

DRIVING BRAND LOYALTY IN CREATIVE CULINARY INDUSTRY

Ivan Destian Butar Butar, Mohammad Harry Pratama, Christian Haposan Pangaribuan*

Sampoerna University, Jakarta, Indonesia
e-mail: christian.pangaribuan@sampoernauniversity.ac.id
(Corresponding Author indicated by an asterisk *)

ABSTRACT

The government has emphasized the increasing number of the creative culinary industry in Indonesia to increase support in this area. One of the flourishing brands running a creative culinary business in Indonesia is Warunk Upnormal. The growth of the player in this industry has grown some concern about such business's sustainability since the related industry has low entry barriers. This research aims to know how well the known drivers of brand loyalty, including variables brand awareness, perceived quality, brand image, perceived value, pleasure, and customer satisfaction, affect brand loyalty in Warunk Upnormal. This research used a quantitative method in finding the relationships among variables and used primary data to be processed. The design and development of the questionnaire are based on the pretested model and distributed toward 208 respondents. The overall result of this research shows that perceived quality affects most toward pleasure, followed by perceived value, then brand awareness. This research also shows the positive and significant relationship of pleasure toward customer satisfaction and customer satisfaction toward brand loyalty.

Keywords: pleasure, customer satisfaction, brand loyalty, creative culinary

INTRODUCTION

The idea of competing in an up-to-date industry has drawn several business players to get into such business. Recently, the creative industry, such as apps and culinary, has become a star in Indonesia. One of the prevalent businesses that now is growing is the Warunk Upnormal, established in 2014. This culinary business has implemented its unique strategy by using very well-known local favorite food such as noodle and toast as their menu and put them up on the menu with a dab of creativity and innovation (Wati & Ardani, 2019).

In 2016, it is reported that the culinary industry has contributed to about 41.4% of total contribution in the local creative economy, the highest compared to other subsectors of the creative economy in Indonesia (Samad et al., 2018). From the report published by Department of Creative Economy in Indonesia, based on the data in 2018, there are more than 5.55 million business units under the culinary industry spread across Indonesia (Kholisdinuka, 2020). This is a huge number and implies that the competitiveness in this industry is high. As the competitiveness level is high in the culinary business, it is essential to clearly define their competitive advantages in order for them to stay competitive in the industry and at the highest level, preventing many customers from switching to another brand quickly. One crucial factor that may contribute to the increasing competitiveness is brand loyalty which contributes to a positive impact on the market share and company's performance (Horsfall & Mac-Kingsley, 2018).

According to previous studies, pleasure can motivate loyalty among Taiwanese respondents (Chen, 2016a; Chen, 2016b). Meanwhile, according to studies by Al-Maamari and Abdulrab (2017) and Zhong and Moon (2020), satisfaction is the most effective factor used to create loyalty through excellent services and quality. Customer satisfaction is becoming the catalyst for loyalty (Anwar et al., 2011; Pangaribuan et al., 2020). However, the factors in the

relationship between pleasure, satisfaction, and loyalty, remain unclear in the context of creative culinary industry in Indonesia. To address these voids, the present study explores the influence of satisfaction as a mediator between brand loyalty and pleasure. In the following sections, a summary of the literature introduces each of the research variables, followed by hypothesis development. Afterward, the method and the results are explained in the following sections. The study is concluded with a discussion of theoretical and managerial implications, limitations, and recommendations of future research.

LITERATURE REVIEW

Cognitive Drivers

In general understanding, cognitive drivers may refer to knowing mentally, which includes aspects such as perception, awareness, judgment, and reasoning (Pawlik & d'Ydewalle, 2006). In marketing, especially in branding, cognitive drivers may involve the knowledge, perception, and judgment of a brand from the customer. Some of the crucial elements from cognitive drivers in brand loyalty include brand awareness from the knowledge side, brand image from the perception, and perceived quality and value from the judgment side (Han et al., 2018).

Brand awareness refers to the customer's ability to recognize and remember a brand as being associated with a specific form of a product. In this case, it is essential to include the product category into the definition because one brand with the same kind of name would not be helping another brand if the product is in another product category. In another definition, brand awareness may be derived from the words itself. The word brand may refer to a name that can gain people's interest in buying the product. From this, it can be derived that building saliency from the brand may lead to brand awareness (Kapferer, 2008). Brand awareness may also be referring to the brand's attention, the awareness of the name that can interest potential buyers from the market, an understanding of the company name. This brand is being associated with the product being sold.

Brand image is the perception that comes from the receiver or audiences, which is a marketing context, the market itself. It talks about the perception that exists within a group of people, or in the market, toward a company's brand. Various factors may influence a brand's image, such as the brand name, various symbols associated with it, the product, advertising, sponsoring, and even articles. Within the company, such factors mentioned may also come from competitors or other unassociated industries that are present as noises within the environment (Kapferer, 2008).

The term perceived quality has been used in various studies. Especially for marketing, perceived quality can be referred to as the customer's judgment about a company's overall quality. It means the quality of a product can be perceived differently from one individual to another, depending on the customer's exposure to the information related to the product (Wankhade & Dabade, 2010). Perceived quality may also refer to the consumer's quality judgment toward the product's attribute (Zopounidis, Pardalos, & Baourakis, 2001). The general understanding of perceived quality is that it is all about judgment from customers or exposure to the product being sold by a company.

Affective Drivers

Affective drivers may refer to the elements or factors affecting the psychological feeling of customers toward a brand. This psychological feeling can refer to the customer's closeness toward a brand that mostly shows customers' emotional feelings. As such, this kind

of factor can cause the customer to be committed toward a brand regardless of the functionality and instrumental attributes of a product (Moutinho et al., 2014). In contrast with cognitive drivers mostly about knowing and judging, the affective drivers may involve many unstructured factors affecting it due to the emotional factor that becomes the main point. Thus, it would probably be a challenging task to know the affective score of customers toward a brand. Customers may not be open to their feeling towards a brand, but they may feel happy towards a brand just because the brand represented his/her concern toward his/her interest.

The definition of pleasure often is associated with the things against it. One may define pleasure as good things desired by all and are associated with pain as the opposite (Mohanty, 2000). Pleasure may also include hedonic processing, part of the positive dimension, and unpleasant dimension (Kringelbach & Berridge, 2010). From this understanding, pleasure is commonly associated with the opposite of it. Someone may never know the pleasure if the person never feels unpleasant. Therefore, in this case, for a customer to feel pleasure, there should be an unpleasant feeling from that person's experience.

The term customer satisfaction may refer to how the product being offered by a company fulfill customer's expectation of the product being sold. However, what is being expected from customers often to be very relative. Therefore, in measuring satisfaction, it is claimed that two sides of the equation should involve, which are the expectation part and the satisfaction part (Hill et al., 2003). Here, customer satisfaction matches what customers expected from the product being offered with the product being sold. In the case of Warunk Upnormal, there may be several customer expectations when they visit the restaurant. Fulfilling customer expectations by delivering what they expect before, during, and after the visit to Warunk Upnormal may create a good score in customer satisfaction. In another study about the chain coffee shop industry, it is found that customer satisfaction may positively influence the level of brand loyalty (Han et al., 2018). Meanwhile, customer satisfaction influences loyalty in an online shopping context (Alif et al., 2019). Thus, customer satisfaction may play a crucial role in connecting the variable of pleasure with brand loyalty.

Brand loyalty refers to the customer's attitude toward a brand that causes a positive influence, a committed attitude of preferring the brand instead of other competitive brands. There are three levels of brand loyalty: brand recognition, brand preference, and brand insistence. Brand recognition is defined as the customer's attitude toward a brand that would consider the brand as the alternative among other brands in the same product category. It would be the lowest level of loyalty and influenced by the customer's awareness of the brand. It has a low level of conversion possibility of sales. Brand preference is defined as a strong customer's attitude towards a brand that would prefer a particular brand compared to the closest competitive brand for a specific product category. In this level of loyalty, the customer would strongly prefer a particular brand compared to another. However, when the product is not available, the customer can still purchase the alternatives. Finally, brand insistence is the most substantial level of loyalty; customers will surely make more effort and commitment to own a brand that they loyal to and accept no substitute. In this case, this level of loyalty would undoubtedly give the most substantial sales conversion (Ferrell & Hartline, 2008).

Thus, the hypotheses derived from the framework of this research would be:

Hypothesis 1 (H1) – Perceived pleasure positively influences brand loyalty

Hypothesis 2 (H2) – Perceived pleasure positively influences customer satisfaction

Hypothesis 3 (H3) – Customer satisfaction positively influences brand loyalty

RESEARCH METHOD

Samples

The final sample was made up of 208 respondents and 63.46% from the total are female. The majority of the respondents are at the age of between 21–23 years old as 56.25% from all respondents are from this group of age. The second highest group that exist as the respondent are those at the age in between 18–20 years old as they represent 16.35% from all respondents, followed by those who are in the age of 24–26 years old which represent 13.94% from all respondents. Two of the least group of age that became the respondent for this research are the group of those who are in the age above 26 years old which represent 12.50% and those who are below 18 years old which represent 0.96% from total respondent. In this section, the summary of all general information or characteristic of respondent is presented. The total respondent for this research is 208. The descriptive analysis for this section will be applied for the data of age, education, gender, monthly expenses, and most used social media platform.

From 208 respondents, the majority are at the age of between 21 and 23 years old (56.25%). The second highest group that exist as the respondent are those at the age in between 18–20 years old as they represent 16.35% from all respondents, followed by those who are in the age of 24– 26 years old which represent 13.94% from all respondents. Two of the least group of age that became the respondent for this research are the group of those who are in the age above 26 years old which represent 12.50% and those who are below 18 years old which represent 0.96% from total respondent.

For classification of educational background, 48.06% are composed by bachelor's degree educational background. The second largest group would be respondents with high school educational background, composing 40.87% from the total of 209 respondents. The third largest group in this section would be respondents who are grouped in others educational background, composing for about 7.69% from the total of 208 respondents. At last, the group that has the least number in this section would be respondents coming from master's degree educational background, composing for about 3.37% from the total of 208 respondents.

The data about respondent's most used social media platform is divided into four. They are included Facebook, Instagram, Twitter, and YouTube. For this research, from total 208 respondents, Instagram social media platform hold the highest most used social media platform, accounts for 75.96% from total respondents. The second highest social media platform mostly used by respondents is YouTube, which accounts for 13.46% from total respondents. Twitter positioned to be the third highest social media platform mostly used by respondents that accounts for 5.77% from total respondents. At last, the least social media platform mostly used by respondents would be Facebook which only accounts for 4.81% from total respondents. As can be seen from the data, Instagram itself can cover for more than 75% from total respondents for social media platform mostly used by respondents, that is greater than the percentage of YouTube, Twitter, and Facebook combined.

Survey questionnaires were administered by two research assistants in middle of 2018. The survey assistants conducted a survey by approaching the respondents with their mobile phones utilizing an online questionnaire platform, which consists of set of questions in Likert Scale measurement. After removing incomplete responses and extreme outliers, the researchers managed to get 208 valid ones of the 250 questionnaires distributed, resulting in a response rate of 83.20%. The high number of response rate can be attributed to the timing of the study, as respondents were approached during lunch and dinner time at one Warunk Upnormal restaurant in the southern part of Jakarta.

Study Instrument

After capturing the respondents' sociodemographic attributes in the first part, the questionnaire items in the second part aimed to explore perceived pleasure, customer satisfaction, and brand loyalty based on previous literature. This study measured the 35 items using a 4-point Likert scale from "1" strongly disagree to "4" strongly agree. The researchers used four degrees of agreement purposely to reduce the possible error that can be generated in providing a "neutral" degree of agreement.

Perceived pleasure was measured empirically using a four-point Likert scale developed by Das (2013). The customer satisfaction scale was measured using a four-item scale developed by Hanaysha (2016). Brand loyalty was measured using a four-point scale adopted from Ryu et al. (2012) and Gong and Yi (2018).

Table 1. Validity and Reliability of the Variables

Constructs	Items	Loadings	Alpha	Reliability	Variance
Pleasure	PLE1	0.851	0.873	0.913	0.725
	PLE2	0.797			
	PLE3	0.873			
	PLE4	0.882			
Satisfaction	SAT1	0.862	0.809	0.872	0.632
	SAT2	0.824			
	SAT3	0.733			
	SAT5	0.754			
Loyalty	LOY1	0.749	0.820	0.827	0.579
	LOY2	0.759			
	LOY3	0.761			
	LOY4	0.776			
	LOY5	0.760			

Data Analysis

The researchers conducted the survey in two steps starting with checking the model's reliability and validity (see Table 1). The validity test is a test to examine the accuracy of content instrument used in the research and check the validity of each content (Pallant, 2016). The validity test was analyzed by using Kaiser-Meyer-Olkin (KMO) in which $KMO > 0.50$ can be considered as valid and a content instrument with $KMO < 0.50$ is considered otherwise (Stine & Foster, 2014). Reliability test, as described by Pallant (2016), is a repeated test to measure the consistency of measurement and to determine the accuracy of the instrument. George and Mallery (2003) use the Cronbach's Alpha coefficient of 1.00 as excellent and < 0.50 is unacceptable.

RESULTS AND DISCUSSION

Table 1 shows the satisfactory composite reliability coefficient of each variable. The result of each variable is perceived pleasure (0.913), customer satisfaction (0.872), and brand loyalty (0.820). In addition to these composite reliability results, the coefficients of Cronbach's Alpha also show good results for perceived pleasure (0.873), customer satisfaction (0.809), and brand loyalty (0.820). Therefore, it can be concluded that each variable has high reliability by judging from the values of composite reliability and Cronbach's Alpha. All variables are

greater than 0.7.

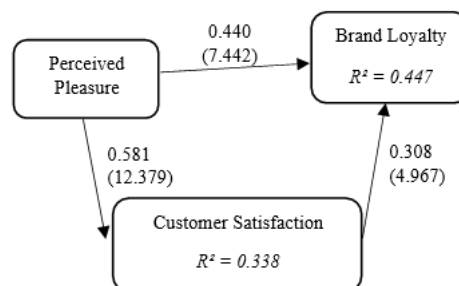
Hypothesis testing of path coefficients between the variables is used to evaluate the structural relationship between latent variables. It compares the p-value with alpha 0.05. This test is intended to measure the correctness of the alleged research or to answer questions about the effect or relationship as described in research background. Testing all hypotheses will be analyzed based on the results obtained from data processing in Table 2. The hypothesized relationships predicted in the model were tested by examining the path estimates. The Structural Equation Modeling was used in the analysis of the data. The researchers tested the model by conducting a series of analysis of whether each variable predicted the next variable in the model via bootstrapping. As expected, perceived pleasure was associated with brand loyalty ($R^2 = 0.447$, $\beta = 0.440$, $p < 0.05$), perceived pleasure was associated with customer satisfaction ($R^2 = 0.338$, $\beta = 0.581$, $p < 0.05$), and customer satisfaction was associated with brand loyalty ($R^2 = 0.447$, $\beta = 0.308$, $p < 0.05$) (see Table 2).

Table 2. Path Estimates

	Path Estimates	t-Statistics	P Values
PLE -> LOY	0.44	7.442	0.000
PLE -> SAT	0.581	12.379	0.000
SAT -> LOY	0.308	4.967	0.000
PLE -> SAT -> LOY	0.179	4.328	0.000

Then, the effect size of R^2 value of 0.447 in brand loyalty can be seen in Figure 1, meaning that the independent variables perceived pleasure and customer satisfaction affect brand loyalty about 44.7%. This can be implied that the other 55.3% is influenced by other variables that are not used in this research. Also, the effect size of R^2 value of 0.338 in customer satisfaction means that the independent variable perceived pleasure affects customer satisfaction about 33.8%, implying that the other 66.2% is influenced by other factors that are not used in this study.

Figure 1. Research Model



Based on Figure 1, it can be seen that perceived pleasure has a significant influence on brand loyalty. This finding is consistent with those reported in previous studies by Chen (2016a, 2016b) and Kim et al. (2015). Chen (2016a, 2016b) confirmed that a person's perceived fun to use a transport system is positively connected to their green loyalty. Kim et al. (2015) investigated that customer delight generated greater loyalty than satisfaction. However, Šeinauskienė et al. (2015) proposed that happiness has an adverse impact on brand

loyalty, but in this study we found that, conversely, happiness or pleasure could positively influence loyalty. This may be explained by the fact that the knowing the brand of the Warunk Upnormal restaurant while experiencing the quality of the food may bring pleasure to the customers.

On the other hand, perceived pleasure also has a significant influence on customer satisfaction. This finding is consistent with those reported by Das (2013) in which the author found that pleasure can be viewed as an important antecedent of satisfaction in banking service. So, the bankers should focus on customers' pleasure as a strategy in order to sustain in the competitive and growing market. In the context of the restaurant, the dining experience is usually believed to please restaurant customer satisfaction from offering a wide variety of menus to customer in food service.

Finally, customer satisfaction has a significant influence on brand loyalty. This finding is consistent with those reported in studies by Zhong and Moon (2020) and Ma et al. (2014). Zhong and Moon (2020) confirmed that the customer's satisfaction to dine at a Western fast-food restaurant in China (e.g., KFC, McDonalds) is positively connected to their brand loyalty. Ma et al. (2014) mentioned that companies can achieve customer satisfaction and loyalty by providing good quality products and services. Satisfied customers of Warunk Upnormal tend to revisit the restaurant and become loyal customers, and they are positively engaged in giving recommendations to other customers and less sensitive to price.

CONCLUSION

This study investigated the influences of perceived pleasure and customer satisfaction on brand loyalty. The study further highlights the mediating effect of customer satisfaction when exploring the strength of relations between perceived pleasure and brand loyalty in the context of creative culinary industry in Jakarta, Indonesia. From the theoretical perspective, variances in the factors of customers being loyal to a brand observed among the Jakartans are not only due to the pleasure about their dining experience but also from their satisfaction. From the practical standpoint, the results of this study will help marketing managers to better understand the important roles of perceived pleasure and customer satisfaction in discovering brand loyalty.

Moreover, knowing the direct influence of perceived pleasure to brand loyalty is more effective rather than going through customer satisfaction, it is important for marketing managers to develop more effective and efficient culinary management practices by amplifying brand awareness, food quality, and the image of the restaurant to further emphasize loyalty of the customers.

Future studies suggest expanding the geographical research area to all Warunk Upnormal outlets as this would lead to a general conclusion for the observed variables. The researchers also suggest adding arousal as an affective driver in the framework. This study only observes pleasure due to the resource limitation regarding time and other resources needed. Therefore, adding arousal into the framework may generate another understanding and implications in increasing brand loyalty as the main objective for this research. Finally, the researchers suggest applying experimental research or qualitative research to understand the issue better.

REFERENCES

Alif, M. G., Pangaribuan, C. H., & Wulandari N. R. (2019). The factors affecting customer satisfaction, loyalty, and word of mouth towards online shopping for millennial

generation in Jakarta. *The 5th Sebelas Maret International Conference on Business, Economics, and Social Sciences (SMICBES)*, Bali, Indonesia, 17–19 July 2018.

Al-Maamari, Q. A. & Abdulrab, M. (2017). Factors affecting on customer loyalty in service organizations. *International Journal of Energy Policy and Management*, 2(5), 25–31.

Anwar, A., Gulzar, A., bin Sohail, F., & Akram, S. N. (2011). Impact of brand image, trust and affect on consumer brand extension attitude: The mediating role of brand loyalty. *International Journal of Economics and Management Sciences*, 1(5), 73–79.

Chen, S. Y. (2016a). Green helpfulness or fun? Influences of green perceived value on the green loyalty of users and non-users of public bikes. *Transport Policy*, 47, 149–159. <https://doi.org/10.1016/j.tranpol.2016.01.014>

Chen, S. Y. (2016b). Using the sustainable modified TAM and TPB to analyze the effects of perceived green value on loyalty to a public bike system. *Transportation Research Part A Policy & Practice*, 88, 58–72. <https://doi.org/10.1016/j.tra.2016.03.008>

Das, G. (2013). The Effect of pleasure and arousal on satisfaction and word-of-mouth: An empirical study of the Indian banking sector. *Vikalpa: The Journal of Decision Makers*, 38(2), 95–103. <https://doi.org/10.1177/0256090920130206>

Ferrell, O. C., & Hartline, M. D. (2008). *Marketing strategy 4e*. Thomson South-Western.

George, D. & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference 11.0 update* (4th ed.). Allyn & Bacon.

Gong, T., & Yi, Y. (2018). The effect of service quality on customer satisfaction, loyalty, and happiness in five Asian countries. *Psychology & Marketing*, 35(6), 427–442. <https://doi.org/10.1002/mar.21096>

Han, H., Nguyen, H. N., Song, H., Chua, B.-L., Lee, S., & Kim, W. (2018). Drivers of brand loyalty in the chain coffee shop industry. *International Journal of Hospitality Management*, 72, 86–97. <https://doi.org/10.1016/j.ijhm.2017.12.011>

Hanaysha, J. (2016). Testing the effects of food quality, price fairness, and physical environment on customer satisfaction in fast food restaurant industry. *Journal of Asian Business Strategy*, 6(2), 31–40. <https://doi.org/10.18488/journal.1006/2016.6.2/1006.2.31.40>

Hill, N., Brierley, J., & MacDougall, R. (2003). *How to measure customer satisfaction*. Gower Publishing Limited.

Horsfall, H. & Mac-Kingsley, I. (2018). Analyzing the impact of brand loyalty on market performance: A study of food and beverage firms in Rivers State. *Journal of Business and African Economy*, 4(1), 26–38.

Kapferer, J. (2008). *The new strategic brand management: Creating and sustaining brand equity long term* (4th ed., New ed.). Kogan Page.

Kholisdinuka, A. (2020, June 12). *Bisnis kuliner ini tetap bertahan meski Corona merajalela*.

DetikFinance. <https://finance.detik.com/solusiukm/d-5051478/bisnis-kuliner-ini-tetap-bertahan-meski-corona-merajalela>

- Kim, M., Vogt, C. A., & Knutson, B. J. (2015). Relationships among customer satisfaction, delight, and loyalty in the hospitality industry. *Journal of Hospitality & Tourism Research*, 39(2), 170–197. <https://doi.org/10.1177/1096348012471376>
- Kringelbach, M. L., & Berridge, K. C. (2010). *Pleasures of the Brain*. Oxford University Press.
- Ma, E., Qu, H., & Eliwa, R. A. (2014). Customer loyalty with fine dining: The moderating role of gender. *Journal of Hospitality and Marketing Management*, 23(5), 513–535. <https://doi.org/10.1080/19368623.2013.835250>
- Mohanty, J. N. (2000). *Classical Indian Philosophy*. Rowman & Littlefield Publishers, Inc.
- Moutinho, L., Bigne, E., & Manrai, A. K. (2014). *The Routledge Companion to the Future of Marketing*. Routledge.
- Pangaribuan, C. H., Sofia, A., & Sitinjak, M. F. (2020). Factors of coffee shop revisit intention and word-of-mouth mediated by customer satisfaction. *Journal of Management and Business*, 19(1), 1–14. <https://doi.org/10.24123/jmb.v19i1.418>
- Pallant, J. (2016). *SPSS Survival Manual* (6th ed.). McGraw-Hill.
- Pawlik, K., & d'Ydewalle, G. (2006). *Psychological concepts: An international historical perspective*. Psychology Press.
- Ryu, K., Lee, H. R., Kim, W. G. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal of Contemporary Hospitality Management*, 24(2), 200–223. <https://www.emerald.com/insight/content/doi/10.1108/09596111211206141/full/html>
- Samad, Y., Salim, M. A. M., & Akib, H. M. (2018). The functions of language in realizing the Indonesian culinary on the official tourism website of Indonesia: A tourism discourse perspective. *IOSR Journal of Humanities and Social Science*, 23(10), 7–15. <http://dx.doi.org/10.9790/0837-2310080715>
- Šeinauskienė, B., Maščinskienė, J., & Jucaitytė, I. (2015). The Relationship of happiness, impulse buying and brand loyalty. *Procedia - Social and Behavioral Sciences*, 213, 687–693. <https://doi.org/10.1016/j.sbspro.2015.11.487>
- Stine, R. A., & Foster, D. (2014). *Quantitative methods for business. Statistics for business: decision making and analysis*. Pearson Education.
- Wankhade, L., & Dabade, B. (2010). *Quality uncertainty and perception*. Springer-Verlag.
- Wati, D. S. R., & Ardani, I. G. A. K. S. (2019). Peran kepuasan pelanggan dalam memediasi Pengaruh inovasi produk terhadap loyalitas pelanggan (Studi pada konsumen Warunk

Upnormal). *E-Jurnal Manajemen*, 8(12), 7177–7195.
<https://doi.org/10.24843/EJMUNUD.2019.v08.i12.p14>

Zhong, Y. & Moon, H. C. (2020). What drives customer satisfaction, loyalty, and happiness in fast-food restaurants in China? Perceived price, service quality, food quality, physical environment quality, and the moderating role of gender. *Foods*, 9(4), 460.
<https://doi.org/10.3390/foods9040460>

Zopounidis, C., Pardalos, P. M., & Baourakis, G. (2001). *Fuzzy sets in management, economics, and marketing*. World Scientific Publishing Co. Pte. Ltd.