Gastronomic satisfaction of the tourist: empirical study in the Creative City of Popayán, Colombia

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Abstract

Currently, gastronomy is a fundamental element for tourists to discover the culture and traditions of a destination. The transcendence granted to a culinary experience in a specific place can become a fundamental motivation for the visit and determine the level of satisfaction reached. In this research, the relationship between tourism and gastronomy is analysed in the city of Popayán, Colombia, a city that has received recognition from UNESCO as a Creative City of Gastronomy. To do this, we examine the influence of different dimensions of culinary motivation in the satisfaction with gastronomy that is experienced during the visit. In addition, we analyse the role of tourist attitude towards culinary experience in gastronomy satisfaction. The methodology used in this research is based on partial least squares structural equation modelling. The main results indicate that the importance of the culinary experience of the tourist in the choice of the destination mediates the effect that culinary motivations exercise on the satisfaction with the gastronomy.

Keywords: Food-cultural study, Gastronomic fusion, Regional cuisine, Creative cities, Tourism, Popayán, Colombia

Introduction

Research area and goals

With the aim of promoting a network of cities that co-operate in specific areas, UNESCO created the Creative Cities Network (UCCN) in 2004. The seven recognised creative fields include Crafts and Folk Art, Design, Film, Gastronomy, Literature, Media Arts and Music. The UCCN promotes creativity and innovation through the adoption of urban co-operation strategies, which allow for more inclusive and sustainable development [1]. One year after the creation of the UCCN, the city of Popayán was the first city that was registered as a UNESCO Creative City of Gastronomy (UCC of Gastronomy). This recognition gives the gastronomy of the city a mark of quality, which allows it to promote gastronomic tourism by means of the revitalisation of its culinary tradition [2].

This mark of quality due to the registration of Popayán as a UCC of Gastronomy has its concision is an important and unique culinary offer that the city provides for the traveller. Additionally, since the year that this recognition was granted, an intense study process has been carried out to rescue, make visible and revitalise elements of traditional cuisine based on ancestral recipes, preparations and culinary tricks. All of this has made the local cuisine become a reference point in gastronomic learning, given its symbiotic combination between traditional and pioneering cuisine. However, these processes of economic and cultural revitalisation have not been the subject of attention in the scientific literature, with there being just a few studies regarding the gastronomic uniqueness of Popayán [3].

In any case, Popayán is recognised on a global level not only for its gastronomy but also for its wide cultural heritage. This has its biggest expression in the Holy Week processions, recognised in 2009 as an Intangible Cultural Heritage (ICH) by UNESCO. In addition to this, the potential for social and economic development that exists in this Latin American country should also be

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considered as a result of the Colombia Peace Process Accords, completed in 2016. These Accords offer a unique opportunity for victims and those reinserted into society to cooperate with the aim of achieving a promising future. It is especially applicable in the geographic areas where the conflict developed, something that happened in the province of Cauca, where the city of Popayán is located. In this sense, the promotion of tourism shall encourage an environment of acceptance, cohabitation and solidarity [4].

This research intends to advance the scientific knowledge regarding the relationship between culinary experiences and tourism in a UCC of Gastronomy. Specifically, the aim of this research is to analyse the role of attitude towards culinary experience that tourists have in the city of Popayán. With the final aim of achieving this goal, the motivations of tourists are studied as well as their satisfaction level reached in relation to their gastronomic experience.

Approach to the gastronomic tradition of Popayán

The city of Popayán, with its attractive historic colonial centre and its beautiful and picturesque sunsets, is known as the White City because of the colour of its walls. Green is also associated with the city because of its rich nature while it is also known as being fertile as it is the place of birth of presidents, poets, writers and illustrious, historic Colombians. Located in the Pubenza valley, between the *Cordillera Occidental* (Western Mountain Range) and the *Cordillera Central* (Central Mountain Range) in the south-west of the country, it is the capital of Cauca Department (Fig. 1). This Colombian city is visited by thousands of tourists each year, attracted by its important natural tourist attractions that allow visitors to engage in hiking, hydrotherapy and bird-watching. Similarly, visitors may enjoy cultural events such as the festival of religious music, "big" Holy Week and "little" Holy Week, the festival of kings (commonly known as "*blanquitos y negritos*" (whites and blacks)), the gastronomic conference, *la ruta del maíz* (The Corn Route), museums and churches.

The fact that Popayán has been recognised by UNESCO as a Creative City of Gastronomy is due to the wide range of traditional dishes, sweets and snacks on offer. Encouraged by this declaration, in recent years, they have been developing a research process to rescue, highlight, make visible and evaluate elements, recipes, tricks and secrets of the cuisine of Cauca and Popayán which have been hidden in the memories and experiences of grandmothers, in the soot of clay pots, in the smoke stains of the roof, the walls and the hobs of traditional kitchens.

Within the gastronomy of Popayán, certain traditional dishes stand out, which have been recognised since ancestral times as being typical of the region. They represent a fine legacy of the Spanish and indigenous (Pre-Colombian) cultural interaction, and they include components belonging to the region as well as foodstuffs brought from Spain by the *conquistadores*. The region's gastronomy is especially rich in corn. This plant of Central American origin is kneaded by the peasants of Cajete (a rural town of Popayán) in order to provide a range of traditional foodstuffs. Among these, the crunchy *Carantanta* stands out, a name derived from the indigenous word which means
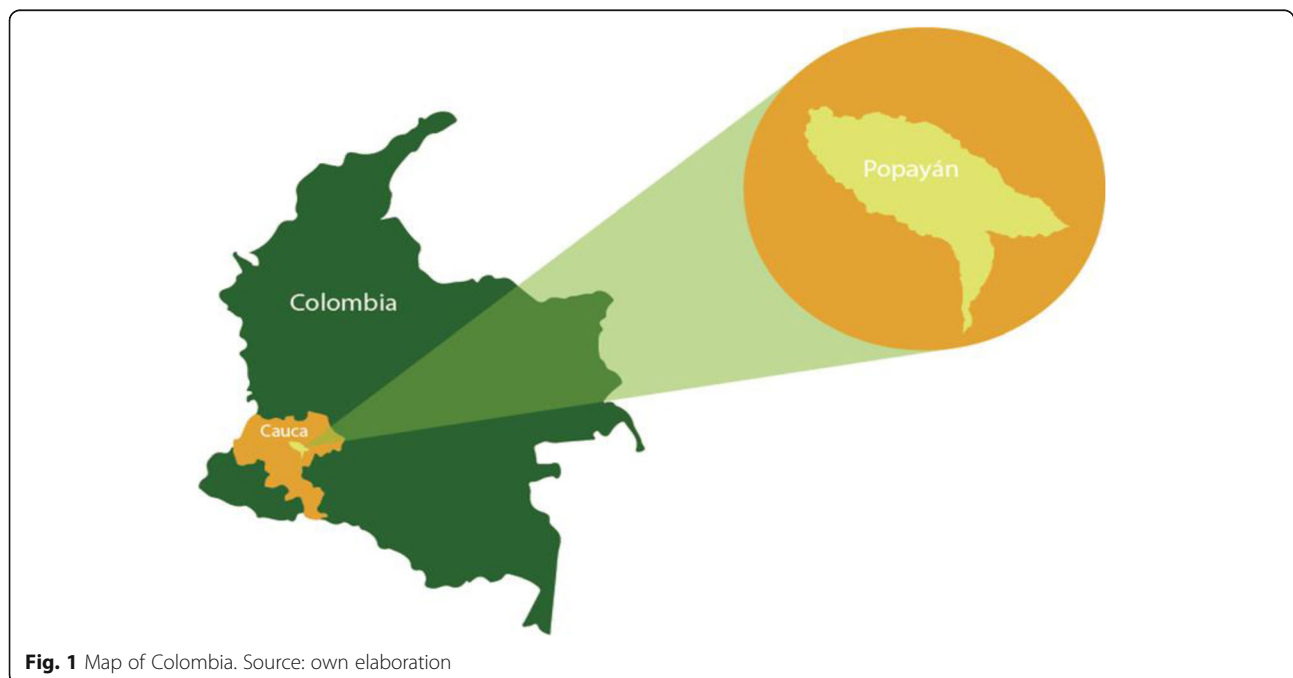

Fig. 1 Map of Colombia. Source: own elaboration

"cornbread" (Fig. 2). Another typical product of cuisine from Popayán is *sopa de tortilla* which, with aged corn as an essential component, is mixed with ingredients such as ground meat, minced potatoes, thin slices of fried green banana, herbs and the desired condiments (Fig. 3).

Highlights of the rich and ancestral cuisine of the region also include corn wraps and the dough to prepare *tamales de pipián (*Fig. 4*)* and *empanadas de pipián* (Fig. 5) (*pipián* is a stew made from peanuts, red potatoes, onion, garlic and annato). The *tamal* is made with corn dough, *pipián*, a slice of boiled egg and a piece of fat. These ingredients are placed on top of banana leaves to be wrapped in and give them flavour. For afterwards, a popular choice is *salpicón de baudilla*, a sweet crushed ice drink made with tropical fruits. It is typical of the Cauca region (Fig. 6). Meanwhile, *aplanchados* (Fig. 7), sweet pastries that gently melt in the mouth, are the most representative dessert of the city of Popayán

Literature review
Creative cities, tourism and gastronomy
When UNESCO created the UCCN recognition in 2004, it was looking to preserve and energise the cities with culture being the supporting idea for their strategic and sustainable management [5]. Accordingly, [1] itself specifies the priority of this type of recognition of cities in Developing Countries, as a way of helping strengthen their local economy. Because of this, the inclusion as a UCCN addresses four fundamental elements for progress in the urban areas: economic prosperity, social equity, environmental sustainability and cultural expression [6].

The tourist, who is motivated by the creativity of the destination, seeks to enjoy new, innovative experiences [7, 8]. indicates that creative tourism has its origin in cultural tourism, and it is indicated for those visitors attracted to the intangible culture of the destination and to the active participation in the customs of the local community. In this sense, creative tourism intends to expand the concept of cultural tourism and, at the same time, redirect it given

Fig. 3 *Sopa de tortilla*

its great involvement in the daily life of the local community. Thus, this type of tourism represents going beyond the mere contemplation of a heritage, allowing the tourist's own cultural enrichment [7].

The creative tourist wishes to live an intense cultural experience by sharing the customs and traditions of the destination. In this respect, the UNESCO recognitions of UCCN have been a strong impulse for this new tourist segment, where gastronomy plays an important role [5]. indicates that the recognition of UCCN has two different environments. First, it suggests a mark of authenticity and a tourist attraction similar to the world Heritage Site or Intangible Cultural Heritage (also recognised by UNESCO). Second, it is a way of creating synergies and cooperation among the different cities recognised in each of the seven different fields of entry.

In any case, there has been little empirical research until now that has been conducted to analyse the relationship between tourism and UCCN. Despite this, [2] indicate the need to complete empirical studies that analyse this relationship, allowing for the provision of results and conclusions that might be useful for UNESCO itself. Among these empirical studies, we highlight the research of [9] in the city of Graz as a UCC of Design

Fig. 2 *Carantanta*

Fig. 4 *Tamales de pipián*

Fig. 5 *Empanadas de pipián*

Fig. 7 *Aplanchados*

or, more recently, the study by [10] in Krakow as a UCC of Literature.

The novelty of this research is focused on the completion of an empirical study in the city of Popayán in Latin America, which is recognised as a UCC of Gastronomy. Additionally, it has an ICH with its Holy Week processions.

Gastronomy and motivation

A tourist who visits a specific destination might find the local food to be merely a physiological response to the need to feed oneself, or it might be a key variable for choosing a place to visit. In the first case, we would be dealing with a tourist without any gastronomy motivation whatsoever, given that the culinary tradition of the destination does not represent a differential factor for them [11]. These tourists, on many occasions, consume food in the destination as they would do so in their place of origin, possibly in the same restaurant chains and eating the same products. On the other hand, we find tourists whose motivation to taste the local cuisine is a differential factor in the structure of the tourist experience. In this sense, [12] specifies that the interest of the tourist in the gastronomy of the destination might be analysed through four different motivational dimensions:

Fig. 6 *Salpicón de Baudilia*

first, the physiological responses to the need to feed themselves; second, the aspiration to discover the culture of the destination by means of its gastronomy; third, the desire to interact socially in this destination with other individuals through the gastronomy; and fourth, the search for prestige and status that a better culinary knowledge of specific destinations provides.

[13] suggest two gastronomic motivational groups in tourist destinations: main motivations and secondary motivations. The first would include stimuli through discovering and tasting the cuisine of the destination visited as the main reasons to visit it. The motivations of a secondary nature refer to variables, including gastronomic ones, that are used to choose a tourist destination [14]. analyses the transcendence of gastronomy as one of the fundamental motivations for choosing a destination. In similar terms, [15] highlight the intense relationship that occurs between the motivations to visit a place and the interest in tasting the local food.

As such, with more or less transcendence, the motivations for tasting the gastronomy of a destination are part of the tourist experience. In this way, for [16], experiences with local cuisine can be classified into three groups: sensory, cultural and social. For their part, [4] collected the motivations for local cuisine based on three combinations: sensory appeal, local food experience and health concern [11]., in their study of tourism, motivations and experiences taken from gastronomic festivals, classify the different motivations that tourists have in terms of the culinary tradition of the destination visited into three groups: new food experiences, culture and socialisation.

Gastronomy and satisfaction

Historically, the tourist sector has been characterised by intense standardisation. Today, the competitiveness that is developed among the different destinations is placing importance on the need to offer different values that make them unique. In this sense, the tourist attraction of a destination cannot exclusively base itself on the sum

of a series of natural or cultural resources. This is due to the tourist only having the satisfaction of the place visited if its tourist offer is sufficiently attractive and covers the expectations and the experiences that the traveller demands [17]. Because of this, the analysis of the satisfaction of the tourist with the gastronomy of the destination is a key factor because of its double cognitive-affective aspect, considering that loyalty to a destination is a variable that occurs if it also reaches satisfaction with the gastronomy. This satisfaction occurs when local food allows for the tourist to enjoy unforgettable experiences [18].

[14] determined that satisfaction achieved with the gastronomy of the destination is conditioned by the tradition that derives from its culinary inheritance and by the natural and healthy characteristics of the ingredients that are used in the preparation of their dishes. For that matter, these culinary ingredients should normally precede from their local producers [4]. indicate that the satisfaction of the tourist with the gastronomy of the place has a strong influence because of the flavour that, on many occasions, derives from the ancestral origin of the recipes that are used in their preparation, defined as a basic part of the cultural heritage of the destination. This gastronomic experience provides the tourists with unique and unrepeatable experiences that can only be enjoyed in destinations with a culinary heritage that is still preserved today. In this sense, the dining experiences become key and defining variables of tourist satisfaction [14].

In summary, the gastronomy of a destination can become a key piece in the structure of the tourist's satisfaction [11, 19]. This derives from the close relationship of three constructs: motivation, experience and satisfaction.

In accordance with the literature review, we propose the following hypothesis:

H_1: Motivations of tourists towards the gastronomy of a destination have a positive effect on the level of satisfaction achieved by the traveller.

Mediating effect of gastronomy experience
This research tries to explore how gastronomic experiences could be an important element in deciding to visit a specific destination [19]. According to [20], the gastronomic experience can be conceptualised based on the motives of the tourist. Likewise, the experience originated by the interest in gastronomy might have an effect on the motivational outcome. Previous literature [21] has endorsed in Thai context the existence of a mediator effect of culinary experience of consumers related to the motives and the culinary satisfaction. Therefore, the presence of gastronomy in the decision to visit a place can be crucial in how gastronomic motivations affect the culinary satisfaction of the visitor. In this sense, the following hypothesis is suggested:

H_2: The attitude that the tourist has in terms of the culinary experience in a destination has a mediating effect on the relationship between the gastronomic motivations and tourist satisfaction.

In Fig. 8, the theoretical model that includes the proposed hypotheses is presented below.

Methodology
Sample and data collection
This research builds on the results obtained from fieldwork based on the completion of surveys given to a representative sample of tourists who visited the city of Popayán during the celebration of the Holy Week processions in 2018, which is registered as an ICH by UNESCO. This research is based on a non-probability sampling technique, which is traditionally used in this type of research, in which tourists that have been surveyed are available at the same time and place [22]. As to the size of the target population, it is considered the number of tourists attended different tourist information points during the Holy Week Processions of the year 2017. The amount reached 22,560 tourists. Hence, with orienting character, in case of being a random sampling,
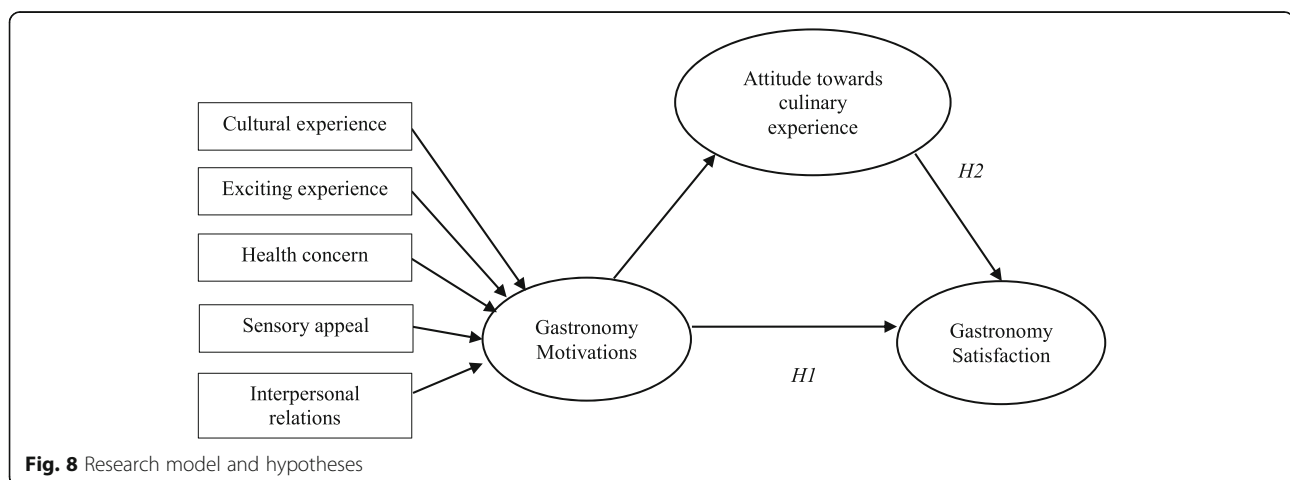

Fig. 8 Research model and hypotheses

the sample error for a confidence level of 95% should be ± 3.90%. In this research, 643 surveys were carried out, of which 615 were valid. In addition, the sample size is evaluated in terms of G*Power test [23] yielding a minimum sample of 128 individuals. As such, the value obtained was appropriate (much higher than the level of 80%) according to that recommended by [24].

Measures
The survey applied in the fieldwork is based on previous research [6, 7, 11, 19, 25, 26]. This research analyses the relationships between tourism and gastronomy.

The questionnaire adopted consists of two differentiated blocks. The first, focused on gastronomy, offers questions such as the interest of the tourists in the gastronomy of Popayán, its importance in the decision to travel, the gastronomic motivations of the travellers, the culinary experience in the destination and the satisfaction with the culinary experience in this place. The second block analyses the socio-demographic variables of the tourists surveyed including gender, age, educational level and nationality. The questionnaire includes yes/no questions, others with open or closed answers, and others on a 5-point Likert (with 1 being "very little importance" and 5 "very important"). The questionnaire was distributed in two languages (English and Spanish). Each participant was able to choose the one that was most comfortable for them according to their native language or their place of origin.

In terms of data analysis, it is proposed a variance-based structural equation modelling (SEM), PLS, aiming to apply to the proposed casual confirmatory research model [27] and, this way, verifying the suggested hypothesis. This research follows a four-step design with the aim of analysing and understanding the PLS results [28]. First, an assessment of the global measurement model was offered. Second, the measurement model was evaluated. Third, the structural model was determined. And fourth, given the mixed nature of the constructs (formative for the latent variable and gastronomy motivations; and reflective for the mediating variable, attitude towards culinary experience).

For the completion of the analytical development and the hypothesis contrast, the Smart PLS v.3.2.8 tool was used. With this instrument, the causal relationships among the gastronomic motivations of the tourists, their level of satisfaction with it and the attitude of the visitor towards the culinary experience as mediation construct were analysed.

Results
Socio-demographic profile
The sample was divided almost equally between men (52.8%) and women (47.2%). By age, those surveyed were distributed in the following way: people under 30 (47.5%),

between 30 and 39 (32.3%), between 40 and 49 (10.4%), between 50 and 59 (6.2%) and over 60 (3.7%). The tourists surveyed displayed a high level of education as 62.7% of the sample indicated having university studies, 20.0% had a post-graduate or a doctorate, 17.3% el resto. In terms of professions, the tourists surveyed were divided in the following way: students (25.5%), employed by others (21.7%), freelance (19.6%), businessmen (14.4%), civil servants (8.2%) and the rest represents the 10.6%. Regarding nationality, 86.6% of the tourists surveyed were Colombians, and the other 13.4% were foreigners. Among the latter group, European tourists were the most frequent (45.3%), followed by Latin Americans (32.2%) and North Americans (21.2%). Finally, in terms of the level of monthly income of the family, those with income less than $525 (36.6%) stand out, followed by the group between $526 and $1050 (30.1%). Far behind are those people with monthly income between $1051 and $1575 (15.1%), followed by those between $1576 to $2625 (12.2%), above these figures, el 6.0%.

Global measurement model
In order to test the goodness of the settings of the global measuring model, the Standardised Root Mean Square Residual (SRMR) was calculated (saturated model), applying a bootstrapping process (the resampling technique gives the generation of 10,000 samples as a result), which allows for the measurement of the difference between the base of both observed correlations and correlations involved with the model [29]. The results offered an estimated SRMR of 0.097. This approximate valuation adjustment index, SRMR, is under the threshold 0.10, which indicates a good model fit according to [30].

Validation of measurement models and data analysis
Reflective composites
The results obtained in the estimation of the measurement model confirm the two main properties of this model (reliability and validity). In Table 1, the reliability of the measuring scales is confirmed. In this sense, it is observed that the coefficients for composite reliability (CR) and Cronbach's α are greater than 0.7 in all cases, which is the minimum value suggested by the scientific literature [31]. The convergent validity of the measuring instruments is also confirmed (see Table 1), as the average variance extracted (AVE) shows values in all cases much higher than the minimum recommended value of 0.5. Additionally, the factorial loads for the reflective scales confirm the convergent validity of each item in an individual way, exceeding the value $\lambda \geq 0.707$ [32] in each case.

The discriminant validity was also studied (see Table 2). Following the recommendation of [33], we opted for the analysis of the heterotrait-monotrait (HT-MT) ratio. All cases show a HT-MT detail below the

Table 1 Analysis of the measurement model: reflective composites

A. Construct	B. Loadings	C. AVE	D. CR	E. Cronbach's alpha
Cultural experience		0.745	0.936	0.914
To discover the taste of local food (CE1)	0.840			
It offers a unique opportunity to understand the local culture (CE2)	0.847			
To discover something new (CE3)	0.904			
To increase my knowledge about different cultures (CE4)	0.878			
To have an authentic experience (CE5)	0.845			
Excitement		0.693	0.900	0.853
To have an authentic experience (E1)	0.807			
Relaxing (E2)	0.847			
Escape noise and crowds (E3)	0.836			
It is different from what I usually eat (E4)	0.841			
Interpersonal relations		0.747	0.922	0.887
To be able to transmit my experiences with the local food (IR1)	0.831			
To taste the local food increases family ties and friendship (IR2)	0.861			
Advise on local dining experiences other travellers (IR3)	0.893			
It allows me to enjoy pleasant moments with family and/or friends (IR4)	0.870			
Sensory appeal		0.773	0.887	0.902
Nice smell (SA1)	0.899			
Good taste (SA2)	0.915			
Visually attractive (SA3)	0.880			
The flavour of the dish is different than what we prepare in my regions (SA4)	0.819			
Health concern		0.813	0.929	0.885
Nutritious (HC1)	0.911			
Contains a large amount of fresh ingredients produced locally (HC2)	0.891			
Healthy (HC3)	0.903			
Attitude towards culinary experience		0.749	0.922	0.887
How important is gastronomy as a motivation to travel (ICE1)	0.818			
How important are the gastronomic experiences when you choose a destination for your trip (ICE2)	0.899			
How important is gastronomy in the satisfaction of your trip (ICE3)	0.876			

(A) The different constructs analysed and the items which form each one of them. (B) Individual reliability of the indicators. (C) The measurement of discriminant validity checks if the constructs deemed not to be related are, in fact, not. (D) and (E) The measurement of internal consistency determines whether the items that measure the construct are similar in their scores

All loadings of reflective composites are significant at the level of 1% based on a two-tailed test [t (0.01;10,000) = 2.577]

[r]Relatively significant formative items

[a]Absolutely significant formative items

Table 2 Evaluation of discriminant validity

A. Construct	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Cultural experience (1)	1						
Excitement (2)	0.914	1					
Health concern (3)	0.742	0.791	1				
Importance culinary experience (4)	0.641	0.594	0.561	1			
Interpersonal relations (5)	0.848	0.896	0.816	0.629	1		
Satisfaction (6)	0.792	0.748	0.713	0.624	0.740	1	
Sensory appeal (7)	0.844	0.859	0.885	0.583	0.899	0.79	1

(A) Indicates how different a specific construct is from other ones. For this, the relationship between each pair of constructs is presented

recommended values of 0.85 or 0.90 [34] with the exception of cultural experience–excitement (HT–MT = 0.914). To resolve this problem, we used the bootstrapping technique (10,000 sub-samples) with an error of 10% and two lines with the aim of inferring whether the HT–MT value for the "cultural experience –excitement" relationship differed from 1. The results show that the discriminant validity was confirmed.

Formative composites

For the determination of formative composites, an analysis of the multi-collinearity among the potential indicators was undertaken. To do this, a variance inflation factor (VIF) is applied in Table 3 [35]. It is observed that all the VIF values are found below the value limit of 5, which implies the inexistence of multi-collinearity and the bias in the application of the method [36]. With respect to the weights, all of these contribute positively to the corresponding constructs (with the exception of GS2) through the application of the bootstrapping technique (10,000 sub-samples).

Second-order composites

To develop the second-order composites, a two-stage approach method [37] was followed. According to this method, second-order composites were developed (see Table 4) with items obtained from the aggregation of scores of the first-order composites' items mentioned above. These aggregate scores, derived from composites representing reflective variables, become part of a formative composite to obtain a unique composite: a reflective-formative second-order composite. The second-order composites fulfil requirements useful for identifying validity criteria that have to be followed by the formative items (weight values less than 0.7, VIF values less than 5).

Table 3 Evaluation of the measurement model: formative composites

	A. Weights	B. VIF
Gastronomy satisfaction		
Quality of the dishes (GS1)	0.271[a]	2.632
Prices (GS2)	− 0.013	2.095
Facilities (GS3)	0.227[a]	3.326
Establishments environment (GS4)	0.082[c]	2.871
Innovation and new flavours in the dishes (GS5)	0.172[a]	2.004
Service and hospitality (GS6)	0.165[a]	2.474
Traditional gastronomy (GS7)	0.281[a]	2.434

It refers to the weighting of the indicators and their meaning allows for the understanding of the structure of each latent variable. (B) VIF, or variance inflation factor, allows for assessing the level of collinearity among variables
[a] [(c)]Weights of formative composites are significant at the level of 1% (10%) based on a two-tailed test [t (0.01;10,000) 2.577]

Results of the structural model

Once the validity of the external constructs of the model was confirmed, this section presents the internal results of the structural model. This analysis mainly develops the measurement of the structural model [33]. Having tested the validity and the reliability of the measuring models, the possible problems of collinearity in the structural model were identified, evaluating the hypothesis tested in the structural model through the analysis of path coefficients and the measures of the predictive power of this structural model (R^2, Q^2 de Stone–Geisser).

Evaluation of collinearity

In agreement with [38], there are multi-collinearity indexes when the variance inflation factor (hereafter, VIF) value is less than 5. As seen in Table 5, all values are below that figure.

The trajectory coefficients may be interpreted as coefficients of standardised regression [38]. In Table 6, the coefficients of the three paths are shown (1; 2a; 2b). These results suggest that the motivations do not imply by themselves an increase in gastronomy satisfaction. Therefore, hypothesis 1 (H_1) is rejected. However, there is an indirect effect between motivations and gastronomy satisfaction. In this vein, there is an indirect effect, which relates gastronomy motivations with attitude through culinary experience, where H_{2a} and H_{2b} yield significative coefficients, $\beta = 1.053$ and $\beta = 1.052$, respectively.

Predictive power

In this section, the R^2 coefficient of determination and Stone–Geisser's Q^2 test is calculated. The first of these represents a measure of predictive power, while the second is used as criteria for measuring the predictive relevance of the reflective dependent constructs (importance culinary experience and gastronomy satisfaction). In Table 7, the results can be seen. Thus, for R^2, the results may be seen as acceptable from a predictive point of view [39]. On the other hand, if $Q^2 > 0$, it could confirm that the composite models have a predictive power [39]. In accordance with the results obtained, loyalty, perceptions and evaluation have values above 0.

Mediation analysis

For the confirmation of the mediation effect, a bias-corrected bootstrap confidence interval was applied as the most reliable test [40]. To obtain the confidence intervals, 10,000 samples were executed, and the bias-corrected method percentile generated a confidence interval of 95%. In Table 8, the results of the mediating effects are detailed. In this case, [41] two-stage model is used. This consists of establishing the meaning of the

Table 4 Weights significance. Testing results second-order formative composite (first-order reflective composite)

	A. Weights	B. VIF	C. *t* value	D. Significance (*p* value)
Gastronomy motivations				
Cultural experience	0.186[a]	3.560	6.492	0.000
Excitement	0.031	3.692	1.116	0.264
Health concern	0.097[a]	2.351	4.161	0.000
Interpersonal relations	0.058[b]	3.411	2.251	0.024
Sensory appeal	0.764[a]	1.539	33.963	0.000

(A) The weightings of the indicators and their meaning allow for the understanding of the structure of each latent variable. (B) VIF, or the variance inflation factor, allows for the assessment of the level of collinearity among variables. (C) and (D) *t* value and *p* value are used to determine whether there is a difference between the means of the two groups, assuming a specific level of probability
[a] [b] Weights of formative composites are significant at the level of 1% (5%) based on a two-tailed test [*t* (0.01;10,000) = 2.577]

indirect effects first of all and, secondly, determining the effects and/or the mediation.

In accordance with the phases of the mediation model, the first step determines the meaning of the indirect effects. The results are shown in Table 8 with a significant indirect effect (positive) with a confidence level of 95%. Firstly, in Table 8, panel A, we observe an indirect effect significantly different from zero (non-standardised estimations = 1.108; $p < 0.05$), being able to infer the existence of a relation between the gastronomic motives and the gastronomic satisfaction through the attitudes towards the culinary experience. With the results, we can confirm the existence of a mediating effect.

Secondly, it would be necessary to determine the type of effect and/or mediation that attitude has towards the culinary experience that it performs (Table 8, panel B). We can observe how the existence of a direct effect between gastronomic motives and gastronomic satisfaction (path 1), what makes us reject H1 (non-standardised estimations = − 0.425; $p < 0.05$). This way we can conclude that the mediation exerted by the attitudes towards the culinary experience is complete in the relation between motivations and satisfaction. Additionally, to prevent possible discrepancies related to the result of the mediation [42], we regard the sample size big enough (see "Methodology" section) as to consider the existence of a full mediation which must not be confused with a partial mediation.

Discussion
The results of this research show that the satisfaction of tourists visiting Popayan is influenced by the motivations the tourist have for the gastronomy of the destination, not directly, but rather through the attitude towards culinary experience. This result confirms the results of previous studies [21] showing that culinary experience plays a fundamental role driving gastronomic motivations as a key factor in achieving a high-level satisfaction in the place visited [16, 18]. The gastronomic motivations for visiting a destination suggest a fundamental part of the cultural motivations of the visit and, consequently, the importance the satisfaction in the destination has for the tourist [14]. As a dependent variable, reaching the satisfaction with the gastronomy of this place might lead to forming a decision to repeat the visit and/or recommend the place, given its culinary distinction. This idea reinforces previous research in which the importance and the transcendence of the gastronomic motivation, the culinary experience and the satisfaction of the traveller were highlighted [11, 19].

More specifically, it should be highlighted that satisfaction is related to different motivational dimensions such as cultural experience, health concerns or sensory attraction ($p > 0.01$) as well as interpersonal relationships ($p < 0.05$).

The indicators adopted in this research show major importance (or a favourable attitude) in the search for a culinary experience in the choice of the place visited influences the satisfaction of the tourist, even reaching the point of being able to mediate the relationship between the motivations and satisfaction. Accordingly, this greater

Table 5 Collinearity analysis. Structural model FIV

	Importance culinary experience	Motivations	Satisfaction
Importance culinary experience			− 9.195
Motivations	1		− 9.195
Satisfaction			

Collinearity measures the degree of correlation between a pair of variables

Table 6 Structural model (*N* = 615)

A. Path	B. Coefficient	C. *t* test
H₁: Gastronomy motivations -> gastronomy satisfaction	− 0.425	0.969
H₂ₐ: Gastronomy motivations -> importance culinary experience	1.053	86.460[a]
H₂ᵦ: Importance of culinary experience-> gastronomy satisfaction	1.052	2.420[b]

(A) Path analysis defines the order of the dependencies among the variables of the model. (B) Variation coefficient represents the degree of relationship between the two variables in each path of variables. (C) The *t* test is used to determine whether there is a difference in the means of the two groups
Note. Significant coefficients. [a]$p < 0.01$; [b]$p < 0.05$

Table 7 Predictive power of the structural model

	A. R^2	B. R^2 adjusted
Importance culinary experience	1.109	1.107
Gastronomy satisfaction	0.346	0.344
	C. Q^2	
Importance culinary experience	0.657	
Gastronomy satisfaction	0.380	

A) R^2 represents a measurement of predictive power. It indicates the amount of variance of a construct that is explained by the predictive variables of this construct. (B) R^2 adjusted is similar to the previous one but controls the complexity of the model when different model configurations are compared. (C) Q^2 is used to measure the predictive relevance of the dependent reflective constructs

presence of the culinary experience in the visit is completely compulsory in order to explain the link between the initial motivational effect regarding the local gastronomy with respect to the satisfaction with the gastronomy achieved by the tourist. This conclusion confirms the importance that different previous studies give to local gastronomy, such as being a way of achieving satisfaction with the visit and loyalty to the destination [43, 44].

Conclusions

Local gastronomy is currently perceived as one of the most powerful attractions for the distinction and consolidation of tourist destinations. This derives from the transcendence that the uniqueness of the destination's culinary culture has for some travellers. In this sense, many tourist places are focusing on a type of visitor that considers the gastronomy of the destination as a main (or secondary) motivation in deciding which place to visit. In addition, there are some gastronomic tourists

who travel to a place attracted by the culinary reputation of that geographic area.

This research looks to analyse the relationship between motivations and satisfaction in the environment of gastronomy in the city of Popayán, a destination declared a UCC of Gastronomy by UNESCO. Popayán was the first city in the world to achieve this distinction. Additionally, this location has an important cultural heritage with its greatest display being the Holy Week Processions, which is registered as an ICH by UNESCO.

The results obtained in this research, applying structural equation modelling, determined that greater gastronomic motivation decisively influences greater satisfaction of the visitor through the mediation effect of the culinary attitude of the visitor between motivation and satisfaction with respect to the culinary tradition of Popayán. This research concludes that motivations' effect on satisfaction is fully explained through the presence of attitude towards culinary experience. When gastronomic criteria are more important in the choice of the place visited, the effect of the gastronomic motivation regarding culinary satisfaction is strengthened. As a result, this mediating effect indicates that the motivation-satisfaction relationship with local gastronomy depends on the attitude that the tourist has in relation to the culinary experiences when deciding to visit a destination.

The main practical contribution of this research is focused on presenting the results that reflect the relationships that arise between tourism and gastronomy in Popayán, a city with great potential and culinary recognition within a country with little empirical study in this field. These results are interesting for the local managers, both public and private, allowing for the understanding and comprehension of the structure of the specific

Table 8 Mediation analysis

Panel A: Indirect effect								
Indirect effects	Original sample (O)	Sample mean (M)	Bias	P. 95, CI		Bootstrapping BC P. 95, CI		Sig.
				2.50%	97.50%	2.50%	97.50%	
path 2a x path 2b	1.108	1.23	-0.121	0.715	2.01	0.593	1.884	yes
Panel B: Mediation								
Direct effect			Indirect effect				Type of mediation	VAF
path 1 -0.425	95% sig no	+/-	path 2a x path 2b 1.108	95% sig yes +/-	+/- +	+	Total mediation	1.622

Panel A, indirect effect indicates if an alternative combination to the direct path is significant for the explanation of gastronomy satisfaction. Panel B, mediation measures how or through which means an independent variable (gastronomy motivations) affects a dependent variable (gastronomy satisfaction), by means of one or more mediating variables
Notes: *P* percentile; *CI* confidence intervals; *BC* bias-corrected; *Sig* significance; 10,000 bootstrap samples

relationships regarding gastronomic tourism, which allows for the sustainable tourist management of a destination. In this respect, the tourist's satisfaction, whose previous consideration regarding the culinary experience is very high, demand the availability of unique gastronomy with natural ingredients, traditional recipes and attractive presentations. All of this is combined with quality dining services.

The main limitation of this research is the time period in which the fieldwork was carried out (March and April 2018). It is necessary to expand this to other months and times of the year. This would enable us to analyse the relationships identified while avoiding the seasonality associated with a specific time period. Additionally, as a future line of research, it is recommended to analyse gastronomic tourism from the point of view of the offer and to study the loyalty resulting from the satisfaction achieved with the local cuisine.

Authors' contributions
PRG, FGS, LSPG and TLG conceptualised the work and reviewed the literature, interpreted and curated the data and wrote the manuscript. The authors read and revised the manuscript several times. All authors read and approved the final manuscript.

Availability of data and materials
We do not wish to share our data for some confidential statements from some information that cannot be shared in public.

Competing interests
The authors declare that they have no competing interests.

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