

From Crumbs to Clicks: The Role of Product Attributes in Online Consumers' Purchase Intention for Bakery Products

Muhammad 'Arif Aizat Bashir¹, Aina Syazwani Muzafar Shah¹, *Sperico Michael Alden¹, Mohd Salehuddin Mohd Zahari² & Feri Ferdian³

¹Faculty of Hotel and Tourism Management,
Universiti Teknologi MARA Cawangan Pulau Pinang,
Kampus Permatang Pauh, 13500 Permatang Pauh,
Pulau Pinang, Malaysia

²Faculty of Hotel and Tourism Management,
Universiti Teknologi MARA Cawangan Selangor,
Kampus Puncak Alam, 42300 Bandar Puncak Alam,
Selangor, Malaysia

³Fakultas Pariwisata dan Perhotelan
Universitas Negeri Padang,
Jalan Prof. Dr. Hamka, Air Tawar Padang,
Sumatera Barat, Indonesia

*Corresponding author's email: sperico.michael@uitm.edu.my

Submission date: 8 February 2024

Accepted date: 24 May 2024

Published date: 29 November 2024

To cite this article: Bashir, M. A. A., Shah, A. S. M., Alden, S. M., Zahari, M. S. M. & Ferdian, F. (2024). From crumbs to clicks: The role of product attributes in online consumers' purchase intention for bakery products. *e-Academia Journal of UiTM Cawangan Terengganu*, 13 (2) 227-239, November 2024

ABSTRACT

This study investigated the impact of intrinsic and extrinsic product attributes on the purchase intention of bakery products among online consumers. Specifically, the study focused on perceived taste and quality as the intrinsic product attributes and price and online advertising as the extrinsic product attributes. The sample for the study was drawn from Malaysian online consumers, and 398 responses were successfully collected through close-ended online survey questionnaires. The findings revealed that all the investigated variables positively impacted online consumers' purchase intention for bakery products. Furthermore, the results indicated that price was the most influential extrinsic product attribute on the purchase intention of online consumers, followed by online advertising, perceived taste, and perceived quality, respectively. Overall, the study contributes to understanding the factors that influence online consumers' purchase intention for bakery products, particularly in the Malaysian context. These findings have important implications for marketers and online retailers, who can use this information to develop effective strategies to enhance consumers'

purchase intention and ultimately increase sales. Further research is needed to explore the factors influencing purchase intention in other contexts and with different product categories.

Keywords: *Bakery Products, Consumerism, Extrinsic Product Attributes, Intrinsic Product Attributes, Online Purchase Intention*

1.0 INTRODUCTION

Without a doubt, marketing is one of the most intriguing matters to be considered in any business, among others. This is because any business could not exist without having any relationship between seller and buyer, in which the seller needs to find the potential buyers to buy or consume either their products or services through the efforts of marketing. In other words, a business undoubtedly involves marketing strategies where the producers must grab the consumers' attention to purchase their products so as to increase their business sales. Therefore, upgrading business marketing strategies is considered of utmost importance to stay relevant in the market. In today's competitive landscape, online businesses must employ innovative marketing strategies to meet the demands of tech-savvy consumers who can access products easily through online mobile devices (Pappas, 2020; Krishen et al., 2021).

Salehi et al. (2012) emphasised the widespread utilisation of technologies and electronic media in contemporary marketing strategies aimed at attracting consumers. Specifically, they noted the prevalence of modern facilities and technologies integrated into current marketing methods. These methods, predominantly leveraging online marketing activities facilitated by the internet/web and related information technologies, have emerged as dominant tools in recent years. In accordance, there are plenty of products, including clothing, books, stationeries, beauty products, furniture and many more, that can be found online with different marketing strategies. Take Zalora as an example; it is one of the popular online shops for clothing, women's, and men's accessories in Malaysia. This online shop has a website where consumers can browse their available products according to categories. Another noteworthy example is the MPH and Popular online bookstores, which sell various books, stationery, and office supplies through their websites. Besides these product categories, marketing food products via online platforms is also increasingly popular nowadays, where various foods can be found online, such as frozen food, fast food, snacks, and bakery products, among others.

With regard to bakery products, their market potential and growth are gradually increasing, which can be seen up to now. It is interesting to note that despite its quite high price, however, people are still purchasing it (Jadhav & Chavan, 2019). The increase in popularity of bakery products might be due to the rise of demand for on-the-go snacks and varieties in unique flavours, coupled with packaging innovations that made it easier for customers to carry over from one place to another. Interestingly, in this new technological era, most bakery products can be purchased online. With the advancement of online food marketing, many bakery product sellers are embarking towards this type of marketing strategy besides their conventional way of selling offline. Recent market research estimates indicate a substantial increase in the internet market for bakery products in recent years. According to a survey from Fortune Business Insights, the worldwide online bakery market is projected to experience a compound annual growth rate (CAGR) of 5.12% between 2021 and 2028 (*Bakery Products Market Size, Analysis & Growth Report, 2021*). The COVID-19 pandemic has accelerated the transition to online food purchasing, particularly bakery products, as customers prioritise convenience and safety. An upward trend in online grocery sales, particularly in the United States and the United Kingdom, has been seen where bakery items have played a significant role in driving this growth (Etumnu & Widmar, 2020; Hood et al., 2020).

It is evident that there are vast numbers of emerging online businesses nowadays, which has led to increased competition among entrepreneurs and marketers. They must stay alert and creative to stay relevant in this competitive marketplace, and Morgan (2011) noted that a proper marketing strategy is key to their online business success. Several scholars, such as Akar and Nasir (2015), Bagga and Bhatt (2013), and Mardhatillah et al. (2018), argued that there are several factors that influence consumer purchase intention when it comes to online products. Bagga and Bhatt (2013) and Mandelkar (2018) contended that as a way for a business to uphold its product sales, it must take into consideration the intrinsic and extrinsic factors of product attributes. Pertaining to intrinsic attributes, Mandelkar (2018) postulated that this would include

the perceived taste and perceived quality of the products. Looking into extrinsic factors, the scholar further deduced that the price and online product advertisement play a pivotal role.

With all the contentions, however, there is limited attention given and a lack of empirical studies on online consumers' purchase intention for bakery products, particularly in the Malaysian context. Specifically, several research questions were raised: 1) What is the influence of intrinsic product attributes towards online consumers' purchase intention for bakery products? 2) What is the influence of extrinsic product attributes towards online consumers' purchase intention for bakery products? And lastly, 3) Which of the product attributes influence most of the online consumers' purchase intention of bakery products? The existing research on either online food products or their online purchase intention primarily focuses on fresh agricultural products (Karim et al., 2021), SME food products (Mardhatillah et al., 2018), gluten-free cakes (Fahreza & Syafrizal, 2021), and organic food (Erlangga et al., 2021). Therefore, an empirical investigation is necessary to address this research gap and gain comprehensive insights into the subject matter.

1.1 Underpinning Theory and Study Framework

The Theory of Planned Behaviour (TPB) provides a robust theoretical framework for understanding and predicting consumer behaviour, particularly in the context of online purchases. According to TPB, behavioural intention is influenced by three primary factors: attitude, subjective norm, and perceived behavioural control (Ajzen, 1991).

Attitude refers to the individual's overall evaluation of performing a particular behaviour, influenced by beliefs about the outcomes of that behaviour. In the context of online consumer purchase intention for bakery products, attitude encompasses perceptions of product attributes such as taste, quality, price, and advertising effectiveness.

Subjective norm reflects the perceived social pressure or normative influence from significant others regarding the behaviour in question. In the context of bakery product purchases, subjective norm may encompass social influences related to price sensitivity, brand loyalty, and responses to online advertising among peers and reference groups.

Perceived behavioural control refers to the individual's perception of their ability to perform the behaviour, taking into account internal and external factors that may facilitate or inhibit the behaviour. In the context of online bakery product purchases, perceived behavioural control may involve factors such as ease of online navigation, trust in online transactions, and confidence in assessing product attributes based on online information.

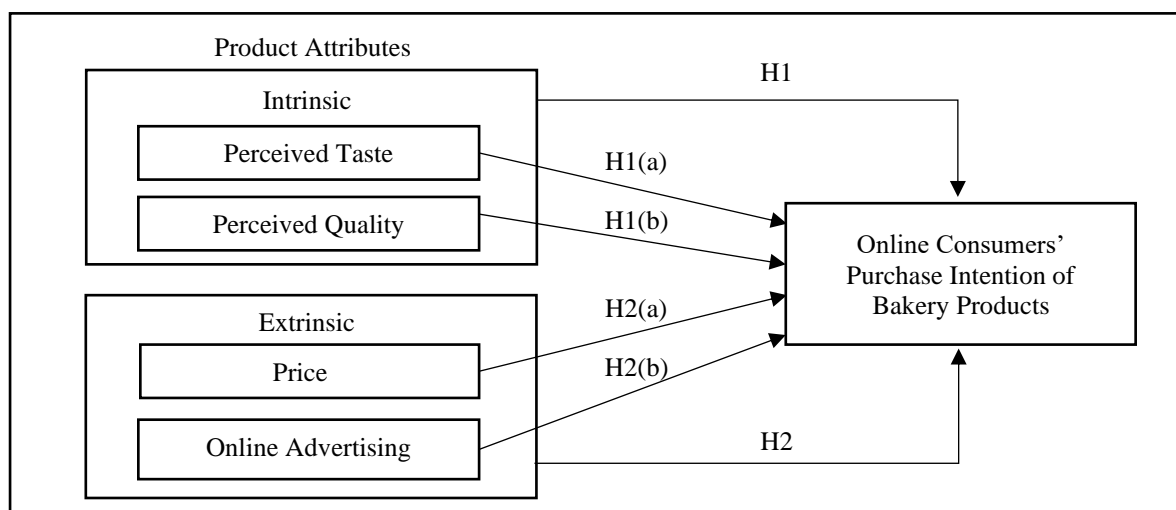


Figure 1: Study framework

The study framework illustrated in Figure 1 integrates the key components of TPB with specific variables relevant to online consumer purchase intention for bakery products. Perceived taste and perceived quality represent intrinsic product attributes, influencing consumers' attitudes toward bakery products. Price and online advertising represent extrinsic product attributes, affecting both attitudes and perceived behavioural

control. Subjective norm, influenced by social factors, mediates the relationship between extrinsic attributes (price and online advertising) and behavioural intention.

In addition to TPB, other related theories offer complementary insights into consumer behaviour in the online context. For instance, the Technology Acceptance Model (TAM) emphasises the role of perceived usefulness and perceived ease of use in determining consumers' acceptance and usage of technology-based systems (Davis, 1989). In the context of online bakery product purchases, TAM may provide additional insights into consumers' perceptions of online platforms and their usability, which can influence purchase intentions.

Moreover, the Elaboration Likelihood Model (ELM) posits that persuasion processes can occur via either central or peripheral routes, depending on the individual's motivation and ability to process information (Petty & Cacioppo, 1986). In the context of online advertising for bakery products, ELM suggests that consumers may engage in either elaborate or heuristic processing of advertising messages, depending on factors such as involvement with the product category and the credibility of the advertising source.

By integrating insights from TPB, TAM, ELM, and other related theories, the study framework provides a comprehensive understanding of the factors influencing online consumer purchase intention for bakery products. This holistic approach enhances the theoretical foundation of the study and facilitates the development of more effective marketing strategies in the hospitality and tourism management domain.

1.2 Research Objectives

The purpose of this study is to determine the influence of intrinsic and extrinsic product attributes towards online consumers' purchase intention for bakery products. In addition, this study compared which intrinsic and extrinsic product attributes influence the most on online consumers' purchase intention of bakery products.

- RO1** : To examine the influence of intrinsic product attributes towards online consumers' purchase intention for bakery products
- RO2** : To examine the influence of extrinsic product attributes towards online consumers' purchase intention for bakery products
- RO3** : To examine which of the product attributes influence most the online consumers' purchase intention of bakery products

2.0 LITERATURE REVIEW

2.1 Online Consumer Purchase Intention

Online consumer purchase intention, defined as the willingness of consumers to engage in online transactions, has gained significant attention in the context of digital commerce (Peña-García et al., 2020). The rise of online platforms has not only transformed daily activities but also revolutionised the way consumers interact with products and services (Tran, 2021). As businesses increasingly seek to enhance their online sales, understanding the factors influencing consumers' decisions to purchase products, particularly in the realm of bakery products, becomes paramount.

In the domain of online shopping, consumer behaviour differs from that of traditional brick-and-mortar stores. Visual cues, online advertising, customer feedback, and product ratings play crucial roles in influencing consumer evaluations and purchase decisions (Sohn et al., 2020; Tran, 2021). These factors become particularly pertinent in the case of bakery products, where sensory appeal and product presentation greatly impact consumer preferences.

The significance of product attributes in shaping consumers' perceptions and subsequently guiding their online purchase intentions has been underscored by several researchers. Kubicová et al. (2020) emphasised that the attributes of bakery products, such as freshness, flavour, and presentation, hold substantial sway over consumers' perceptions and preferences in the online context. These attributes, when effectively conveyed through online platforms, can enhance consumers' confidence and willingness to make purchases.

Gallegos-Hernández et al. (2018) further explored the role of product attributes in influencing consumer behaviour within the online bakery product market. Their findings indicated that attributes like ingredient quality, nutritional information, and aesthetic appeal significantly impact consumers' perceptions of product value and subsequently influence their purchase intentions. Moreover, the authors highlighted the

importance of clear and accurate product descriptions and imagery in shaping consumer expectations, thus influencing their decision-making process.

Recent studies continue to underscore the multifaceted nature of online purchase intention for bakery products. Peña-García et al. (2020) indicated that consumers' perceptions of product quality and trust in online transactions play pivotal roles in determining their willingness to engage in online purchases. The authors further emphasised that personalised recommendations, secure payment gateways, and transparent return policies positively influence consumers' perceptions of online shopping convenience and, consequently, their purchase intentions.

Tran (2021) delved into the impact of social interactions on consumers' online purchase intentions for bakery products. The study found that social media platforms and online reviews provide consumers with valuable insights into product quality and popularity. Positive social interactions and endorsements contribute to building consumer trust and confidence in online bakery product purchases.

To sum up, online consumer purchase intention remains a dynamic field of research, especially concerning bakery products. The attributes of bakery products, their sensory appeal, and the role of digital cues in shaping consumer perceptions continue to be essential determinants of purchase intention. Understanding and effectively addressing these factors can enable businesses to optimise their online marketing strategies and enhance their sales potential in the increasingly competitive online marketplace. However, while existing literature provides valuable insights, there remains a gap in understanding the underlying mechanisms and theoretical frameworks guiding online consumer purchase intention, particularly concerning bakery products. This review aims to bridge this gap by critically analysing existing theories and identifying avenues for further research.

2.2 Product Attributes

From the point of view of entrepreneurs, marketers, and consumers, product attributes are among the significant parts to be concerned about in marketing efforts (Akpoymare et al., 2013; Kubicová et al., 2020). Product attributes have become the basis for evaluating a product by consumers, and they are conjectured to influence the consumers' perception of a particular product (Akpoymare et al., 2013; Gallegos-Hernández et al., 2018). Hoffmann et al. (2020) mentioned that the elements or features related to the product are known as product attributes, which can be divided into intrinsic and extrinsic.

2.2.1 Intrinsic Product Attributes

Intrinsic attributes, inherent to the product itself, significantly influence consumer perceptions and preferences. Scholars have identified taste, smell, texture, colour, appearance, and quality as key intrinsic attributes in the context of food products (Bolha et al., 2020).

Theoretical frameworks such as sensory marketing and the theory of reasoned action provide valuable insights into how intrinsic attributes impact consumer behaviour. Sensory marketing posits that sensory stimuli evoke emotional responses, influencing consumer perceptions and purchase decisions (Jürkenbeck & Spiller, 2021). Meanwhile, the theory of reasoned action suggests that attitudes toward a behaviour, influenced by perceived attributes, shape behavioural intentions (Ajzen & Fishbein, 1980).

Despite the theoretical underpinnings, empirical studies exploring the nuanced relationships between intrinsic attributes and online consumer purchase intention, particularly in the bakery sector, remain limited. Therefore, further research is warranted to elucidate these relationships with the following hypothesis:

H₁: Intrinsic product attributes positively influence online consumers' purchase intention for bakery products.

2.2.1.1 Perceived Taste

In terms of online food products, consumers rely on visual cues, such as images and videos, to make assumptions about the taste of the products (Huang et al., 2021; Wee et al., 2014). Nonetheless, Wang et al. (2020) concurred that perceptions can sometimes be inaccurate, including taste perceptions. Therefore, when it comes to online food products, providing detailed product information and descriptions is crucial as consumers lack the ability to physically experience the taste, smell, or touch. This is particularly important because positively perceived taste significantly boosts consumers' confidence and ultimately increases their intention to purchase (Violante et al., 2019; Watanabe et al., 2020).

H_{1a}: Perceived taste positively influences online consumers' purchase intention for bakery products.

2.2.1.2 Perceived Quality

Perceived quality refers to consumers' perception of a product attribute and their expectations regarding its quality (Solin & Curry, 2023). Evaluating product quality is crucial particularly in online purchases, where consumers rely on information entrepreneurs and marketers provide to judge the product's quality and determine their purchase intention (Mandelkar, 2018; Wee et al., 2014; Rosillo-Díaz et al., 2020). However, Wang et al. (2020) mentioned that the lack of information and consumers' perceptions may differ from the actual quality. Hence, providing reliable and sufficient product descriptions, including ingredient information, could influence consumers' perception of the food product's quality (Gallegos-Hernández et al., 2018).

H_{1b}: Perceived quality positively influences online consumers' purchase intention for bakery products.

2.2.2 Extrinsic Product Attributes

Extrinsic attributes, including price, brand, packaging, and advertising, shape consumer perceptions of product value and influence purchase intentions (Bolha et al., 2020). These attributes serve as cues signalling product quality, reliability, and prestige (Chernev, 2012; Idemen & Elmadag, 2024).

Theoretical frameworks such as signalling theory and cognitive appraisal theory offer insights into how extrinsic attributes influence consumer behaviour. Signalling theory posits that extrinsic cues serve as signals of intrinsic product quality, influencing consumer perceptions (Erevelles et al., 2001). Cognitive appraisal theory suggests that consumers evaluate extrinsic cues based on their relevance and personal significance (Ding & Tseng, 2015).

Despite the theoretical foundation, empirical research examining the impact of extrinsic attributes on online consumer purchase intention for bakery products is scarce. Therefore, future studies should aim to elucidate these relationships and contribute to theoretical advancements in the field. Hypothesis 2 was developed based on the presumption that extrinsic product attributes positively influence online consumers' purchase intention for bakery products:

H₂: Extrinsic product attributes positively influence online consumers' purchase intention for bakery products.

2.2.2.1 Price

In marketing strategy, price plays a significant role in attracting consumers to make purchases (Mandelkar, 2018; Jadhav & Chavan, 2019). Consumers generally base their price comparison on the cost and the expected benefits in terms of service and quality, aiming for a higher perceived value that justifies their payment (Mandelkar, 2018; Gallegos-Hernández et al., 2018). When the price offered is high, consumers' expectations of the product itself are higher. Besides, several researchers also pointed out that if the price is too high or too low, it may influence consumers' intention to purchase (Gallegos-Hernández et al., 2018). In other words, it is important to note that price plays an important role in affecting consumers' purchase intentions.

H_{2a}: Price positively influences online consumers' purchase intention for bakery products.

2.2.2.2 Online Advertising

The advancement of technology nowadays has made online advertising a popular tool many businesses and marketers use to promote their products and services as it is an affordable and convenient tool (Chamboko-Mpotaringa & Tichaawa, 2021; Jerome et al., 2010; Kapoor & Kapoor, 2021). As a result, it plays an essential role in attracting consumers' attention to the product or services offered. Belanche et al. (2020), Jerome et al. (2010), and Munsch (2021) stated that the effectiveness of online advertising increases when it can instantly capture the consumers' attention. Incorporating attractive features into online advertising may help increase its effectiveness, thus triggering the consumers' purchase intention. For instance, some consumers' purchase intentions may be triggered by the images, videos, and content or product descriptions provided, which may persuade them to purchase (Jerome et al., 2010). Therefore, it is important to ensure that online advertising is attractive and appeals to consumers, which is believed to increase their purchase intention.

H_{2b}: Online advertising positively influences online consumers' purchase intention for bakery products.

3.0 METHODOLOGY

3.1 Research Design

It is worth mentioning that three research questions were explored in this study. First, what is the influence of intrinsic product attributes towards online consumers' purchase intention for bakery products? Next, what is the influence of extrinsic product attributes towards online consumers' purchase intention for bakery products? And third, which of the product attributes influences the most on online consumers' purchase intention of bakery products? Therefore, with the help of a proper research design, those questions are able to be answered accordingly.

With regard to this research, the appropriate design falls into a quantitative approach, using data collection, analysis, and interpretation of numerical data. The study can be categorised as causal research, aiming to determine cause-and-effect relationships between variables. It adopts a cross-sectional time horizon, focusing on a specific period. The study is conducted in a contrived setting, enabling efficient data collection. The unit of analysis comprises individual Malaysian online bakery product consumers.

3.2 Population and Sample

This study focuses on the Malaysian online bakery product consumer population, sampled using convenience sampling through online survey questionnaires, where individuals who are accessible to the researcher are included. Determining an appropriate minimum sample size is challenging due to the unknown population size of online bakery product consumers. In terms of the sample size, Roscoe (1975) noted that sample sizes larger than 30 and smaller than 500 are appropriate for most research. Tabachnick and Fidell (2019) recommended a sample size of at least 75, where $N > 50 + 8m$ (m is the number of predictor variables), while Babyak (2004) suggested a minimum sample size of 10–15 observations per predictor variable. It is worth mentioning that the researchers estimated the sample size by calculating using this formula $n = Z^2Pq/e^2$:

n: sample size

Z: the value on Z table at 95% confidence interval level=1.96

e: sampling error at 5%

P: maximum variability of the population at 50%

q: 1-p

By using the above-mentioned formula, the estimated sample size was about 384 respondents with a 5% margin of error and 95% confidence interval. In the final data collection process, 398 responses were successfully obtained. This total number of collected responses fulfilled all the criteria and recommendations from the previous scholars.

3.3 Instrumentation

In constructing the appropriate instrument, some issues were first considered. The main consideration emphasised to whom the questions were to be asked. Since the target respondents were Malaysian online bakery consumers, the language and wording used in the instruments were accustomed to appropriately addressing the level of understanding. It is important to note that the national language of Malaysia is Malay, while English is the alternative language. Therefore, in the interest of avoiding misunderstanding and misinterpretation while answering those questionnaires, both languages were included in the questionnaires.

While planning the style and type of questionnaire format, it was decided to use close-ended questions. The close-ended questions using a summated rating scale, commonly known as the interval scale, were selected for this study as it is more reliable and can provide a greater volume of data than any other scales, particularly when measuring people's attitudes and opinions of different aspects (Cooper et al., 2012). According to Sekaran and Bougie (2010), this scale is based on the assumption that each item has equal value or importance in terms of reflecting the inclination towards that question.

In terms of the number of scale points used, most of the researchers argued that a 5- or 7-point scale is the most appropriate when measuring attitudes, behaviour, or opinions of people (Cooper et al., 2012; Sekaran & Bougie, 2010). The decision depends on how finely the researcher wants to measure the intensity of the attitude in question and the population's capacity to make fine distinctions between the numbers (Sekaran & Bougie, 2010). Moser and Kalton (1971) argued that the respondents are unable to place themselves if the scale is divided too finely, and if the scale is divided too coarsely, the scale will not differentiate their

opinions adequately. From those arguments, the researcher, therefore, decided to use an identical five-point scale for each section in the questionnaire as it allows the respondents to better express themselves and, at the same time, increases the response rate and the quality of data obtained (Babakus & Mangold, 1992). Most researchers contended that a 5- or 7-point scale is the most appropriate when measuring people's attitudes, behaviour, or opinions (Cooper et al., 2012; Sekaran & Bougie, 2010).

It is worth noting that the instrument used to collect data for this study is a questionnaire adapted from Mandelkar (2018). The questionnaires have also been divided into four sections, which are as follows:

Section A

Demographic. In this section, the questions were about the basic information of the respondents, such as age, gender, income, and marital status. The questions in this section were multiple choices, with a nominal and ordinal scale in which the respondents would be able to choose only one answer.

Section B

Question for intrinsic factors of product attributes towards bakery products. In this section, eight items that are related to the intrinsic factors of product attributes, including perceived taste and quality, were included. The scale used is the interval scale.

Section C

Question for extrinsic attributes towards bakery products. Eight items in this section are related to the extrinsic factors of product attributes, including price and online advertising. The scale used is the interval scale.

Section D

Online consumers' purchase intention. In this section, eight items are included regarding what conditions consumers will intend to purchase online bakery products. The scale used is the interval scale.

3.4 Research Ethic

Ensuring the ethical conduct of research is paramount to safeguarding the rights and well-being of both researchers and participants. In adherence to ethical principles, the researcher obtained formal ethics approval for the survey questionnaire from the Research Ethics Committee at Universiti Teknologi MARA. The approval reference for this study is BEREC/9/2023 (UG/MR/230), indicating compliance with established ethical guidelines and regulations.

4.0 FINDINGS

4.1 Reliability Coefficient

The reliability coefficients for each questionnaire section are presented in Table 1.

Table 1: Reliability Coefficients for Each Section of The Questionnaire

Questionnaire	No. of Items	Cronbach's Alpha
Section B: Intrinsic Product Attributes	8	.721
Section C: Extrinsic Product Attributes	7	.813
Section D: Online Consumers' Purchase Intention	7	.802

Note: No. of respondents = 398

Based on Table 1, Extrinsic Product Attributes have the highest coefficient alpha value, which is .813, followed by Online Consumers' Purchase Intention, which has a .802 coefficient alpha value. For the Intrinsic Product Attributes, the coefficient alpha value is slightly lower than the other two sections, which is .721.

4.2 Respondents' Demographic Profile

The study found that the majority of respondents were female (68.6%) and in the age group of 20-26 years old (60.8%). Most participants had a monthly income below RM 2000 (56.5%) and were single (67.6%). These findings suggest that female youths in the 20-36 age group were more interested in purchasing bakery products online regardless of income.

4.3 Simple Linear Regression Analysis

This section of analysis was intended to respond to Research Objectives 1 and 2.

4.3.1 The influence of intrinsic product attributes towards online consumers' purchase intention for bakery products

The output of the analysis is outlined in Table 2.

Table 2: Result of Simple Linear Regression of Intrinsic Product Attributes on Online Consumers' Purchase Intention for Bakery Products

	B	SE B	β
(Constant)	1.739	.148	
Intrinsic Product Attributes	.592	.039	.609***

Note: $R^2 = .371$, *** $p < .001$.

4.3.2 The influence of extrinsic product attributes towards online consumers' purchase intention for bakery products

The output of the analysis is summarised in Table 3.

Table 3: Result of Simple Linear Regression of Extrinsic Product Attributes on Online Consumers' Purchase Intention for Bakery Products

	B	SE B	β
(Constant)	1.134	.133	
Extrinsic Product Attributes	.716	.033	.735***

Note: $R^2 = .541$, *** $p < .001$.

4.4 Multiple Linear Regression Analysis

This section of analysis was intended to respond to Research Objective 3. Table 4 illustrates the output of the analysis.

Table 4: Result of Multiple Linear Regression of Overall Product Attributes on Online Consumers' Purchase Intention for Bakery Products

	B	SE B	β
(Constant)	.824	.141	
Perceived Taste	.101	.036	.120**
Perceived Quality	.138	.039	.157***
Price	.281	.037	.335***
Online Advertising	.284	.037	.322***

Note: $R^2 = .577$, ** $p < .005$, *** $p < .001$.

4.5 Conclusion of Regression Analysis (Simple and Multiple Linear)

All hypothesised paths in the model were significant ($p < .001$ and $p < .005$), supporting the relationships between independent and dependent variables. Perceived taste, perceived quality, price, and online advertising collectively explained 57.7% of online consumers' purchasing intention variation. Notably, price had the highest impact among the independent variables.

5.0 DISCUSSION AND CONCLUSION

The findings of this study offer valuable insights into the factors influencing online consumers' purchase intention for bakery products, as framed within the Theory of Planned Behavior (TPB). The results demonstrate that both intrinsic and extrinsic product attributes significantly impact consumers' purchasing decisions in the online bakery sector.

Perceived taste and perceived quality, representing intrinsic attributes, exhibit varying degrees of influence on purchase intention. While perceived taste emerges as the weakest predictor in this study, its role remains crucial, especially considering the subjective nature of taste perception. Consumers often rely on detailed product descriptions to bridge the gap between virtual and sensory experiences, emphasising the importance of accurate and appealing product presentations on online platforms. In contrast, perceived quality emerges as a strong determinant of purchase intention, reflecting consumers' propensity to assess product value based on perceived quality indicators, such as ingredient information and product descriptions. Initially, Fandos and Flavián (2006) stated that intrinsic factors of product attributes in terms of taste and quality clearly have an impact and significantly influence the consumers' purchase intention. This finding underscores the significance of transparent communication regarding product attributes to instil consumer confidence and foster positive purchase intentions.

Among the extrinsic attributes, price emerges as the most influential factor shaping online consumers' purchase intention. This result aligns with the growing consumer sensitivity to pricing strategies in the digital marketplace, where price comparison and perceived value play pivotal roles in decision-making processes. Effective pricing strategies that balance affordability with perceived product value are essential for stimulating purchase intentions among online consumers. Furthermore, online advertising emerges as a potent tool for influencing purchase intention, particularly when tailored to consumers' preferences and needs. The convenience offered by online advertising, coupled with visually appealing and informative content, enhances consumers' engagement and propensity to make purchase decisions. Customised advertising strategies that resonate with target audiences are crucial for maximising the effectiveness of online marketing efforts in the bakery industry. These findings corroborated well with previous scholars, such as Bolha et al. (2020), who postulated that consumers' purchase intentions are not only affected by intrinsic factors of the product attributes itself but also can be positively influenced by extrinsic information about the product, such as price and online advertising.

In conclusion, the study findings highlight the multifaceted nature of online consumers' purchase intention, influenced by a combination of intrinsic and extrinsic product attributes. By leveraging insights from the TPB framework, marketers and entrepreneurs in the bakery industry can refine their marketing strategies to align with consumers' preferences and enhance their competitiveness in the digital marketplace.

5.1 Academic Implications

From an academic perspective, the outcome of this study contributed to new affirmation and also the summation of the existing online consumers' purchase intention literature. This study is expected to be beneficial for the bakery industry in Malaysia, as the results provide useful information to improve their marketing strategies and stay relevant in this current marketplace. It is also believed that by testing the hypotheses and relating the results of this study to the existing literature, those benefits are able to be achieved. Therefore, the findings of this study were beneficial for academic aspects that are applicable to the food service industry.

5.2 Practical Implications

From a practical viewpoint, understanding the possible factors that affect online consumers' purchase intention is crucial to entrepreneurs and marketers. This is because it is quite challenging for them to attract and maintain their consumers in this competitive marketplace nowadays. Besides that, the outcomes of this study were helpful for the entrepreneurs and marketers to sustain in the market to compete with each other, indirectly increasing their sales performances. In addition, by having the findings, improvements also could be made by both entrepreneurs and marketers on their marketing strategies to increase their effectiveness in operations. As a result, current consumers' needs and preferences could be fulfilled based on understanding the factors that influence their online purchasing intention.

5.3 Limitations and Suggestions for Future Studies

The scope of this study was only limited to the Malaysia area, with 398 online bakery product consumers as the sample size. This research could be extended by increasing the targeted consumer size to gain more reliable results. Besides, there is also a limitation regarding the methodological approach used. It is undoubted that by using the quantitative approach, the evaluation of data could symbolise the relationship between the relevant variables but still does not completely answer the problem or issues in a wider context. Therefore, the result is believed to be more holistic and comprehensive by implementing qualitative or mixed methods.

ACKNOWLEDGEMENTS

The researchers extend sincere gratitude to Universiti Teknologi MARA Cawangan Pulau Pinang for the invaluable support, both financially and motivationally, which greatly contributed to the success of this research. Additionally, appreciation is extended to all faculty members, staff, and research colleagues for their guidance and assistance throughout the study. The researchers also acknowledge the contributions of the study participants, whose cooperation and feedback were essential to the research outcomes.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organisational behavior and human decision processes*, 50(2), 179-211.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Akar, E., & Nasir, S. (2015). The effects of intrinsic and extrinsic attributes of products on consumers' purchase intention: Empirical evidence from Pakistan. *Pakistan Journal of Commerce and Social Sciences*, 9(2), 389-404.
- Akpoyomare, O. B., Adeosun, L. P. K., & Ganiyu, R. A. (2013). The Influence of Product Attributes on Consumer Purchase Decision in the Nigerian Food and Beverages Industry: A Study of Lagos Metropolis. *American Journal of Business and Management*, 2(1), 196.
- Babakus, E., & Mangold, W. G. (1992). Adapting the SERVQUAL scale to hospital services: an empirical investigation. *Health services research*, 26(6), 767.
- Babyak, M. A. (2004). What you see may not be what you get: a brief, nontechnical introduction to overfitting in regression-type models. *Psychosomatic medicine*, 66(3), 411-421.
- Bagga, T., & Bhatt, M. (2013). A Study of Intrinsic and Extrinsic Factors Influencing Consumer Buying Behavior Online. *Asia-Pacific Journal of Management Research and Innovation*, 9(1), 77-90.
- Bakery Products Market Size, Analysis & Growth Report*. (2021). Fortunebusinessinsights.com. <https://www.fortunebusinessinsights.com/industry-reports/bakery-products-market-101472>
- Belanche, D., Flavián, C., & Pérez-Rueda, A. (2020). Consumer empowerment in interactive advertising and eWOM consequences: The PITRE model. *Journal of Marketing Communications*, 26(1), 1-20.
- Bolha, A., Blaznik, U., & Korošec, M. (2020). Influence of intrinsic and extrinsic food attributes on consumers' acceptance of reformulated food products: A systematic review. *Slovenian Journal of Public Health*, 60(1), 72-78.
- Chamboko-Mpotaringa, M., & Tichaawa, T. M. (2021). Tourism digital marketing tools and views on future trends: A systematic review of literature. *African Journal of Hospitality, Tourism and Leisure*, 10(2), 712-726.
- Chernev, A. (2012). Product assortment and consumer choice: An interdisciplinary review. *Foundations and Trends in Marketing*, 6(1), 1-61.
- Cooper, A., Reimann, R., & Cronin, D. (2012). *About face 3: the essentials of interaction design*: Wiley.
- Davis, F. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13, 319-340.
- Ding, C. G., & Tseng, T. H. (2015). On the relationships among brand experience, hedonic emotions, and brand equity. *European Journal of Marketing*, 49(7/8), 994-1015.
- Erevelles, S., Roy, A., & Yip, L. S. (2001). The universality of the signal theory for products and services. *Journal of Business Research*, 52(2), 175-187.
- Erlangga, D. A., Wahyudi, A., & Utomo, D. W. (2021). Consumers' preferences and purchase intentions toward organic bakery products: A case study in Jakarta, Indonesia. *Journal of Ethnic Foods*, 8, 63-71.
- Etumnu, C., & Widmar, N. (2020). Grocery Shopping in the Digital Era. Choices. *The Magazine of Food, Farm, and Resources Issues*, 35.
- Fahreza, R., & Syafrizal. (2021). The effect of product quality, price perception, and brand awareness on the purchasing decision of gluten-free cake. *International Journal of Innovative Science and Research Technology*, 6(3), 208-214.
- Fandos, C., & Flavián, C. (2006). Intrinsic and extrinsic quality attributes, loyalty and buying intention: an analysis for a PDO product. *British Food Journal*, 108(8), 646-662.
- Gallegos-Hernández, B. P., Pérez-Villarreal, H. H., Barahona, I., & Mayett-Moreno, Y. (2018). Analysis of the intrinsic signals, extrinsic signals and the expected quality of the organic tortilla to assess its purchasing intentions. *Cogent Business & Management*, 5(1), 1548548.
- Hoffmann, N., Symmank, C., Mai, R., Stok, F., Rohm, H., & Hoffmann, S. (2020). The influence of extrinsic product attributes on consumers' food decisions: review and network analysis of the marketing literature. *Journal of Marketing Management*, 36, 888 - 915.

- Hood, N., Urquhart, R., Newing, A., & Heppenstall, A. (2020). Sociodemographic and spatial disaggregation of e-commerce channel use in the grocery market in Great Britain. *Journal of Retailing and Consumer Services*, 55, 102076.
- Huang, J., Peng, Y., & Wan, X. (2021). The color-flavor incongruency effect in visual search for food labels: An eye-tracking study. *Food Quality and Preference*, 88, 104078.
- Idemen, E., & Elmadag, A. B. (2024). Beyond looks: How designer cues win over customers through social value, self-expression, and design involvement. *Journal of Global Scholars of Marketing Science*, 1-21.
- Jadhav, H., & Chavan, D. P. (2019). An Analytical Study on Consumer Buying Behavior for Bakery Products. *International Journal of Trend in Scientific Research and Development, Special Issue (Special Issue-FIIIPM2019)*, 129–133.
- Jerome, T., Shan, L. W., & Khong, K. W. (2010). Online Advertising: A Study on Malaysian Consumers. *SSRN Electronic Journal*.
- Jürkenbeck, K., & Spiller, A. (2021). Importance of sensory quality signals in consumers' food choice. *Food Quality and Preference*, 90, 104155.
- Kapoor, R., & Kapoor, K. (2021). The transition from traditional to digital marketing: a study of the evolution of e-marketing in the Indian hotel industry. *Worldwide Hospitality and Tourism Themes*, 13(2), 199-213.
- Karim, A. R., Jalal, S., Bhuiyan, M. A. R., Uddin, M. B., & Uddin, S. (2021). Determinants of consumers' buying behavior of fresh agricultural products: Evidence from Bangladesh. *Journal of Food Products Marketing*, 27(1), 39-55.
- Krishen, A. S., Dwivedi, Y. K., Bindu, N., & Kumar, K. S. (2021). A broad overview of interactive digital marketing: A bibliometric network analysis. *Journal of Business Research*, 131, 183-195.
- Kubicová, L., Predanociová, K., Kádeková, Z., & Košičiarová, I. (2020). Slovak Consumers' Perception of Bakery Products and Their Offer in Retail. *Potravinárstvo*, 14(1).
- Lombart, C., Millan, E., Normand, J. M., Verhulst, A., Labbé-Pinlon, B., & Moreau, G. (2020). Effects of physical, non-immersive virtual, and immersive virtual store environments on consumers' perceptions and purchase behavior. *Computers in Human Behavior*, 110, 106374.
- Mandelkar, P.M.B.A., (2018). *Intrinsic and extrinsic factors affecting consumer purchase intention for ready-to-eat food in Bangkok and its vicinity* (Master Thesis, Graduate School, Bangkok University).
- Mardhatillah, A., Fattah, A., Kartajaya, R., & Kirchner, A. (2018). Determinants of consumer purchase intention in online shopping: A literature review. *Journal of Physics: Conference Series*, 1028(1), 012078.
- Morgan, N. A. (2011). Marketing and business performance. *Journal of the Academy of Marketing Science*, 40(1), 102–119.
- Moser, C. A., & Kalton, G. (1971). Survey methods in social investigation. *Survey methods in social investigation*. (2nd Edition).
- Munsch, A. (2021). Millennial and generation Z digital marketing communication and advertising effectiveness: A qualitative exploration. *Journal of Global Scholars of Marketing Science*, 31(1), 10-29.
- Pappas, I. (2020). Digital marketing strategies and tactics in the era of machine learning and artificial intelligence. *Journal of Innovation & Knowledge*, 5(2), 123-125.
- Peña-García, N., Gil-Saura, I., Rodríguez-Orejuela, A., & Siqueira-Junior, J. R. (2020). Purchase intention and purchase behavior online: A cross-cultural approach. *Heliyon*, 6(6), e04284.
- Petty, R. E., Cacioppo, J. T. (1986) The Elaboration Likelihood Model of persuasion. In L. Berkowitz, (ed.), *Advances in Experimental Social Psychology*, 19, 123-205.
- Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences*. Holt, Rinehart and Winston.
- Rosillo-Díaz, E., Blanco-Encomienda, F. J., & Crespo-Almendros, E. (2020). A cross-cultural analysis of perceived product quality, perceived risk and purchase intention in e-commerce platforms. *Journal of Enterprise Information Management*, 33(1), 139-160.
- Salehi, M., Mirzaei, H., Aghaei, M., & Abyari, M. (2012). Dissimilarity of E-Marketing VS Traditional Marketing. *International Journal of Academic Research in Business and Social Sciences*. 2(1), 384-389.

- Sekaran, U., & Bougie, R. (2010). *Research Methods for Business: A Skill Building Approach*: John Wiley & Sons.
- Sohn, J. W., & Kim, J. K. (2020). Factors that influence purchase intentions in social commerce. *Technology in Society*, 63, 101365.
- Solin, A., & Curry, A. (2023). Perceived quality: in search of a definition. *The TQM Journal*, 35(3), 778-795.
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using Multivariate Statistics* (7th ed.). Pearson Education.
- Tran, L. T. T. (2021). Managing the effectiveness of e-commerce platforms in a pandemic. *Journal of Retailing and Consumer Services*, 58, 102287.
- Violante, M. G., Vezzetti, E., & Piazzolla, P. (2019). How to design a virtual reality experience that impacts the consumer engagement: the case of the virtual supermarket. *International Journal on Interactive Design and Manufacturing (IJIDeM)*, 13, 243-262.
- Wang, J., Tao, J., & Chu, M. (2020). Behind the label: Chinese consumers' trust in food certification and the effect of perceived quality on purchase intention. *Food Control*, 108, 106825.
- Watanabe, E., Alfinito, S., Curvelo, I., & Hamza, K. (2020). Perceived value, trust and purchase intention of organic food: a study with Brazilian consumers. *British Food Journal*, 122, 1070-1184.
- Wee, C. S., Ariff, M. S. M, Zakuan, N., & Tajudin, M. N. M. (2014). Consumers Perception, Purchase Intention and Actual Purchase Behavior of Organic Food Products. *Review of Integrative Business and Business and Economics Research (Riber)*, 3(2), 378-397.