shows that CT and GT use digital media as a key influencer in deciding the purchase of local culinary. While the suggestions of friends and family are used to validate the information they get on the internet. On the other hand, NCT use friend suggestions as their key influencer. It is also confirmed through the ANOVA test in Tables 6 that H3 is accepted that there are differences in information-seeking behavior in different typologies of tourists.

The findings in this study are new and exciting. Although the types of digital media are increasingly varied, the direct influence of friends and family or peer influence is still a trusted information source for tourists, especially for NCT. According to Soh, Rezaei, & Gu [68], social factors influence millennial generation purchasing decisions. Based on an article written by Glover [69], word-of-mouth is considered by 74% of consumers as key influencers in their purchasing decisions. 92% of consumers trust advice from friends and family over advertising, and 88% of consumers trust online reviews written on social media [69]. Online reviews with electronic word-of-mouth (eWOM) are increasingly being found and accessed on social media. eWOM is increasingly accessible with the internet and various digital media [70]. As in this study, food blogger content on social media and YouTube is also used as a source of tourist reference information in searching for cultural information and local culinary restaurants on all tourist typologies, NCT, CT, and GT.

## 5. CONCLUSION AND RECOMMENDATION

This study shows that three types of tourists are classified based on their interest in local culinary at the destination. They were starting from tourists who have low, medium, and high interests, which are termed Non-Culinary Tourist (NCT), Culinary Tourist (CT), and Gastronomic Tourist (GT). Different typologies of tourists have different attitudes, perceptions, and information-seeking behavior. Interest in local culinary is getting higher in GT, and for them food is part of the satisfaction of traveling. Meanwhile, CT has a more casual attitude, although they also enjoy local cuisine with its uniqueness and novelty. Then for the NCT, local culinary is not used as a criterion to determine the destination because eating is no more than fulfilling physiological needs. Thus, this study provides theoretical implications that found different typologies of tourists related to local culinary consumption behavior in the digital era. This finding can be claimed as a new theory related to culinary tourists typology in the digital era.

Another interesting finding is that the main source of information for all types of tourists is digital media. However, they still consider recommendations from friends through WOM to reassure them about the choice of culinary tourism destinations. Therefore, this research provides practical implications that can be used as suggestions for developing gastronomic tourism in destinations, especially in Indonesia, and the world in general.

Culinary entrepreneurs in Yogyakarta and Solo are advised to be more active in using digital media in marketing activities, from providing product information, it's culture and local wisdom. The use of digital media can be adjusted to the reference information sources that are most widely used by tourists. This strategy will expand access to information for tourists before visiting a destination which is expected to attract their interest in visiting the destination. The central government, local governments, and destination managers are advised for assisting and facilitating of information digitalization for culinary entrepreneurs. Assistance program can be training, mentoring, and promoting local culinary in the official tourism website. Some of the results in this study can also be used to adjust culinary tourism development strategies according to tourist demands, for example increasing culinary products based on requests

from GT tourists as the majority of types with the highest number in this study, from the aspect of uniqueness, culture, and authenticity

The limitation of this research is that it is only conducted on domestic tourists in Indonesia. Further research can be carried out with broader research subjects, such as foreign tourists or in other countries. A wider subject can provide a broader view of the consumption behavior of tourists in culinary tourism. In addition, this research is also limited to using only a quantitative approach. Further research is suggested to enrich the research method, for example, with a qualitative or mixed approach. More prosperous methods will get more in-depth information. Further research can also be conducted to analyze the behavior of tourists in the consumption and post-consumption periods.

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## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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