



The influence of crowdedness on brand image and its impact on word of mouth

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ABSTRAK

Popularitas yang terjadi pada sebuah restoran dapat menyebabkan keramaian yang tak terhindarkan, seperti yang terjadi pada restoran Mie Gacoan di Kota Malang, di mana tempat tersebut menarik sejumlah besar pengunjung setiap harinya. Situasi ini dapat menimbulkan berbagai dampak negatif seperti antrean yang panjang, waktu tunggu layanan yang lama, dan masalah kesesakan, baik dalam hal kesesakan manusia maupun kesesakan spasial. Kesesakan manusia mengacu pada sesaknya suatu tempat akibat terdapat banyaknya orang, sedangkan kesesakan spasial mengacu pada benda-benda non-manusia yang memenuhi suatu ruangan seperti meja, kursi, dan berbagai dekorasi lainnya. Kondisi ini dapat mempengaruhi citra merek pada suatu restoran, yang pada akhirnya akan memengaruhi komunikasi dari mulut ke mulut yang diinisiasi oleh konsumen. Penelitian ini menggunakan analisis Partial Least Squares-Structural Equation Modeling (PLS-SEM) dengan sampel sebanyak 150 responden. Temuan penelitian ini menunjukkan adanya hubungan positif antara kesesakan manusia dengan citra merek, serta antara kesesakan spasial dengan citra merek. Demikian pula, terdapat korelasi positif antara citra merek dan komunikasi dari mulut ke mulut, yang menunjukkan pengaruh yang signifikan antara hubungan tersebut.

ABSTRACT

The popularity of a restaurant led to unavoidable crowdedness, as seen in the case of Mie Gacoan restaurant in Malang City, where the establishment attracted a large number of visitors daily. This situation resulted in various negative impacts, such as long lines, extended waiting times for service, and issues with crowdedness, both in terms of human crowdedness and spatial crowdedness. Human crowdedness refers to the congestion caused by a large number of people in a space, while spatial crowdedness refers to

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non-human objects occupying a space such as table, chair, and other decorations. These conditions influenced the brand image of the restaurant which ultimately affecting word-of-mouth communication initiated by consumers. This study used Partial Least Squares-Structural Equation Modeling (PLS-SEM) analysis with a sample size of 150 respondents. The findings of this research showed a positive relationship between human crowdedness and brand image, as well as between spatial crowdedness and brand image. Similarly, there was a positive correlation between brand image and word-of-mouth, indicating a significant influence.

INTRODUCTION

The popularity that occurs in a restaurant is often accompanied by an increase in the number of visitors, which can create crowdedness and trigger congestion phenomena. Congestion refers to a situation where there is very close physical distance between consumers in a limited area (Khan et al., 2022). Congestion is divided into two dimensions: spatial congestion and human congestion. Spatial congestion relates to consumers' perception of the physical space available and non-human objects occupying a room (Blut & Iyer, 2020). Meanwhile, human congestion involves the number of people and the level of interaction occurring in a specific situation. The congestion phenomenon has two contradictory impacts on the restaurant's brand image. Human congestion can enhance positive perceptions of popularity, reputation, price, and restaurant quality (Wang et al., 2021). However, congestion in the spatial dimension can also negatively impact the brand image through its influence on consumer comfort. Previous research shows that consumers tend to have a more positive perception of moderate spatial congestion than high spatial congestion (Quan et al., 2021).

Consumer perceptions of the formed crowdedness can affect the brand image. The formation of a consistent brand image can influence consumer purchasing decisions (Santana & Keni 2020). A positive brand image can also create positive word of mouth. Word of mouth is a more efficient marketing communication that influences consumer purchases (Tavukçuoğlu, 2018). Therefore, creating a good brand image in restaurants can stimulate positive word of mouth (Giantari et al., 2020). Research on human and spatial congestion has been conducted in various contexts and with different variables. A study on human congestion was carried out by Almeida et al. (2019) in retail stores, examining its impact on consumer attitudes. Similarly, Siddique et al. (2022) investigated the influence of human congestion on customer satisfaction in family restaurants. Research on congestion and word of mouth has also been conducted in Korea by Quan et al. (2021). However, their study was limited to restaurants in Korea, focusing specifically on restaurant tourists and their experiences within that setting. Previous studies on brand image have often linked it to product

attributes such as price and product quality (Pertiwi et al., 2023; Yi et al., 2018), but have rarely explored its connection to environmental psychology, particularly human and spatial congestion. There is still a lack of research examining the relationship between brand image and word of mouth within the context of environmental factors, especially in popular restaurants in Malang City. Therefore, this study is conducted to address these research gaps and provide a new perspective by applying an environmental psychology approach to understand how congestion influences brand image and word of mouth.

The congestion phenomenon that occurred aligns with the conditions at Mie Gacoan restaurant in Malang City. This restaurant is popular for its trendy spicy noodle menu and is often crowded with consumers, especially during lunchtime. This indicates the occurrence of crowds and congestion phenomena. However, this restaurant remains popular despite these phenomena, as evidenced by the continued influx of customers. According to previous studies, the congestion phenomena may lead to a positive and negative outcome, where spatial crowdedness can negatively impact consumer comfort and brand perception (Blut & Iyer, 2020; Quan et al., 2021) and human crowdedness.

The phenomenon of congestion aligns with the conditions at Mie Gacoan restaurant in Malang City, which remains highly popular despite high levels of spatial crowdedness. According to previous studies, spatial crowdedness tends to negatively impact consumer comfort and brand perception (Blut & Iyer, 2020), while human crowdedness can enhance positive perceptions of popularity, reputation, price, and restaurant quality (Wang et al., 2021). However, contrary to these findings, Mie Gacoan continues to attract a large number of customers, suggesting that congestion may not always have a detrimental effect on consumer behavior.

This contradicts conventional marketing theories that associate spatial congestion with lower consumer satisfaction. However, from a marketing perspective, crowdedness can also serve as a signal of high demand and popularity, aligning with social proof theory, which suggests that a crowd can serve as an indicator of good quality (Venema et al., 2020). Given this paradox, Mie Gacoan in Malang City presents an intriguing research subject, as its crowdedness does not appear to diminish its popularity. This study aims to examine the impact of both human and spatial crowdedness on brand image and its subsequent effect on word of mouth in contemporary noodle shops in Malang City.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Theory of Behavioral Constraints

Human and spatial crowdedness are components of the theory of behavioral constraints. This theory states that when an individual is confronted with excessive

stimuli, they may lose control over their own actions in the situation (Helmi, 2015). According to this theory, an individual who perceives their behavioral freedom as threatened or restricted may experience a psychological reaction. This theory also relates to the concept of personal space surrounding each individual, which ideally should not be intruded upon by strangers. Therefore, this concept explains the need for comfortable distance during interactions. Within this theory, the terms human and spatial crowdedness are recognized. Human crowdedness refers to the close proximity of individuals to one another within a specific area or environment (Maeng et al., 2013). This phenomenon describes the presence of many people in a given area. Meanwhile, spatial crowdedness refers to consumers' perceptions of the physical space available in a particular area (Blut & Iyer, 2020). Another perspective suggests that spatial crowdedness is associated with various non-human objects within a certain area (Wang et al., 2021).

Human crowdedness can influence the brand image of a restaurant. Brand image can be understood as consumers' assumptions about a brand, as certain characteristics experienced by consumers may effectively evoke their purchase intentions (Khuong & Tran 2018). Brand image can also refer to the impression consumers form of a brand, which can shape their attitudes and actions toward the product or brand (Huang et al., 2019). The presence of human and spatial crowdedness can impact consumers' comfort levels, which in turn affects their perception and the image of the restaurant (Wang et al., 2021). Human crowdedness can inform consumers about factors such as price, popularity, brand image, and food quality at a restaurant. When consumers perceive a crowded restaurant, they may assume something attractive is happening, which can reflect a good store reputation (Simanjuntak et al., 2020). High crowd density is often associated with a positive image and evaluation of a restaurant (Liao et al., 2023). Therefore, the hypothesis for this study is as follows:

H1: Human crowdedness positively affects brand image at Mie Gacoan in Malang City.

Crowding can also have negative impacts on consumers. Spatial crowdedness, in particular, can lead to feelings of confusion and discomfort among consumers (Quan et al., 2021). Other studies have shown that spatial crowdedness also has a negative impact on visitor comfort (Kim et al., 2016). Consumers generally prefer restaurants with moderate spatial density, as it allows for easier navigation and a more relaxed atmosphere. Excessive spatial congestion may lead to discomfort, which in turn can influence consumers' evaluations of a restaurant's brand image. Blut & Iyer (2020) also argue that spatial crowding can adversely affect consumers' overall assessments and perceptions of a brand. Furthermore, research on spatial crowdedness emphasizes that higher levels of spatial density can increase psychological stress and reduce

positive emotions, ultimately affecting how consumers perceive brand image. Therefore, the hypothesis for this study is as follows:

H2: Spatial crowdedness negatively affects brand image at Mie Gacoan in Malang City.

Theory of Brand Management

Brand management refers to the process of managing a brand, whether for a product, organization, or individual, through elements such as names, terms, symbols, and designs used to identify and distinguish the brand (Velotsou & Delgado-Ballester, 2018). One form of brand management is brand image. Brand image refers to the set of beliefs and impressions held by consumers regarding a brand (Huang et al., 2019). It significantly influences consumers' perceptions of the value provided by the brand (Sindarto & Ellitan, 2022). Moreover, brand image plays a pivotal role in shaping word-of-mouth communication.

Word-of-mouth communication is a form of interpersonal interaction among consumers, where they share personal experiences related to a product or brand (Erawan & Widagda, 2020). A positive brand image can foster positive word-of-mouth communication (Yaman, 2018; Hasyim et al., 2017). A favorable brand image enhances consumer loyalty and advocacy, making it more likely for consumers to recommend the restaurant to their peers. Hence, building a strong brand image can be a strategic approach to stimulate positive word-of-mouth communication. Therefore, the hypothesis for this study is as follows:

H3: Brand image positively affects word of mouth at Mie Gacoan in Malang City.

RESEARCH METHOD

Data and Sample

This study employed an explanatory quantitative design to analyze the cause-and-effect relationships between each observed variable (Sari et al., 2022). This approach focuses on providing explanations for the phenomena occurring by the formulated hypotheses, which were developed based on previous studies. The location and sample selection in this research were carried out using non-probability sampling, specifically purposive sampling. The population of this study consists of all consumers who have already visited and experienced the atmosphere of Mie Gacoan restaurants in Malang City. The study was conducted at the Mie Gacoan restaurant in Malang City, involving a sample of 150 respondents who had consumed Mie Gacoan products in Malang City at least twice. This location was chosen because it is a popular dining

spot and can represent the conditions of congestion relevant to the research. Additionally, the restaurant has a well-distributed presence and the same characteristic and store atmosphere across Malang city.

The sample size was calculated using the rule of thumb, based on the maximum number of arrows present in the research model (see Figure 1), which in this case is 2 arrows, as demonstrated by the two arrows pointing toward the brand image variable. The study employed a 5% significance level with a minimum value of R-squared is 0.10. As a result, based on the table provided by Hair et al. (2014), the recommended sample size was 110 respondents. To enhance the robustness of the findings, the sample size was rounded up to 150 respondents.

Research Model

The following is the research model used in this study. This research model illustrating the influence of human and spatial crowding on brand image, and its impact on word-of-mouth communication.

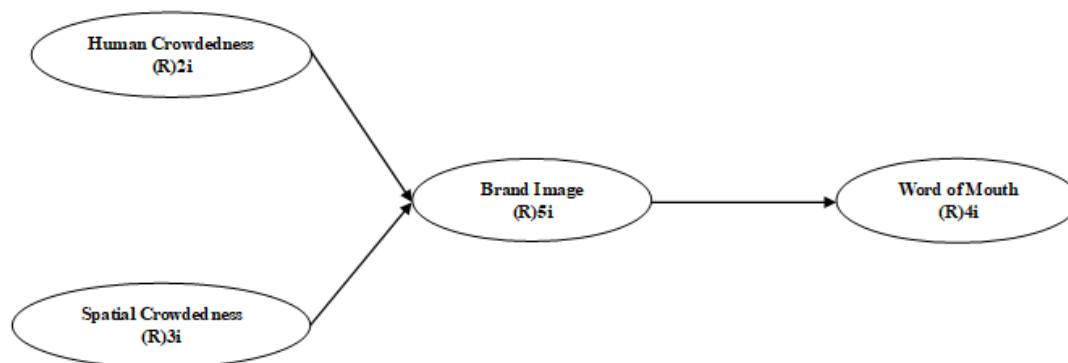


Figure 1
Research Model

Data were collected from October to November 2023 through a closed questionnaire distributed online via various platforms, including Twitter, Instagram, and WhatsApp groups. The questionnaire included sections on respondent identity, the human congestion variable (referring to the perceived crowding of people), the spatial congestion variable (referring to congestion caused by non-human factors at the location), the restaurant's brand image, and word-of-mouth communication. The questionnaire employed a 5-point Likert scale, where a score of 1 indicates "strongly disagree" and a score of 5 indicates "strongly agree." The collected data were then compiled and cleaned using Excel.

Variable Measurement and Data Analysis Technique

The data were first tested for validity and reliability. Once the data met the required validity and reliability standards, further analyses were conducted to examine the effects among the variables. Table 1 explains the indicators that used in this study.

Table 1
Research Indicator

Variable	Indicator	Code
Human (X1)	Busy with a lot of visitors	(X1.1)
	Busy, and one may need to queue	(X1.2)
Spatial (X2)	Feeling suffocated due to limited space	(X2.1)
	Feeling cramped due to tight space	(X2.2)
	Difficulty in moving around	(X2.3)
Brand Image (Y1)	Enjoyable atmosphere	(Y1.1)
	Crowdedness reflects the restaurant's popularity	(Y1.2)
	Food quality	(Y1.3)
	Interior design	(Y1.4)
	Easy access and a spacious parking area	(Y1.4)
Word of Mouth (Y2)	Sharing positive information	(Y2.1)
	Posting experiences	(Y2.2)
	Recommending	(Y2.3)
	Encouraging to come and visit	(Y2.4)

Based on Table 1, the data are considered valid if they meet convergent validity, indicated by loading factor values above 0.7, and discriminant validity, where the pattern loading values are higher than their corresponding cross-loading values (Hair et al., 2014). The data are deemed reliable if they have a Cronbach's alpha greater than 0.6 and a composite reliability exceeding 0.7 (Solimun et al., 2017). The data that have been gathered were analyzed using PLS-SEM with WarpPLS 7.0. This method was chosen considering the relatively small sample size (Handoyo & Nugraha, 2020).

EMPIRICAL RESULTS AND DISCUSSION

Respondent Characteristics

This study categorizes the characteristics of 150 respondents into six criteria: gender, age, domicile, occupation, income, and purchase frequency, as shown in the Table 2.

Table 2
Respondent Characteristics

No.	Profile	Category	Frequency	Percentage
1	Gender	Female	104	69%
		Male	46	31%
2	Age	17-25 (late teens)	140	93%
		26-35 (early adolescence)	9	6%
		36-45 (late adolescence)	1	1%
3	Domicile	Malang	105	70%
		Gresik	9	6%
		Surabaya	5	3%
		Mojokerto	5	3%
		Others	26	17%
4	Occupation	Student	122	81%
		Employee	13	9%
		Business owner	8	5%
		Teacher	1	1%
		Others	6	4%

No.	Profile	Category	Frequency	Percentage
5	Income	< IDR 500,000	27	18%
		IDR 500,000 – IDR 1,000,000	46	31%
		IDR 1000,000 – IDR 2,000,000	43	29%
		IDR 2000,000 – IDR 3,000,000	16	11%
		> IDR 3,000,000	18	12%
6	Purchase Frequency	1-2 times	36	24%
		3-4 times	42	28%
		5-6 times	23	15%
		>6 times	49	33%

Source: Primary Data, 2023

Table 2 provides an overview of the respondents' characteristics in this study. Based on the table, it is observed that the majority of restaurant consumers, accounting for 69% of the total respondents, are female. This can be attributed to the tendency of women to enjoy visiting pleasant places, such as restaurants, to socialize with friends (Yulianti & Deliana, 2018). Furthermore, 93% of consumers are aged 17–25 years, representing late adolescence. At this young age, consumers tend to favor foods with unique and challenging flavors, such as the spicy noodles discussed in this study (Santoso et al., 2018). In terms of domicile, 70% of consumers reside in Malang, as the majority of a restaurant's customers are often dominated by individuals from the same area where the restaurant is located (Afriyanti & Rasmikayati, 2018). Regarding occupation, 81% of consumers are students, influenced by factors such as brand consideration, fast food preparation, and delicious flavors at affordable prices (Antonika et al., 2015).

These factors align with the restaurant's offerings, which include spicy noodles at a budget-friendly price. In terms of income, most consumers receive an income ranging from IDR 500,000 to IDR 1,000,000, reflecting limited income typically associated with students. Additionally, 33% of consumers have made repeat purchases of food and beverage products from this restaurant more than six times. Factors influencing repeat purchases include service quality, store image, promotions, pricing, and good product quality (Suryana & Dasuki, 2013; Permatasari et al., 2022).

Convergent Validity Testing

The validity of convergence is assessed by examining the combined loading and cross-loading values. This test is deemed to be met if the loading factor exceeds 0.708 in each construct (Hair et al., 2014). Table 3 shows the combined loading and cross-loading values.

Table 3
Convergent Validity Test

	X1	X2	Y1	Y2	P Value
X1.1	0.856	-0.028	0.123	-0.131	<0.001
X1.2	0.856	0.028	-0.123	0.131	<0.001
X2.1	0.079	0.859	-0.075	-0.046	<0.001
X2.2	-0.122	0.834	-0.194	0.302	<0.001
X2.3	0.040	0.845	0.268	-0.251	<0.001
Y1.1	0.054	-0.270	0.785	-0.064	<0.001
Y1.2	0.131	0.287	0.825	0.061	<0.001
Y1.3	0.014	0.019	0.806	-0.181	<0.001
Y1.4	-0.198	0.081	0.781	0.125	<0.001
Y1.5	-0.008	-0.118	0.867	0.056	<0.001
Y2.1	0.022	-0.111	0.189	0.922	<0.001
Y2.2	0.129	0.261	-0.052	0.748	<0.001
Y2.3	-0.066	-0.030	0.113	0.889	<0.001
Y2.4	-0.069	-0.079	-0.278	0.848	<0.001

Source: Primary Data, 2023

Based on the Table 3, each indicator in the study fulfills the test of convergent validity as indicated by the loading and cross-loading values in the test being greater than 0.5-0.6. This testing can also be conducted using the Average Variances Extracted (AVE) values in Table 4. The AVE value is considered satisfactory if it is > 0.50 (Solimun et al., 2017).

Table 4
Average Variances Extracted (AVE)

Variable	AVE
Human Crowdedness (X1)	0.733
Spatial Crowdedness (X2)	0.716
Brand Image (Y1)	0.662
Word of Mouth (Y2)	0.730

Source: Primary Data, 2023

Based on the Table 4, the AVE values for all latent variables are > 0.50. The variables, namely human congestion (X1), spatial congestion (X2), brand image (Y1), and word of mouth (Y2), have values of 0.733, 0.716, 0.662, and 0.730, respectively. Therefore, all indicators in the test have satisfied the convergent validity.

Discriminant Validity Testing

Discriminant validity testing in Table 5 is conducted by comparing the pattern loading values with the cross-loading values. The pattern loading value for each indicator must be greater than its cross-loading value (Solimun et al., 2017).

Table 5
Pattern Loadings and Cross-loadings

	X1	X2	Y1	Y2
X1.1	0.876	-0.028	0.123	-0.131
X1.2	0.837	0.028	-0.123	0.131
X2.1	0.079	0.905	-0.075	-0.046
X2.2	-0.122	0.828	-0.194	0.302
X2.3	0.040	0.805	0.268	-0.251

	X1	X2	Y1	Y2
Y1.1	0.054	-0.270	1.013	-0.064
Y1.2	0.131	0.287	0.479	0.061
Y1.3	0.014	0.019	0.943	-0.181
Y1.4	-0.198	0.081	0.732	0.125
Y1.5	-0.008	-0.118	0.906	0.056
Y2.1	0.022	-0.111	0.189	0.820
Y2.2	0.129	0.261	-0.052	0.526
Y2.3	-0.066	-0.030	0.113	0.854
Y2.4	-0.069	-0.079	-0.278	1.192

Source: Primary Data, 2023

Table 5 indicates that the pattern loading values of all variables are greater than their cross-loading values. This indicates that all variables in this study are valid and meet the discriminant validity test.

Reliability Testing

Reliability testing is conducted using composite reliability coefficients and Cronbach's alpha coefficients. Good composite reliability coefficients are > 0.70 , with Cronbach's alpha coefficients > 0.60 (Solimun et al., 2017). The results of the testing are shown in the following table:

Table 6
Composite Reliability Coefficients and Cronbach's Alpha Coefficients

	Composite Reliability	Cronbach's Alpha
Standard Value	≥ 0.7	≥ 0.6
Human Crowdedness (X1)	0.846	0.636
Spatial Crowdedness (X2)	0.883	0.801
Brand Image (Y1)	0.907	0.872
Word of Mouth (Y2)	0.915	0.874

Source: Primary Data, 2023

Table 6 shows the values of composite reliability coefficients in the study, which have met the testing criteria, with results greater than 0.70. The questionnaire testing results with Cronbach's alpha coefficients have also met the testing criteria, being greater than 0.60. Therefore, all variables used are considered reliable.

Inner Model Evaluation

Inner model evaluation is conducted through path coefficients, R-squared, and Goodness of Fit. Figure 2 highlights the path diagram illustrating the relationships between the variables.

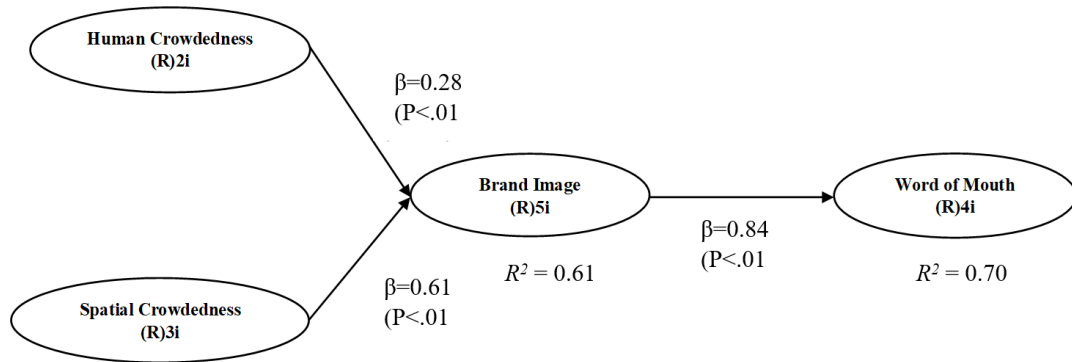


Figure 2
Path Coefficient Diagram Result

Based on the Figure 2, it can be seen that all variables in the model have a value of +1, indicating a positive relationship between the variables (Hair et al., 2014). The diagram shows that the variable of human congestion (X1) has a positive effect on brand image (Y1) by 0.28 with a p-value < 0.01 . The spatial congestion variable (X2) has a positive effect on brand image (Y1) by 0.61 with a p-value < 0.01 . The last path illustrates the positive relationship between brand image (Y1) and word of mouth (Y2) by 0.84 with a p-value of 0.01.

The path diagram also indicates the R-squared values for brand image and word of mouth. The R-squared values for brand image and word of mouth are 0.61 and 0.70, respectively. These R-squared values indicate that brand image is influenced by human congestion and spatial congestion variables by 61%, with the remainder explained by other variables outside the model. Similarly, word of mouth is influenced by brand image variables by 70%, with the remainder explained by other variables outside the model. In this study, an evaluation was also conducted using a goodness-of-fit table, and the testing results indicated that all ten parameters met the requirements.

Hypothesis Testing

A statistical method for determining if there is sufficient evidence in a sample to draw conclusions about a population is called hypothesis testing. Table 7 shows the hypothesis testing results.

Table 7
Hypothesis Testing

	Hypothesis	Path Coefficients	P-values	Conclusion
H1	Human crowdedness positively influences brand image	0.28	0.001	Accepted
H2	Spatial crowdedness negatively influences brand image	0.61	0.001	Rejected
H3	Brand image positively influences word of mouth	0.84	0.001	Accepted

Source: Primary Data, 2023

Based on the Table 7, it can be observed that the variable of human congestion has a positive and significant effect on brand image. This finding is consistent with the research conducted by Liao et al. (2023), which indicates that crowds in restaurants can create a positive image and favorable evaluations from consumers towards a brand. Crowds in restaurants can shape a positive image related to food quality, product pricing, and restaurant popularity (Wang et al., 2021). In the context of the Mie Gacoan restaurant, the congestion that occurs can be identified with popularity, delicious food quality, and the uniqueness of the restaurant. The higher the quality and taste of a product, the greater the consumer's interest in purchasing and enjoying the food (Fasya & Rahwana, 2021). In this restaurant, market segmentation tends to focus on the younger generation, which also influences the positive brand image, as this segment prefers contemporary cuisine due to its uniqueness, innovation, and food aesthetics (Kurniawati, 2020).

Table 6 also indicates that spatial congestion variables have a positive and significant relationship with brand image. This finding differs from the research by Kim et al. (2016), which states that spatial congestion has a negative impact on brand image in Mie Gacoan restaurants. Field findings show that congestion conditions in Mie Gacoan restaurants actually do not have a negative effect on brand image. Consistent with the research conducted by Quan et al. (2021), the perception of spatial congestion felt by consumers can be influenced by the restaurant's atmosphere and decoration. A comfortable and enjoyable restaurant atmosphere is one of the important factors considered by consumers in making purchases, where consumers respond not only to the products and services offered but also to the restaurant's atmosphere (Ridwan & Mariah, 2021). This is consistent with Mie Gacoan restaurant, which offers a unique restaurant atmosphere with an industrial concept and contemporary interior design that can elicit positive responses and reduce the impact of perceived congestion by consumers.

The findings of this study highlight that consumers perceive crowdedness at Mie Gacoan as a positive aspect. While spatial crowdedness is commonly associated with physical discomfort, in this context, it did not significantly affect brand image. This may be due to other contributing factors, such as the restaurant's unique interior design and open layout, which help mitigate feelings of discomfort. Human crowdedness is also perceived positively, as it signals various indicators such as the restaurant's popularity.

This research also shows that brand image significantly and positively influences word of mouth. This finding is in line with the research by Meiliana & Erdiansyah (2020), which states that brand image has a positive impact on word-of-mouth performance. Brand image can meet consumer expectations and encourage them to convey this positive image to others. The formation of a positive brand image through consumer experience can also affect the formation of positive word of mouth, as indicated by the research by Hakim et al. (2017). The importance of a positive brand

image in building positive word of mouth is also emphasized by Erawan & Widagda (2020). Consumers who perceive a restaurant's brand image positively tend to provide positive recommendations to others through various media. Positive word of mouth creates ease of acceptance for a product and influences consumer purchasing decisions. Mie Gacoan is known for its strong and positive brand image as a spicy noodle restaurant that serves quality food and meets consumer expectations in terms of price levels and spiciness levels. This strong brand image encourages consumers to spread positive word of mouth to potential consumers. A strong and positive brand image can also facilitate the acceptance of marketing communications such as recommendations and invitations by consumers (Erawan & Widagda, 2020). Thus, the positive brand image of Mie Gacoan restaurant contributes to the creation of positive word of mouth by consumers towards the restaurant.

The formation of positive word-of-mouth communication is influenced by several factors, one of which is ease of access to the restaurant. Ease of access is an important factor for restaurants, where ease of access to a restaurant is known through easily accessible information, good road conditions, and adequate parking facilities (Khotimah & Astuti, 2022). Consistent with the conditions at Mie Gacoan restaurant, easily accessible information with optimal road access is available. Adequate parking facilities and organized vehicle arrangements also provide convenience for consumers. The ease of access experienced by consumers at Mie Gacoan restaurant can provide comfort for consumers, which can influence consumer perceptions of a restaurant and shape positive word-of-mouth communication (Adiasih & Brahmana, 2017).

CONCLUSION

Based on the data analysis and discussion conducted in this study, the following conclusions can be drawn. Human congestion at Mie Gacoan has a positive and significant impact on brand image. The presence of a large number of people in the restaurant creates a positive perception of the restaurant's atmosphere, popularity, and product quality. Thus, the crowds can influence a positive brand image in the restaurant. Spatial congestion at Mie Gacoan has a positive and significant impact on brand image. The feeling of spatial congestion in the restaurant can be alleviated by offering an attractive interior design that diverts visitors' attention away from the perception of congestion. The brand image of Mie Gacoan has a positive and significant impact on word of mouth because the restaurant has a strong image as a quality spicy noodle restaurant that meets consumer expectations. The positive image formed encourages the spread of positive word of mouth. Other factors such as ease of access also play a role in shaping a positive brand image, which in turn can influence the word of mouth generated by consumers.

The findings contribute to knowledge, particularly regarding the effects of human and spatial congestion in restaurants. This study can serve as a reference for

further research and development by enriching the variables and addressing the limitations of this study, such as examining direct relationships between human and spatial congestion and word-of-mouth, and also adding another variable such as perceived crowdedness, time pressure, and individual characteristics. For practitioners, especially restaurant managers, the findings can help Mie Gacoan's management focus on room layouts that ensure customer comfort and freedom of movement. Simple and organized layouts and table arrangements with adequate spacing can facilitate consumer mobility. Moreover, the restaurant can add additional ordering counters and guide customers to plan their orders before reaching the cashier to reduce queue times. This study also highlights the importance of balancing congestion with customer comfort through layouts and designs that can divert the perception of overcrowding.

REFERENCES

- Adiasih, P., & Brahmana, R. K. M. R. (2017). Persepsi terhadap makanan tradisional Jawa Timur: Studi awal terhadap mahasiswa perguruan tinggi swasta di Surabaya. *Kinerja*, 19(2), 114–127. <https://doi.org/10.24002/kinerja.v19i2.538>
- Afriyanti, S., & Rasmikayati, E. (2018). Studi strategi pemasaran terbaik berdasarkan perilaku konsumen dalam menghadapi persaingan antar kedai kopi di Jatinangor. *Agroinfo Galuh: Jurnal Ilmiah Mahasiswa*, 4(3), 100–126.
- Almeida, C. P., Botelho, D., & Pereira, I. (2019). A field study on the relationship between perceived store crowding and consumer response. *Internacional Journal of Business & Marketing*, 4(1), 36–45. <https://www.ijbmkt.org/ijbmkt/article/view/106>
- Antonika, A., Rangga, A., & Nurainy, F. (2015). Analisis perilaku mahasiswa dalam proses keputusan pembelian produk pangan halal: Studi kasus mahasiswa Universitas Lampung. *Jurnal Teknologi Industri & Hasil Pertanian*, 20(2), 73–85. <https://doi.org/10.23960/jtihp.v20i2.73%20-%2085>
- Blut, M., & Iyer, G. R. (2020). Consequences of perceived crowding: A meta-analytical perspective. *Journal of Retailing*, 96(3), 362–382. <https://doi.org/10.1016/j.jretai.2019.11.007>
- Pertiwi, R. D., Sudarso, A., Wardana, W., Agung, H. S., Ahidin, U., & Prabowo, F. H. E. (2023). The model of product attributes and brand image: Purchase decisions based. *International Journal of Advanced Multidisciplinary*, 2(1), 8–15. <https://greenpub.org/IJAM/article/view/181>
- Erawan, P. Y. P., & Widagda K, I. G. N. J. A. (2020). Pengaruh brand image terhadap word of mouth yang dimediasi oleh customer satisfaction. *E-Jurnal Manajemen*, 9(8), 3301–3320. <https://doi.org/10.24843/EJMUNUD.2020.v09.i08.p20>
- Fasya, D. A., & Rahwana, K. A. (2021). Pengaruh kemasan dan cita rasa terhadap keputusan pembelian konsumen produk mie instan Indomie (Survei pada Mahasiswa/i Universitas Perjuangan Tasikmalaya). *Jurnal Ekonomi*

- Perjuangan*, 2(2), 167–176. <https://doi.org/10.36423/jumper.v2i2.669>
- Giantari, I. G. A. K., Utama, I. P. H. B., & Wardani, N. L. D. A. (2020). Peran brand love memediasi pengaruh brand image terhadap word of mouth. *Juima: Jurnal Ilmu Manajemen*, 10(1), 54–61.
- Hair, J. F., Hult, G. T. M., Sarstedt, M., & Ringle, C. M. (2014). A primer on partial least squares structural equation modeling. *Long Range Planning*, 46(1–2), 184–185. <https://doi.org/10.1016/j.lrp.2013.01.002>
- Hakim, F. R., Fuxi, A., & Mawardi, M. K. (2017). Pengaruh citra merek terhadap word of mouth serta dampaknya pada keputusan pembelian (Survei pada konsumen Waroeng Pring Pethuk di jalan Cemara Kipas Dalam, Kota Batu). *Jurnal Administrasi Bisnis*, 43(1), 180–186.
- Handoyo, N., & Nugraha, A. K. N. A. (2020). Country of origin dan keputusan pembelian konsumen otomotif: Peran nilai terpersepsi sebagai pemediasi. *Jurnal Ekonomi Dan Bisnis*, 23(1), 149–172. <https://doi.org/10.24914/jeb.v23i1.3178>
- Hasyim, M., Fauzi, A., & Fanani, D. (2017). Pengaruh citra merek terhadap word of mouth dan keputusan pembelian (Survei pada Mahasiswa Fakultas Ilmu Administrasi Universitas Brawijaya Jurusan Administrasi Bisnis Angkatan 2014/2015-2015/2016 pembeli handphone Samsung Galaxy). *Jurnal Administrasi Bisnis*, 43(1), 148–156.
- Helmi, A. F. (2015). Beberapa teori psikologi lingkungan. *Buletin Psikologi*, 7(2), 7–19.
- Huang, L. C., Gao, M., & Hsu, P. F. (2019). A study on the effect of brand image on perceived value and repurchase intention in ecotourism industry. *Ekoloji*, 28(107), 283–287.
- Khan, K. I., Mahmood, S., & Iqbal, M. (2022). Effect of store environment, perceived crowdedness, and perceived noisiness on consumer buying behavior through brand attachment. *NUML International Journal of Business & Management*, 16(2), 37–69. <https://doi.org/10.52015/nijbm.v16i2.72>
- Khotimah, K., & Astuti, P. B. (2022). Pengaruh aksesibilitas dan physical evidence terhadap revisit intention dengan kepuasan pengunjung sebagai variabel intervening. *Jurnal Ilmiah Mahasiswa Manajemen, Bisnis Dan Akuntansi*, 4(4), 547–566. <https://doi.org/10.32639/jimmba.v4i4.148>
- Khuong, M. N., & Tran, N. T. H. (2018). The impacts of product packaging elements on brand image and purchase intention — An Empirical study of Phuc Long's packaged tea products. *International Journal of Trade, Economics and Finance*, 9(1), 8–13. <https://doi.org/10.18178/ijtef.2018.9.1.580>
- Kim, D., Lee, C. K., & Sirgy, M. J. (2016). Examining the differential impact of human crowding versus spatial crowding on visitor satisfaction at a festival. *Journal of Travel and Tourism Marketing*, 33(3), 293–312. <https://doi.org/10.1080/10548408.2015.1024914>
- Kurniawati, A. D. (2020). Post before eating: Motif generasi milenial Ponorogo dalam fenomena kuliner kekinian. *Jurnal Sosiologi Reflektif*, 14(2), 271–286.

<https://doi.org/10.14421/jsr.v14i2.1745>

- Liao, Z., Chen, J., Jia, L., Chen, X., & Ding, H. (2023). Does social crowding promote green products purchasing? Analyzing the role of face consciousness and relative price. *Computers and Industrial Engineering*, 184(5), 109575. <https://doi.org/10.1016/j.cie.2023.109575>
- Maeng, A., Tanner, R. J., & Soman, D. (2013). Conservative when crowded: Social crowding and consumer choice. *Journal of Marketing Research*, 50(6), 739–752. <https://doi.org/10.1509/jmr.12.0118>
- Meiliana, M., & Erdiansyah, R. (2020). Pengaruh citra merek terhadap kepuasan pelanggan dan implikasinya pada positive word of mouth penumpang MRT Jakarta. *Prologia*, 4(2), 368–376. <https://doi.org/10.24912/pr.v4i2.6632>
- Permatasari, E., Luthfiana, H., Pratama, N. A., & Ali, H. (2022). Faktor-faktor yang mempengaruhi pembelian konsumen: Promosi, harga dan produk (Literature review perilaku konsumen). *Jurnal Ilmu Manajemen Terapan*, 3(5), 522–529. <https://doi.org/10.31933/jimt.v3i5>
- Quan, W., Al-Ansi, A., & Han, H. (2021). Spatial and human crowdedness, time pressure, and Chinese traveler word-of-mouth behaviors for Korean restaurants. *International Journal of Hospitality Management*, 94, 102851. <https://doi.org/10.1016/j.ijhm.2020.102851>
- Ridwan, M. S., & Mariah, M. (2021). Analisis pengaruh suasana restoran dan lokasi terhadap minat beli konsumen pada Restoran Limbung Mas Indah Kabupaten Gowa. *Jurnal Manajemen Perbankan Keuangan Nitro*, 3(1), 41–51. <https://doi.org/10.56858/jmpkn.v3i1.23>
- Santana, A., & Keni, K. (2020). Pengaruh brand image terhadap kepuasan dan loyalitas pelanggan pada PT. Brand X di Jakarta. *Jurnal Manajemen Bisnis Dan Kewirausahaan*, 4(4), 150. <https://doi.org/10.24912/jmbk.v4i4.8678>
- Santoso, S. O., Janeta, A., & Kristanti, M. (2018). Faktor-faktor yang mempengaruhi pemilihan makanan pada remaja di Surabaya. *Jurnal Hospitality Dan Manajemen Jasa*, 6(1), 19–32.
- Sari, M., Rachman, H., Astuti, N. J., Afgani, M. W., & Siroj, R. A. (2022). Explanatory survey dalam metode penelitian deskriptif kuantitatif. *Jurnal Pendidikan Sains Dan Komputer*, 3(01), 10–16. <https://doi.org/10.47709/jpsk.v3i01.1953>
- Siddique, N., Hamid, K., Sajid, M., Ali, A., & Akash, R. S. I. (2022). Investigating the impact of perceived crowding and various determinants on customers satisfaction: Insights from family restaurants. *Middle East J. of Management*, 9(1), 23. <https://doi.org/10.1504/mejm.2022.119359>
- Sindarto, J., & Ellitan, L. (2022). Peran citra merek dalam membangun kepuasan dan loyalitas konsumen: sebuah kajian teoritis. *Jurnal Ilmiah Multidisiplin*, 1(10), 3794–3807.
- Simanjuntak, M., Nur, H. R., Sartono, B., & Sabri, M. F. (2020). A general structural equation model of the emotions and repurchase intention in modern retail. *Management Science Letters*, 10(4), 801–814. <https://doi.org/10.5267/j.msl.2019.10.017>

- Solimun, S., Fernandes, A. A. R., & Nurjannah, N. (2017). *Metode statistika multivariat pemodelan persamaan struktural (SEM) pendekatan WarpPLS* (2nd ed.). UB Press.
- Suryana, P., & Dasuki, E. S. (2013). Analisis faktor yang mempengaruhi keputusan pembelian dan implikasinya pada minat beli ulang. *Jurnal Ekonomi Trikonomika*, 12(2), 190–200. <https://doi.org/10.23969/trikononika.v12i2.479>
- Tavukçuoğlu, R. T. (2018). *Word-of-Mouth marketing*. In S. Ozturkcan & E. Y. Okan (Eds.), *Marketing Management in Turkey* (pp. 321–349). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78714-557-320181022>
- Veloutsou, C., & Delgado-Ballester, E. (2018). New challenges in brand management. *Spanish Journal of Marketing - ESIC*, 22(3), 255–272. <https://doi.org/10.1108/SJME-12-2018-036>
- Venema, T. A. G., Kroese, F. M., Benjamins, J. S., & de Ridder, D. T. D. (2020). When in doubt, follow the crowd? Responsiveness to social proof nudges in the absence of clear preferences. *Frontiers in Psychology*, 11, 1–13. <https://doi.org/10.3389/fpsyg.2020.01385>
- Wang, D., Yao, J., & Martin, B. A. S. (2021). The effects of crowdedness and safety measures on restaurant patronage choices and perceptions in the COVID-19 pandemic. *International Journal of Hospitality Management*, 95, 102910. <https://doi.org/10.1016/j.ijhm.2021.102910>
- Yaman, Z. (2018). The effect of word of mouth marketing on the purchase behavior via brand image and perceived quality. *Montenegrin Journal of Economics*, 14(2), 175–182. <https://doi.org/10.14254/1800-5845/2018.14-2.12>
- Yi, S., Zhao, J., & Joung, H. W. (2018). Influence of price and brand image on restaurant customers' restaurant selection attribute. *Journal of Foodservice Business Research*, 21(2), 200–217. <https://doi.org/10.1080/15378020.2017.1368808>
- Yulianti, Y., & Deliana, Y. (2018). Gaya hidup kaitannya dengan keputusan konsumen dalam membeli minuman kopi. *Jurnal Agrisep: Kajian Masalah Sosial Ekonomi Pertanian Dan Agribisnis*, 17(1), 39–50. <https://doi.org/10.31186/jagrisep.17.1.39-50>

