

Reliability and Validity of a New Questionnaire on Perception and Motivation Towards Local Food among Tourists in Kota Kinabalu, Sabah

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ABSTRACT

Malaysian gastronomy has built a unique identity that plays an important role in the development of the tourism industry, especially in Sabah. Local food consumption is a good medium to promote tourist back to Sabah. The study aimed to measure the validity and reliability of perception and motivation towards local food questionnaire. The content for the questionnaire was used as references to develop this questionnaire. The forward translation was done by researchers and professionals with culinary and tourism background meanwhile backward translation was done by professionals from another field. The Cronbach alpha as reliability for the questionnaire was 0.854 for perception and 0.787 for motivation. ICC for perception was 0.793 indicates good consistency whereas for motivation ICC was at 0.424 indicates poor consistency. Further test-retest method analysis revealed the reliability of 0.760 to 0.854 for both components, indicating a scale of high reliability. However, the Wilcoxon signed-rank test showed that the motivation component was not statistically different, $T = 30.5$, $z = 1.70$, $p = 0.090$, two-tailed. The results showed that the designed questionnaire is valid and reliable to measure the perception and motivation towards local food among tourists in Kota Kinabalu, Sabah.

INTRODUCTION

Malaysia has a multiracial and multiethnic characteristic in their local food, which creates fusion cuisine resulting from the influence of major ethnic Malays, Chinese and Indians, contributing to the emergence of various types of food and cuisine available throughout the country (Mohd Hairi Jalis, Che, & Markwell, 2014). Food is a driving factor for tourists to travel both locally and abroad to experience the uniqueness of the fusion of local food in Malaysia. Increasing competition between tourist destinations in the Asian region put Malaysia's local food and culture as a valuable resource to attract foreign tourists. Hence, the Malaysia Tourism Promotion Board (MTPB) under the Ministry of Tourism and Culture has developed a promotional plan to promote local cuisine as part of the tourist experience (Malaysia Tourism Promotion Board, 2013).

From a Malaysian perspective, the promotion of local cuisine based on the specialties of this country, region, and society will represent a country and at the same time introduce and improve the image of a country, which will attract tourists to experience local cuisine (Zainal, Zali, & Kassim, 2010). The consumption of local foods by tourist, which includes cultural and religion, socio-demographic factor, motivational factor, personality and past experiences, eco-friendly, health-conscious, the historical context and the story behind the area, as part of their own culture (Symons, 1999; Getz, 2000; Prescott, 2002; Wolf, 2002; Babicz-Zielinska, 2006). The criteria in selecting food of choice on food diversity offer several factors that affect the sensory as well as the non-sensory function that become a benchmark in food selection (Henderson, 2009; Kim, Eves & Scarles, 2009; Blakey, 2012; Mak, Lumbers, Eves, & Chang et al., 2012).

Meiselman (2000) and Yuskel and Yuskel (2003) added the quality of the surrounding environment act as a motivational factor to

attract tourist to try on local food provided. Meanwhile, Kim et al. (2009) found that taste, flavours, smells and visual images of food as the attraction of senses. Studies show that motivation factors affecting food tourism and local food consumption is the overall travel satisfaction (Fields, 2002; Cetin & Bilgihan, 2015). Tourists prefer to eat in places with a traditional atmosphere (MacCannell, 1976; Smith, 1994; Getz, 2000).

Malaysian gastronomy has built a unique identity that plays an important role in the development of the tourism industry, especially in Sabah. The gastronomic interaction between food and region's heritage forms an own blueprint where food represents not only physical needs but also local culture and customs (Alonso & Krajsic, 2013).

Sabah is one of 13 states that attracts foreign tourists from various countries such as Korea, Russia, Germany, China, France, and Japan. This Land Below the Wind is rich in diversity of nature, unique cultural ethics, beautiful scenery and rugged adventure that attract foreign tourists. Another main reason tourists visiting Sabah is because of local food. The unique food of Sabah ethnic derived mainly from three tribal ethnic groups which consist of Kadazandusun, Bajau, and Murut. This diversity forms the flavours and taste in producing local food menu. Therefore, local food is easy to find and there is a wide range of dining options throughout the Sabah region. However, the involvement of tourists in trying local food is still not as satisfying as the tourists who still prefer to eat at western restaurants or their traditional food over Sabah cuisine. Cohen and Avieli (2004) reported that tourist food consumption was largely neglected in the hospitality and tourism sectors. Introducing and encouraging tourists to try local food and Sabah tradition will help to provide a long-lasting experience. Hence, local food is a medium of marketing in terms of experience and satisfaction of tourists as it encourages local food consumption and it creates the intention to travel back to Sabah.

A valid, reliable questionnaire that assesses the motivation factors on local food consumption among tourists in Sabah is needed to identify the most influential factor to increase the tourism value. The process of developing a questionnaire described as a logical, systematic and structured approach (Rattray & Jones, 2007). Two main key considerations when developing a questionnaire are validity and reliability. This study aimed to measure the reliability and validity of the perception and motivation towards local food questionnaire among tourists in Kota Kinabalu, Sabah. The specific objectives are (1) to examine the construct validity; (2) to measure the internal consistency; (3) test-retest reliability of the perception and motivation to local food questionnaire among tourists in Kota Kinabalu.

LITERATURE REVIEW

Perception on Local Food

Perceptions of local food vary by region because of its large division of climate, soil type and population (Peters, Bills, Wilkins, & Fick, 2016). Most researchers accept that local food consumption means minimizing the distance between production and user, especially in relation to modern mainstream food systems (Peters et al., 2008). Terms like local food, local food systems, and food network often change according to food production in relation to modern food systems and mainstream food (Peters et al., 2008). The time taken in producing local food may vary by region. Accessible districts or towns with denser populations will have the ability to access source supplies within a short distance (Ilbery & Maye, 2006). The geographical position is just one of the components of local food definitions. There are various other features that consumers can use to determine local food systems. Local food is also defined by the food production method. For example, practicing sustainable production and distribution in the local setting reduce the use of synthetic chemicals and

poisonous waste food. Hence, part of the local food definition is on geographic and method of production.

Food Tourism and Local Food

The tourism and local food industries have an intrinsic and extrinsic value from each perspective for every tourist who visits Sabah. Local cuisine creates a destination identity as part of a traveller's experience. Local resources and cooking method of a particular region reflects on local culture and identity (Bessiere, 1998). Globally, environmental and landscape values, history, culture, and traditions from the marketing of cuisine is well represented by the Japanese as part of the Japanese destination identity (World Tourism Organization, 2012). Food tourism involves visiting major and secondary food producer, food festivals, restaurants, and certain locations which offers local food tasting from specializing chef (Kim et al., 2009). From the Malaysian perspective, there is a strong relationship between local food and tourism, as both sectors have mutually beneficial relationships. Promotion of local cuisine can represent a country and at the same time introduce and improve the image of a country (Zainal et al., 2010). Zainal et al. (2010) state that the Malaysian Government has planned to come out with food route initiatives based on the specialties of this country, region, and society to attract tourists to experience local cuisine. This shows the seriousness of the Malaysian Government to promote the existence of local cuisine as part of the tourism industry experience.

The development of tourism culinary is based on several factors. Consumers are more active in promoting eco-friendly and health-conscious purchases, hence this increases the demand for natural, fresh and healthy raw materials from local agriculture (Getz, 2000; Wolf, 2002). Sabah is a country rich in crops, fruits, and seafood. Local products and food become an additional tourist destination attribute which further enhances the overall traveling experience (Symons, 1999).

Factors Influencing Travellers on Local Food

Blakey (2012) study explains that there is a recently discovered interest by a tourist who demands in the preparation of local cuisine concerning the historical context and the story behind the area that tourist is willing to try and experience. For example, the unique cuisines of western European countries such as France, Italy, and Spain are well recognized worldwide and have become a special attraction for tourists. This success has inspired other countries including Asian countries such as Thailand, Japan, Korea, Singapore, and Vietnam, to integrate and promote their local cuisine as part of their own culture (Henderson, 2009). Therefore, the use of local cuisine as part of the image destination and variety of products and experiences can help to reinforce the identity and competitiveness of tourist destinations. Hence, one should consider the importance of taking local food to tourist attractions from the aspects of cultural, social and economic. The food reflects destination, cultural and creates social identity. It plays an important role in the selection and attracts gastronomic travellers to a country.

Mak et al. (2012) stated that five dimensions affect the consumption of local foods which includes cultural and religion, socio-demographic factor, motivational factor, personality, and past experiences. Kim et al. (2009) on the other hand, wrote that motivational factor is further subdivided into pleasures of experience, out of box routine, health concerns, learning knowledge, original experience, togetherness, prestige, sensory and physical attraction. The same study claims demographic factors consisting of gender, age and level of learning and in terms of psychological factors neophilia and neophobia are also considered.

Food selection can be influenced by various aspects due to the complex nature of food. The criteria in selecting food of choice on food diversity offer several factors that affect

the sensory as well as non-sensory function. Babicz-Zielinska (2006) addresses several factors that emphasizing on personal factors such as motives and emotions that become a benchmark in food selection. Prescott (2002) states that health, mood, convenience, sensory attraction, natural ingredients, price, weight management, habituation is one of the most common indications in food selection. Therefore, local food consumption depends on convenience, comfort, and likeness of tourists to try on local food.

Factors that Motivate Travellers

Studies show that motivation factors affecting food tourism and local food consumption is the overall travel satisfaction (Cetin & Bilgihan, 2015). The excitement of tourists to visit a country depends on the pleasure of experience in that particular country which acts as a motivational factor. Moreover, food is a basic necessity for humans and tourists to consume local food when the travelling experience is satisfying. The sense, appearance, smell and originality of the local area are the sensory perception that is considered to be one of the five senses considered as a physical motivator to consume local food (Fields, 2002). Kim et al. (2009) added that taste, flavours, smells and visual images of food as a physical motivation that illustrates the attraction of senses.

Apart from physical aspects such as restaurants, decorations, music, lights and architecture, quality of the surrounding environment act as a motivational factor to attract tourist to try on local food provided (Yuskel & Yuskel, 2003; Meiselman, 2000). Tourists seem to find a way to escape from normal daily, hence they prefer to eat in places with a traditional atmosphere rather than chain food restaurants worldwide (MacCannell, 1976; Smith, 1994). Therefore, eating local food at local restaurants creates social and cultural interaction as it provides guidance on the local way of life, morals, geography, and economics (Getz, 2000).

Questionnaire Development

A valid, reliable questionnaire that assesses the motivation factors on local food consumption among tourists in Sabah is needed to identify the most influential factor to increase the tourism value. The process of developing a questionnaire described as a logical, systematic and structured approach (Rattray & Jones, 2007). The first stage to develop the questionnaire is to identify the target population, determine the questionnaire format whether it is open-ended or close-ended questions, construct and identify the content domain (Tsang et al., 2017). The questionnaire used in this present study is close-ended questions whereas the content domain focuses on the motivational factors on local food consumption in a tourist destination, the same as the previous study (Kim & Eves, 2012). Two main key considerations when developing a questionnaire are validity and reliability.

Questionnaire Validation

Performing validity analysis is essential for any newly developed questionnaire which concerned with the meaningful and purpose of the research. Drost (2011) stated that the validity analysis aims to ensure that all items or the indicators in the instruments measure the same concepts to avoid misinterpretation of the outcomes. There are several ways to validate the questionnaire, including external and internal validity. External validity refers to whether this study has the ability to generalise the finding to other population whereas internal validity is to measure the accessibility of the instrument used. When validating a new questionnaire, internal validity is the focus. Therefore, two types of validity analyses in a questionnaire were used which is content validity and construct validity. Content validity usually refers to the content or questionnaire to fully represent the domain of measure. However, there is no statistical test that can be used to measure the adequacy of the

content and it usually comes from opinion or judgement of experts (Mohajan, 2017). Construct validity is to measure how well the items in the questionnaire can be grouped into a particular structure. Establish a construct validity of a questionnaire, factor analysis can be used to determine the items or domains within the measure (Rattray & Jones 2007).

Questionnaire Reliability

Reliability refers to the consistency and stability of measurement to ensure the items in the questionnaire measured in a similar concept. The use of reliability tests such as coefficients of stability, test-retest, internal consistency, and split-half tests depends on the nature of data (Mohajan, 2017). Test-retest and internal consistency will be used in this study. The test-retest method assesses the reliability of the knowledge question by evaluating the ability of a questionnaire to produce similar results. Instrument test-retest reliability assesses the interclass correlation coefficient (Drost, 2011). Higher the interclass correlation coefficient, the higher the test-retest reliability. Internal consistency measures the questions on interval or ratio scale with different aspects but the same attribute. Cronbach α is often used to determine the internal consistency in questionnaires rated on a continuous scale and can identify which questions are not grouped correctly. A Cronbach's alpha value equal to or greater than 0.7 is generally considered as good internal consistency (Okoro et al., 2018).

METHODOLOGY

Translation

The work of translation of this questionnaire begins from gathering different types of articles on tourism, local food attraction, and gastronomy. All related articles both international and locals were used as a reference on the development of this questionnaire. Two teams were formed for the translation of the questionnaire. The first

team, forward translation team consists of researchers and professionals with culinary and tourism background who are fluent in both Malay and English. The second team, backward translation team involve professional linguist to access the language used.

Forward Translation

The first draft of the questionnaire was in the English language. Then, researchers and professionals independently translated it to Malay. The problems that were encountered during the translation were some words such as 'dining experience' do not fit correctly and grammatically wrong on the Malay language. In addition to that, questions that require respondents to scale their opinion such as 'I strongly disagree on the trying of local food', 'I disagree on the trying of local food', etc. were formatted into table form for better viewing. This will ease respondents to judge their responses correctly without respondents flipping pages to answer to such one question.

Backward Translation

The two-independent professional from other fields translated the questionnaire from Malay to English to make sure the meaning of the words is still valid. Amendment of the questionnaire was done to culturally fit and reported back to the researcher team which makes this to be the second draft.

Participants and Recruitment

Participants were recruited via email and word of mouth. Participants who are above 18 years old and have visited Sabah for holiday purposes in less than a year are included in our study. In order to achieve the reliability of this survey form, the same participants were given the same set questionnaires twice with an interval of one week. All information regarding the study and consent was obtained prior to testing.

RESULTS AND DISCUSSION

Data Analysis

Factor analysis is widely used to determine to construct validity. It is a statistical test can cluster the item and group into a similar factor. Therefore, it allows the deletion of the item which shows conceptual inconsistent (Parsian & Dunning, 2009). The 20 items instrument include ten items on the perception of local food and another ten items test on motivation to local food was pretested with a convenience sample of 203 participants who are experience the local food of Sabah during their vacation or holiday in the past one year. An exploratory factor analysis (EFA) with varimax rotation was used to explore the relationship between the variables and help to assess the data collected whether suitable for factor analysis. The set of data can be constructed based on the theoretical frame according to the loading factor (Yong & Pearce, 2013).

The Kaiser-Meyer-Olkin (KMO) which measures of sampling adequacy was 0.820 and Bartlett's test of sphericity was significant at $p < 0.0001$, indicating the suitability of this data for factor analysis. The Anti-Image Matrices of value below 0.5 indicate that they do not have a strong relationship between the variables (Yong & Pearce, 2013). In the analysis, all the data have a value of more than 0.5, therefore do not need to consider dropping any variables from the analysis. The items were measured using a 7-point Likert scale. A total of 20 items remained with two constructed identified by EFA: perception of Sabah local food and motivation on Sabah local food. These two factors accounted for 44.33% of the total variance. However, the items have been rearranged according to the component. The first component of perception to the local food became 14 items and the second component left six items. Cronbach's reliability for perception on Sabah food was 0.854 whereas the Cronbach reliability scores for motivation on Sabah local were improved from 0.760

to 0.787 after deleting "Sebab utama untuk mencuba makanan baru adalah untuk keluar dari rutin kebiasaan." Both Cronbach's alpha scores ranged from 0.787 to 0.854 were indicated good reliability.

The test-retest method was used to further examine the internal consistency and reliability. Further data collection was done, and 27 subjects were recruited which were 12 males and 15 females. However, few subjects did not complete all questionnaires in the retest phase. Hence the data analysis for the retest phase-only included 16 subjects (drop-out rate: 42%). The convenience sampling was undertaken to ask the subjects filling out the questionnaire provided they met the inclusion criteria. The intraclass correlation coefficient (ICC) was calculated for stability analysis, by comparing the score obtained after filling up the questionnaire in the test-retest method. To apply the retest, a period from seven to 14 days allowed to elapse between measurements. Reliability of the questionnaire assessed by testing its stability over time and its internal consistency (Bolarinwa, 2015). Interclass Correlation Coefficient (ICC) for perception on local food was 0.793 indicated good consistency of reliability whereas poor consistency reliability was showed in the factor motivation on local Sabah food which ICC was 0.424.

Bland-Altman plot was used to describe the level of agreement between two pairs of measurements by constructing the limits of agreement (Giavarina, 2015). It is the simplest visual way to compare two measurements of the same variables. The statistical limits were calculated by using the mean and standard deviations of the difference between pre-test and re-test scores (Klara, 2017). The results show in the scatter plot graph where the X-axis is the average of the scores and the Y-axis represents the difference in the scores between the tests. The mean difference in perception and motivation was 2.00 and 0.74 respectively. The visual plot gives a general

idea of the method used for measurement is overestimated because the mean difference is above zero. The mean difference is closer to zero indicated better the level of agreement of measurement. Limit of the agreement was defined as a mean \pm 1.96 times the standard deviation of difference (Giavarina, 2015; Klara, 2017). Basically, most of the results were fall within the limit which indicates has a good level of agreement between the tests.

The standard error of measurement (SEM) is the standard deviation of the measurement associated with the test scores which can determine the number of variations in the measurement errors of the test (Harvil, 1991). The smaller the SEM or SEM closer to the mean, the more accurate the measurement is being made. The formula used to calculate SEM as below:

$$SEM = SD \times \sqrt{1 - r^2}$$

where SD is standard deviation and r is stand for the reliability of the test which calculated from ICC. SEM for factor perception to Sabah local food was reported as ± 3.84 . It is about 2.7% of the error of measurement from the total score of 140. Whereas SEM for factor motivation to Sabah local food was reported as ± 3.48 which was around 7% of measurement error from the total score of 50. SEM does not have a standard score to represent the perfect reliability of the measurement, but both SEM found in this cross-sectional study are relatively small till can be negligible. Therefore, the SEM in both factors still can be accepted.

In addition, a two-tailed, paired-samples T-test with an alpha level of 0.05 was used to compare the pre- and post-test scores of the questionnaire factor perception to the Sabah local food. On average, the pre- ($M = 79.06, SD = 9.84$) the re-test score ($M = 77.06, SD = 9.77$) were 2 points lower than their pre-test score. The difference of the questionnaire was not statistically different, $t = 1.269, p = 0.224$. Cohen's for this test was

0.204, which can describe as a small effect size. Due to the data for the factor motivation to the local Sabah food is not normally distributed, hence, a Wilcoxon signed-rank test was used. The Wilcoxon signed-rank test indicated that motivation to the local food of tourists was not statistically different, $T = 30.5$, $z = 1.70$, $p = 0.090$, two-tailed. Relative to the pre-test score, 12 subjects ranked motivation to local food was more influential (Sum of Ranks = 89.50) than the other three subjects ranked less influential (Sum of Ranks = 30.50). This factor has a large effect size where $r = 0.425$.

DISCUSSION

This study was the first Malaysian study to construct a questionnaire about the perception and motivation towards the Sabah local food. Performing validity analysis is essential for any newly developed questionnaire which concerned with the meaningful and purpose of the research. As stated by Drost (2011) the validity analysis aims to ensure that all items or the indicators in the instruments measure the same concepts to avoid misinterpretation of the outcomes. Content validity usually refers to the content or questionnaire to fully represent the domain of measure. However, there is no statistical test can be measured the adequate of the content usually is by the opinion or judgement of experts (Mohajan, 2017). Construct validity is to measure how well the items in the questionnaire can be grouped into a particular structure. Establish a construct validity of a questionnaire, factor analysis can be used to determine the items or domains within the measure (Rattray & Jones, 2007).

The validation process was conducted based on the study by Kim and Eves (2012), whereby they grouped the questions into two factors which are: perception and motivation in the local food. The first factor in the study named as perception to the local food which comprises 14 items, according to Kim and Eves (2012), the study named this factor as 'cultural experience' where include the 'learning

knowledge' and 'authentic experience'. In the past studies, most of the tourists' perception tasting the local food is a learning process where they can understand a country and their cultures. Besides, local food to the tourist also is an authentic experience to them as they can explore the uniqueness and specialty of local food during their holiday (Kim et al., 2009; Sims, 2009). Based on the previous study by Mak et al. (2012), the factor of the motivation of tourists to the local food constructed based on the interpersonal relationships which comprise five items. This factor mainly focuses on togetherness with families and friends as they can be gathered with a common interest to seek for the food experience. In the study, the items for both factors in the questionnaire are consistent with past research.

Reliability refers to the consistency and stability of measurement to ensure that the items in the questionnaire measured a similar concept. The use of reliability tests such as coefficients of stability, test-retest, internal consistency, and split-half tests depends on the nature of data (Mohajan, 2017). Two types of reliability test test-retest and internal consistency will be assessed in our study. The test-retest method assesses the reliability of the knowledge question by evaluating the ability of a questionnaire to produce similar results. Instrument test-retest reliability assesses the interclass correlation coefficient (Drost, 2011). Higher the interclass correlation coefficient, the higher the test-retest reliability. Internal consistency measures the questions on interval or ratio scale with different aspects but the same attribute.

With regard to reliability, Cronbach's alpha is the most widely to use. The questionnaire for two components was within 0.76 to 0.854 which indicated a scale of high reliability. The results also show a similar reported in Kim and Eves (2012) and Hashim et al. (2017). The stability of the test was analysed by the interclass correlation coefficient to determine the consistency of reliability. In

general, the correlation coefficient, r is >0.7 considered good. However, the study on the component of motivation to the local food shows relatively poor. Refer to the principles and methods by Bolarinwa (2015) had mentioned that the variables such as anxiety, emotion, energy, happiness which are likely to change in a short period have also known because of maturation effect. Therefore, the variable measured in this component is motivation which also will be affected because of maturation. Despite this, the Bland-Altman plot shows a good level of agreement with a relatively small standard error of measurement.

Several limitations were found in this study and should be addressed and improvised in the following research. The number of subjects involved in the test-retest measurement was small may affect the accuracy of the study and it is recommended researchers can replicate the study with a large sample. In addition, language also is a limitation to this questionnaire as the questionnaire only applicable in Malay and the English language; therefore, the study is not very representative to all the tourists. Another potential limitation includes the weakness in the test-retest reliability measure; high drop-out rate, 41% were found in this method. This is because the questionnaire was mailed to the subjects for the second test, and some of the subjects were lost to follow up. Besides, there is a possibility that subjects may not take extra time or unlikely to complete the questionnaire properly.

CONCLUSION

The aim of this study was to assess the validation and reliability of the questionnaire to measure the perception and motivation of tourists to local Sabah food. This questionnaire can support individualized management for example travel agencies can use the questionnaire as a guide to understand the needs of tourists and thus contribute to Sabah

tourism. In conclusion, the questionnaire of this study has good consistency reliability and small standard error of measurement. However, further research with a larger sample is required to measure effectiveness. Besides, this questionnaire also can be an example to further examine other factors in the future research study on local food which not only focuses on perception and motivation.

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REFERENCES

Alonso, D., & Krajsic, V. (2013). Food heritage down under: Olive growers as Mediterranean 'food ambassadors'. *Journal of Heritage Tourism*, 8 (2 – 3), 158 – 171. <https://doi.org/10.1080/1743873X.2013.767807>

Artinah Zainal, Ahmad Nizan bin Zali & Mohd Nizam bin Kassim. (2010). Malaysian gastronomy routes as a tourist Destination. *Malaysian Journal of Tourism, Hospitality & Culinary Arts*, 2 (1), 1 – 10.

Babicz-Zielinska, E. (2006). Role of psychological factors in food choice – a review. *Polish Journal of Food and Nutrition Sciences*, 15 (4), 379 – 384.

Bessiere, J. (1998). Local development and heritage: Traditional food and cuisine as tourist attractions in rural areas. *European Society for Rural Sociology*, 38 (1), 21 – 34.

Blakey, C. (2012). Consuming place: Tourism's gastronomy connection. *University of Hawai'i at Hilo: Hawai'i Community College HOHONU*, 10, 51 – 54.

Bolarinwa, O. A. (2015). *Principles and methods of validity and reliability testing of questionnaires used in social and health science researches*. doi:10.4103/1117-1936.173959

Cetin, G., & Bilgihan, A. (2015). Components of cultural tourists' experience in destinations. *Current Issues in Tourism*, 19 (2), 137 – 154. doi:10.1080/13683500.2014.994559

Cohen, E., & Avieli, N. (2004). Food in tourism: Attraction and impediment. *Annals of tourism Research*, 31 (4), 755 – 778.

Correia, A., Kozak, M., & Ferradeira, J. (2013). From tourist motivations to tourist satisfaction. *International Journal of Culture, Tourism and Hospitality Research*, 7 (4), 411 – 424.

Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and Perspectives*, 38 (1), 105 – 123.

Fields, K. (2002). Demand for gastronomy product: motivational factors. In A. Hjalager, & G. Richards (Eds.). *Tourism and gastronomy* (pp. 37 – 50). London: Routledge.

Getz, D. (2000). *Explore wine tourism: Management and destinations*. New York: Cognizant Development Corporation.

Giavarina, D. (2015). Understanding Bland Altman analysis Lessons in biostatistics. *Biochemia Medica*, 25 (2), 141 – 151. doi:10.11613/BM.2015.015

Harvil, L. M. (1991). Standard error of measurement: An NCME instructional module. *Educational Measurement Issues and Practice*, 10 (2), 33 – 41. <https://doi.org/10.1111/j.1745-3992.1991.tb00195.x>

Hashim, N., Ariff Kamarulzaman, W. D., Mohamed Idris, A. K., & Salleh, R. (2017). Tourist motivation to consume Pulau Pinang local food. *Journal of Tourism, Hospitality & Culinary Arts (JTHCA)*, 9 (2), 603 – 612.

Henderson. (2009). Transport and tourism destination development: An Indonesian perspective. *Tourism and Hospitality Research*, 9 (3), 199 – 208.

Ilbery, B. & Maye, D. (2005 & 2006). *Alternative (shorter) food supply chains and specialist ... products in the UK: The case of PDOs and PGIs'*. *Outlook on Agriculture* 29, 31 – 7. ... Institute of Grocery Distribution (2006) Shopper trends in 2006.

Kim, Y. G. & Eves, A. (2012). Construction and validation of a scale to measure tourist motivation to consume local food. *Tourism Management*, 33 (6), 1458 – 1467. <http://dx.doi.org/10.1016/j.tourman.2012.01.015>

Kim, Y. G., Eves, A., & Scarles, C. (2009). Building a model of local food consumption on trips and holidays: A grounded theory approach. *International Journal of Hospitality Management*, 28, 423 – 431. <https://doi.org/10.1016/j.ijhm.2008.11.005>

Klara, A. (2017). Decoding the Bland-Altman Plot: Basic Review. *Journal of the Practice of Cardiovascular Sciences*, 3, 36 – 38.

L., Feinstein & J., Symons. (1999). Attainment in secondary school. *Oxford Economic Papers*, 51 (2): 300 – 321. <https://doi.org/10.1093/oep/51.2.300>.

MacCannell, D. (1976). *The tourist: A new theory of leisure class*. New York: Schocken.

Mak, A. H. N., Lumbers, M., Eves, A., & Chang, R. C. Y. (2012). Factors influencing tourist food consumption. *International Journal of Hospitality Management*, 31 (3), 928 – 936. <https://doi.org/10.1016/j.ijhm.2011.10.012>

Malaysia Tourism Promotion Board. (2013). *Promotional plan 2013/2014*. Kuala Lumpur: Author.

Meiselman. (2000). Demonstrations of the influence of the eating environment on food acceptance. *Apetite*, 35 (3), 231 – 237.

APPENDICES

Table 1 Exploratory factor analysis results for the initial measurement scale

Motivasi Terhadap Makanan Tempatan (Motivation on Sabah local food) (0.760)^a	Mean (SD)	Factor Loading
Saya ingin mencuba makanan tempatan bersama-sama dengan teman yang melancong bersama.	6.19 (0.622)	.716
Saya akan makan apa yang teman yang melancong bersama saya ingin makan.	5.41 (1.185)	.699
Saya ingin makan di restoran tempatan yang menawarkan harga yang berpatutan.	6.33 (0.832)	.654
Saya ingin makan di restoran tempatan yang menawarkan makanan yang berbaloi dengan nilainya .	6.33 (0.920)	.710
Saya lebih suka makanan yang dihidangkan dengan cara yang menarik perhatian.	5.33 (1.074)	.537
Persepsi Terhadap Makanan Tempatan (Perception on Sabah local food) (0.854)^a		
Saya ingin mempelajari budaya tempatan melalui pemakanan.	5.44 (0.974)	.755
Saya ingin mempelajari tentang makanan tempatan dan budaya Sabah.	5.48 (1.087)	.704
Saya ingin mencuba makan makanan tempatan yang tulen untuk mencari pengalaman baharu.	5.74 (0.859)	.716
Saya ingin mencuba variasi makanan yang tidak biasa dimakan.	5.37 (1.334)	.606
Saya ingin mencuba makan makanan tempatan seperti yang dipaparkan di televisyen, buku dan internet.	5.67 (1.038)	.665
Saya ingin makan makanan tempatan yang baik untuk kesihatan.	5.78 (1.476)	.624
Saya akan memastikan terlebih dahulu kandungan makanan tersebut sebelum mencubanya.	5.33 (1.414)	.644
Saya ingin makan di restoran yang mesra-pelancong.	6.22 (0.892)	0.610
Saya akan hanya makan di restoran yang mempunyai standard kebersihan yang tinggi.	5.63 (1.305)	.706
Saya suka untuk makan di restoran makanan tempatan daripada restoran berantai (contohnya KFC, McD, Pizza Hut).	5.85 (1.562)	-.018
Saya hanya akan makan makanan yang biasanya saya makan dan menurut kebiasaan.	4.04 (1.605)	.604
Saya mahu mencuba makanan tempatan yang diketahui ramai kesedapannya.	5.96 (1.055)	0.610
Saya ingin mencuba kedua-dua makanan tempatan dan antarabangsa di negeri Sabah.	6.04 (1.018)	.504
Saya akan memberitahu rakan-rakan saya mengenai pengalaman merasai makanan tempatan Sabah.	6.22 (0.751)	.589

KMO: 0.820. Bartlett test of Sphericity: 1755.402, Sig.: 0.000, each item has a 7-point Likert response set: disagree strongly to agree strongly. Cronbach's alpha ^a

Table 2 Reliability statistic

Reliability Test	Perception on Local Sabah Food	Motivation to Local Sabah Food
Cronbach's alpha	0.854	0.760
Interclass Correlation Coefficient	0.793	0.424

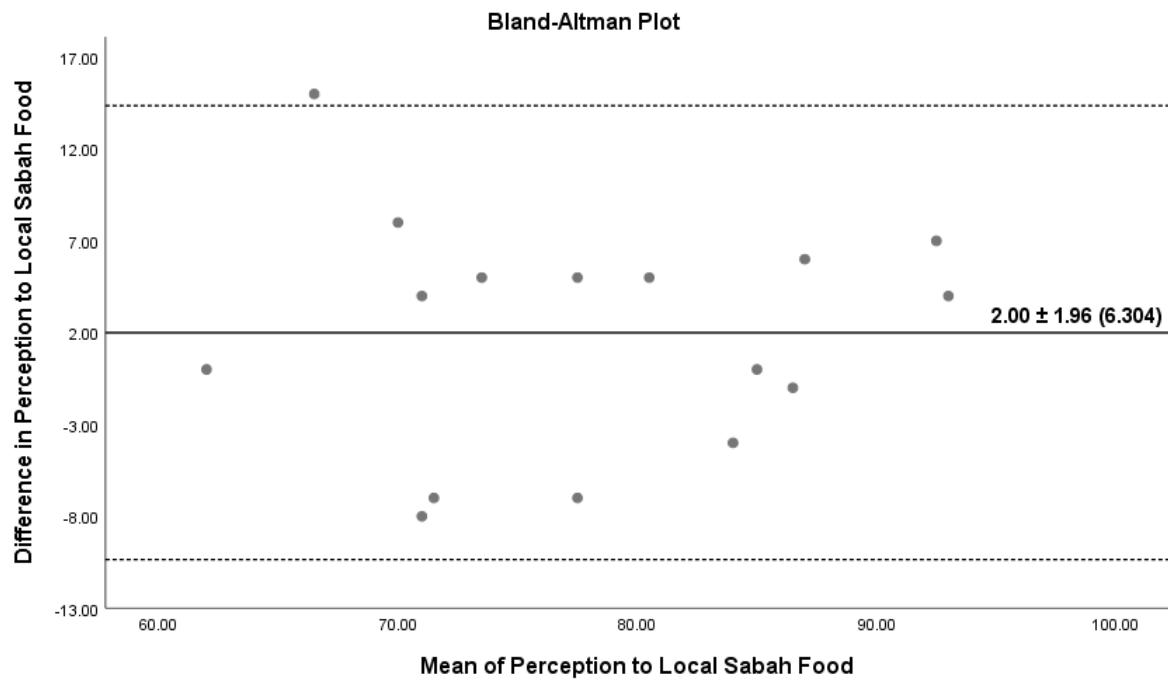


Figure 1 Bland-Altman plot analysis for perception component

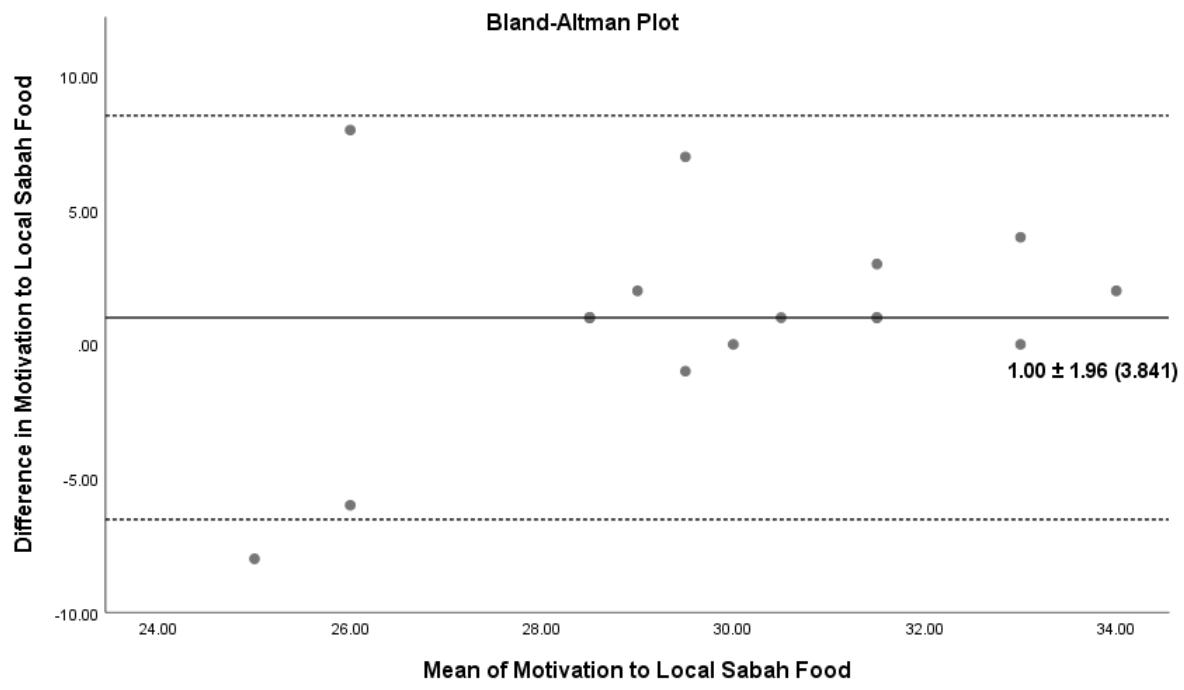


Figure 2 Bland-Altman plot analysis for motivation component