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Psychology-Based Sensory Marketing Cues and Purchase Intention Among Generation Z Consumers: Evidence from a Philippine Heritage Bakery

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Abstract

This study examined the relationship between psychology-based sensory marketing cues and purchase intention among Generation Z consumers in the context of a Philippine heritage bakery. A quantitative descriptive-correlational research design was employed using a researcher-developed questionnaire administered online through purposive sampling. Of the 84 initial responses, 73 met the age and prior-encounter eligibility criteria. Exposure-sensitive analyses included 70 respondents for visual packaging appeal, product presentation and display, and perceived freshness cues, and 60 respondents for aroma or olfactory appeal. All four sensory dimensions received favorable assessments, with aroma obtaining the highest mean ($M = 4.120$), followed by product presentation and display ($M = 3.894$), perceived freshness cues ($M = 3.883$), and visual packaging appeal ($M = 3.743$). Overall purchase intention was favorable ($M = 3.849$). All four sensory dimensions demonstrated significant positive correlations with purchase intention ($p < .001$), with product presentation and display showing the strongest observed association ($r = .580$), followed by aroma ($r = .550$), visual packaging ($r = .520$), and perceived freshness ($r = .519$). Packaging was also the most frequently identified improvement priority (34.2%). The findings support an integrated sensory marketing strategy emphasizing packaging refinement, product presentation, authentic bakery aroma, credible freshness cues, and heritage preservation. Given the cross-sectional correlational design, these relationships do not establish causality, and proposed interventions require further evaluation using actual purchasing behavior.

Keywords: *consumer psychology; sensory marketing; purchase intention; Generation Z; heritage bakery; consumer behavior*

1. Introduction

The food industry operates in an increasingly competitive environment in which product quality alone may not fully explain consumer preferences and purchasing decisions. Comparable competitive pressures have been documented among food and beverage enterprises in Batangas, where product similarity and limited brand distinction can weaken market positioning (J. H. M. Mendoza & Magnaye, 2026). Consumers encounter food products through multiple sensory and informational channels, including packaging, visual presentation, promotional materials, store environments, and direct product experiences. These encounters contribute to how consumers perceive product attractiveness, evaluate quality, develop preferences, and form purchasing intentions. Consequently, understanding the psychological processes underlying consumer responses has become important for food enterprises seeking to maintain relevance in changing markets.

Consumer psychology provides a theoretical foundation for examining how individuals interpret marketing stimuli and translate their perceptions into behavioral intentions. Psychological processes such as attention, perception, emotion, motivation, and memory contribute to consumer evaluations, particularly when purchasing decisions involve products with strong sensory characteristics. Sensory marketing applies these principles by examining how stimuli associated with sight, smell, taste, touch, and sound contribute to consumer experiences and purchase-related responses. Vermeir and Roose (2020) emphasized that visual design characteristics influence food-related evaluations through perceptual, cognitive, and affective processes, while also demonstrating that consumer responses depend on the characteristics of the product, individual, and purchasing context.

Within bakery enterprises, sensory marketing is particularly relevant because consumers frequently evaluate products through cues encountered before purchase. Visual packaging appeal communicates product identity, attractiveness, and expected quality through design elements such as color, typography, imagery, and product visibility. Su and Wang (2024) demonstrated that food packaging color and product characteristics can influence purchase intention through perceptual processes. Product presentation and display constitute another important dimension, encompassing product arrangement, visibility, organization, accessibility, and the overall appearance of the selling environment. Bialkova et al. (2020) established that product characteristics, placement, and shopping goals contribute to variations in consumer attention and choice.

Beyond visual stimuli, olfactory appeal and perceived freshness contribute to the psychological evaluation of bakery products. The aroma of freshly baked bread and pastries may evoke associations with warmth, taste, familiarity, and product quality. However, the relationship between food-related odors and consumer responses is influenced by contextual factors, including odor congruence, exposure, and individual differences (Zhang & Spence, 2023). Similarly, perceived freshness represents a consumer judgment that may develop from product appearance, packaging, cleanliness, and visible product condition rather than direct knowledge of preparation time. Gong et al. (2025) demonstrated that visual design characteristics can influence perceived food freshness and subsequent purchase-related responses. These findings suggest that sensory cues operate as sources of psychological information rather than as automatic determinants of purchasing behavior.

The relevance of these processes becomes particularly important when examining Generation Z consumers. Having developed within environments characterized by digital communication, visual content, and extensive product choices, members of this generation encounter marketing information through numerous channels. Research involving Generation Z college students has documented substantial engagement with social media, particularly through passive consumption activities such as viewing and scrolling (Dancel et al., 2026). Nevertheless, Generation Z consumers should not be regarded as a homogeneous market segment. Their purchasing intentions may vary according to individual preferences, economic considerations, previous experiences, cultural influences, and familiarity with particular products or enterprises.

For heritage bakery enterprises, understanding these psychological considerations presents opportunities to connect traditional products with contemporary consumer expectations. Established bakeries often possess distinctive historical identities, traditional recipes, recognizable products, and accumulated customer familiarity. These characteristics may contribute to perceptions of authenticity and cultural continuity. Case evidence from Philippine legacy retail similarly indicates that long-established enterprises may retain relevance through brand salience while adapting to changing consumer expectations and digital competition (A. G. Atento & Atento, 2026b). Chen and Lin (2024), in their examination of Generation Z consumers of traditional Hong Kong food products, identified the relevance of nostalgic emotion and authenticity to purchase intention. Their findings suggest that traditional food enterprises may retain their cultural identity while adapting how products are presented to younger consumer segments.

A participating heritage bakery enterprise in Batangas Province, Philippines, provided the context for examining these relationships. Its traditional bakery identity offers an opportunity to investigate how Generation Z consumers evaluate sensory marketing cues and how these evaluations relate to their willingness to purchase traditional bakery products. Rather than assuming that existing marketing practices are ineffective or that younger consumers are uninterested in heritage products, the investigation focuses on identifying the sensory dimensions associated with favorable consumer responses.

Although previous studies have examined packaging design, product presentation, olfactory experiences, freshness perceptions, and purchase intention across different food and retail contexts, the relative associations of these dimensions within a particular Philippine heritage bakery and its Generation Z consumer segment remain contextually important to establish. Findings from other industries, consumer populations, or national settings cannot automatically be generalized to traditional bakery enterprises. An integrated examination of visual packaging appeal, product presentation and display, aroma or olfactory appeal, and perceived freshness cues therefore provides an empirical basis for identifying potentially relevant marketing priorities within this setting.

Purchase intention serves as the principal behavioral outcome of the investigation. It represents consumers' reported willingness or likelihood to consider, choose, or purchase bakery products, rather than evidence of completed transactions. Examining its statistical relationships with sensory marketing dimensions may clarify which aspects of the consumer experience are most closely associated with favorable purchasing intentions. Such evidence can inform a psychology-based sensory marketing strategy that seeks to strengthen consumer engagement while preserving the enterprise's traditional identity. Because the research adopts a cross-sectional correlational design, the observed relationships are interpreted as associations rather than causal effects.

Objectives of the Study

This study aimed to examine the relationship between psychology-based sensory marketing cues and purchase intention among Generation Z consumers toward traditional bakery products, using a Philippine heritage bakery as the research context. Specifically, it sought to (1) determine consumers' assessments of visual packaging appeal, product presentation and display, aroma or olfactory appeal, and perceived freshness cues; (2) determine the level of purchase intention toward traditional bakery products; (3) examine whether a statistically significant relationship exists between each sensory marketing dimension and purchase intention; (4) identify the dimension demonstrating the strongest observed association with purchase intention; and (5) propose a psychology-based sensory marketing strategy based on the study findings.

2. Review of Related Literature

2.1 Consumer Psychology and Sensory Marketing

Consumer psychology examines the cognitive, emotional, perceptual, and motivational processes through which individuals evaluate products and develop purchasing preferences. In food marketing, these processes are particularly relevant because consumers frequently encounter sensory information before making purchasing decisions. Product appearance, packaging, aroma, presentation, and perceived quality provide stimuli that consumers interpret when forming judgments about product attractiveness, desirability, and suitability.

Sensory marketing applies psychological principles to understand how stimuli associated with the human senses contribute to consumer experiences and purchase-related responses. Vermeir and Roose (2020), in their review of visual design cues affecting food choice, identified several psychological mechanisms through which visual characteristics influence consumer responses, including attention, affective and cognitive reactions, motivation, product perceptions, and attitudes. Their findings emphasized that responses to visual stimuli depend not only on product characteristics but also on consumer attributes and contextual conditions.

Similarly, Pandey and Tripathi (2025), through a comprehensive review of sensory marketing research, identified the importance of sensory cues in marketing communication and consumer experience. Their synthesis demonstrated the breadth of research examining visual, olfactory, and other sensory dimensions, highlighting the relevance of integrating sensory information when investigating consumer behavior.

These perspectives indicate that sensory marketing involves more than improving the physical attractiveness of products. Sensory cues function as information that consumers interpret through psychological processes shaped by their experiences, expectations, and environmental conditions. Consequently, the same sensory stimulus may generate different responses across consumers and purchasing contexts.

Within traditional bakery enterprises, sensory marketing provides a framework for understanding how packaging, product presentation, aroma, and freshness perceptions contribute to consumer evaluations. However, favorable sensory experiences should not automatically be assumed to produce actual purchases. Their relationships with behavioral intention require empirical examination within the relevant consumer population and product environment.

2.2 Visual Packaging Appeal and Product Presentation

Visual information represents an important component of consumer evaluation because product appearance is often encountered before direct consumption. Two related dimensions are particularly relevant to bakery marketing: visual packaging appeal and product presentation and display. Although both rely substantially on visual perception, they differ in their functions within the consumer experience.

Visual packaging appeal concerns the design and appearance of a product's container or wrapping, including its colors, typography, imagery, shape, labeling, and product visibility. Packaging communicates information about product identity, expected quality, attractiveness, and value. Su and Wang (2024) examined the interaction between food packaging color and food type in relation to purchase intention, identifying perceived fluency as an explanatory mechanism. Their findings suggest that packaging characteristics can influence consumer evaluations through the ease with which visual information is processed.

Retamosa et al. (2024), employing eye-tracking and questionnaire measures, demonstrated the relevance of packaging components to visual attention, product choice, and purchase intention. Wang et al. (2023) likewise identified packaging design characteristics, including color, shape, imagery, lines, and typography, as relevant considerations in consumer purchase decisions. More recently, Guo et al. (2026) reported that transparent-window packaging attracted visual attention more rapidly and sustained attention longer than product-image packaging in their experimental setting, with associated differences in expected quality and purchase intention.

Product presentation and display, meanwhile, concern how products are organized, positioned, and made accessible within a purchasing environment. Effective product presentation may facilitate attention and evaluation by allowing consumers to locate, observe, and compare available products.

Bialkova et al. (2020), using eye-tracking methods in laboratory and supermarket settings, demonstrated that consumer attention and product choice varied according to brand and product characteristics, shopping objectives, and placement. Cheng et al. (2022) also established that product presentation formats could influence purchase intention through perceived diagnosticity and mental imagery in an online retail context.

Taken together, these studies demonstrate the psychological relevance of visual packaging and product presentation while indicating that their functions should be examined separately. In a heritage bakery, packaging communicates information through individual product appearance, whereas display communicates information through the organization and presentation of products within the selling environment. Both may contribute to purchase intention, but their relative associations require context-specific investigation.

2.3 Olfactory Appeal and Perceived Freshness

Olfactory appeal represents another important dimension of sensory marketing, particularly for food products whose aromas contribute to expectations regarding taste, quality, warmth, and freshness. Within bakery environments, the smell of bread and pastries may provide sensory information before consumers directly examine or purchase the products.

Zhang and Spence (2023) reviewed research on orthonasal olfactory influences on consumer food behavior and emphasized that the effects of food-related odors depend on contextual conditions. Odor-food congruence, intensity, duration of exposure, and individual differences can influence consumer responses. These findings indicate that aroma should not be treated as a universally effective marketing stimulus. Its relevance depends on the relationship between the sensory experience, the product, and the consumer. In an experimental study with a Filipino sample, Bala and San Juan (2026) likewise found that a pleasant ambient scent was associated with higher trustworthiness ratings of unfamiliar faces, suggesting that olfactory context can contribute to evaluative judgments beyond the scent itself.

In traditional bakery settings, olfactory appeal may also possess symbolic significance. Familiar baking aromas can evoke associations with established preparation practices and previous food experiences. Such associations may contribute to consumer evaluations, although the relationship between aroma perception and purchase intention remains an empirical question rather than an assumed causal mechanism.

Perceived freshness constitutes a related but conceptually distinct dimension of sensory evaluation. It concerns consumers' judgments that food products appear recently prepared, suitable for consumption, and desirable. These judgments may develop through observable characteristics such as product appearance, packaging, cleanliness, presentation, and visible product condition.

Gong et al. (2025) demonstrated that visual design characteristics, including logo shape, can influence perceptions of food freshness and subsequent purchase-related responses. Ferreira et al. (2026), examining online fresh-food purchases, likewise emphasized the importance of freshness expectations and perceived freshness in consumer satisfaction and repurchase intention.

These studies indicate that perceived freshness is not necessarily equivalent to objectively measured product freshness. Consumers may form favorable or unfavorable judgments using available sensory information without knowing the precise preparation time or physical condition of a product.

For heritage bakery enterprises, olfactory appeal and perceived freshness may therefore operate as complementary components of product evaluation. Aroma provides information through the sense of smell, while perceived freshness reflects judgments informed by visible and contextual cues. Examining these dimensions separately allows their respective relationships with purchase intention to be assessed without assuming that either independently determines purchasing behavior.

2.4 Generation Z, Traditional Food, and Purchase Intention

Generation Z represents a relevant consumer population for examining sensory marketing because its members encounter product information through physical retail environments and digitally mediated communication. Their familiarity with visual content and online product presentations creates opportunities for food enterprises to communicate product identity and attractiveness through multiple channels. Research among Filipino college students has also documented moderate levels of habitual and validation-oriented social media use (Ruela et al., 2026).

Dancel et al. (2026), in a study involving Generation Z college students, documented substantial social media engagement, particularly through passive activities such as viewing and scrolling. Although this research did not directly examine sensory marketing, it provides contextual evidence concerning the communication environments in which younger consumers encounter information. Similarly, a survey of senior high school learners in CALABARZON reported a strong preference for social media marketing over traditional channels, alongside substantial daily social media exposure (Espelita et al., 2026).

Nevertheless, Generation Z should not be treated as a homogeneous consumer segment. Purchasing preferences may differ according to financial capacity, product familiarity, individual expectations, cultural background, and previous consumption experiences. Among Filipino university students aged 18 to 24, for instance, perceived influencer credibility did not significantly predict purchase intention, indicating that commonly assumed drivers of younger consumers' intentions may not hold uniformly across contexts (A. G. Atento & Atento, 2026a).

For traditional food enterprises, these differences are particularly relevant because consumer evaluations may reflect both contemporary expectations and established cultural associations. Chen and Lin (2024) examined Generation Z purchase intentions toward traditional Hong Kong tong sui and identified the relevance of nostalgic emotion and authenticity. Their findings indicate that traditional food products can retain appeal among younger consumers through psychological associations connected with cultural familiarity and authenticity.

Similarly, Hoang et al. (2024), in a multigenerational investigation of Vietnamese pho, identified the relevance of food quality, authenticity, and nostalgia-related marketing to restaurant choice. These findings suggest that modern consumer engagement and the preservation of traditional food identity need not represent incompatible strategic directions.

Purchase intention provides a behavioral construct through which these consumer evaluations may be examined. It refers to an individual's reported willingness or likelihood to consider or purchase a product and is distinct from completed purchasing behavior. Related research among college students has examined impulse purchasing tendencies in consumer environments characterized by digital payments and promotional exposure (Cervantes & San Juan, 2026). Prior studies have linked packaging characteristics, visual attention, and product presentation with purchase-related responses across different retail settings (Retamosa et al., 2024; Su & Wang, 2024).

Within heritage bakery enterprises, purchase intention may therefore be associated with contemporary sensory presentation alongside perceptions of authenticity and traditional product identity. Examining these relationships among Generation Z consumers offers an opportunity to identify marketing priorities while recognizing that favorable intentions do not necessarily translate into actual transactions.

2.5 Synthesis of Related Literature and Research Gap

The reviewed literature establishes that sensory marketing cues contribute to consumer evaluation through interconnected psychological processes. Visual packaging characteristics can influence attention and product perceptions (Retamosa et al., 2024; Su & Wang, 2024), while product presentation and placement shape how consumers encounter and assess available products (Bialkova et al., 2020; Cheng et al., 2022). Olfactory experiences are likewise relevant to food-related responses, although their effects depend on contextual conditions and actual sensory exposure (Zhang & Spence, 2023). Perceived freshness represents another evaluative dimension through which consumers interpret visual and contextual information concerning food products (Gong et al., 2025; Ferreira et al., 2026).

Research involving traditional food consumption further demonstrates that authenticity, familiarity, and nostalgic associations remain relevant to younger consumers (Chen & Lin, 2024; Hoang et al., 2024). These findings provide a basis for investigating how sensory presentation and heritage identity may coexist within traditional food marketing.

However, the reviewed studies examine different product categories, consumer populations, and purchasing environments. Their findings do not directly establish the relative associations of visual packaging appeal, product presentation and display, olfactory appeal, and perceived freshness with purchase intention among Generation Z consumers in a Philippine heritage bakery.

The present study addresses this contextual empirical gap by examining the four sensory marketing dimensions within a unified descriptive-correlational framework. By identifying their respective relationships with purchase intention, the research provides evidence for prioritizing potential improvements in the consumer experience.

The resulting findings also inform the development of a psychology-based sensory marketing strategy that integrates contemporary product presentation with the preservation of traditional bakery identity. The proposed

strategy is grounded in observed consumer evaluations and statistical associations rather than assumptions of causal effects.

3. Methodology

3.1 Research Design

The study employed a quantitative descriptive-correlational research design to examine the relationship between psychology-based sensory marketing cues and purchase intention among Generation Z consumers. The descriptive component assessed consumer evaluations of four sensory marketing dimensions: Visual Packaging Appeal, Product Presentation and Display, Aroma/Olfactory Appeal, and Perceived Freshness Cues. It also measured respondents' purchase intention and identified their priorities for improving the bakery's sensory marketing practices.

The correlational component examined the direction, magnitude, and statistical significance of the relationships between each sensory marketing dimension and purchase intention. The research adopted a cross-sectional approach in which respondents reported their evaluations and behavioral intentions through a structured questionnaire. No experimental manipulation of sensory stimuli was undertaken. Accordingly, statistically significant relationships were interpreted as associations rather than evidence of causal effects.

3.2 Research Setting and Respondents

The study focused on a heritage bakery enterprise based in Batangas Province, Philippines. The enterprise provided a setting for examining consumer responses to traditional bakery products and sensory characteristics associated with packaging, product presentation, aroma, and perceived freshness.

The target population consisted of Generation Z consumers aged 18–27 years who had previously encountered or were familiar with the participating bakery or its products. Respondents were not required to have previously purchased from the bakery, as the study sought to examine purchase intention among both existing and potential consumers.

Data were collected through an online survey administered to respondents recruited through accessible settings and communication channels. The questionnaire included screening questions concerning age and prior exposure to the enterprise and its products. A total of 84 survey responses were initially obtained. Following eligibility screening, 73 respondents were retained for the overall analysis. Variable-specific sample sizes were subsequently determined according to reported exposure to the sensory cues being evaluated.

3.3 Sampling Technique and Eligibility Screening

Purposive sampling was employed to select respondents who satisfied the study's eligibility requirements. The researchers initially established a target sample of 84 respondents using G*Power, with statistical power specified at .80. Although 84 survey responses were collected, the final analytic sample was determined after applying the inclusion criteria.

Seven responses were excluded because respondents did not satisfy the 18–27-year age requirement. One respondent belonged to the category of 17 years or below, while six selected the category of 28 years or above. An additional four respondents within the eligible age categories were excluded because they reported that they had not personally encountered or seen the bakery or its products. Consequently, 73 respondents met the general eligibility requirements.

Additional screening was conducted at the variable level to account for differences in sensory exposure. Three qualified respondents indicated that they had not personally seen the bakery's products, packaging, or product displays. Their responses were therefore excluded from analyses of Visual Packaging Appeal, Product Presentation and Display, and Perceived Freshness Cues, resulting in 70 valid respondents for each dimension. Similarly, 13 qualified respondents reported no prior encounter with the bakery's aroma. Their responses were excluded from the Aroma/Olfactory Appeal analysis, resulting in 60 valid respondents. Purchase Intention was analyzed using the complete sample of 73 qualified respondents.

This exposure-sensitive approach ensured that evaluation of particular sensory dimensions was based on respondents reporting relevant sensory encounters. The resulting analytic samples were differentiated according to the constructs under examination.

3.4 Research Instrument and Measures

The study utilized a researcher-developed structured questionnaire informed by literature on sensory marketing, consumer psychology, and purchase intention. It included screening and profile questions, four five-item sensory marketing scales, a five-item Purchase Intention scale, and questions concerning consumer improvement priorities and recommendations.

Visual Packaging Appeal measured evaluations of packaging appearance, colors, design, attractiveness, and appropriateness. Product Presentation and Display examined organization, visibility, attractiveness, accessibility, and ease of product examination. Aroma/Olfactory Appeal assessed pleasantness, attention, appropriateness, favorable impressions, and contribution of aroma to the bakery experience. Perceived Freshness Cues measured visible freshness, apparent recent preparation, suitability for immediate consumption, and confidence in product freshness. Purchase Intention measured respondents' future intention, likelihood of purchase when products were needed, consideration of the enterprise among alternatives, willingness to purchase traditional bakery products, and choice given a purchasing opportunity.

Responses to the 25 construct items were obtained using a five-point Likert-type scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Internal consistency was evaluated using Cronbach's alpha. The five composite measures yielded reported reliability coefficients ranging from .869 to .965; reliability was evaluated using the analytic samples applicable to each construct.

3.5 Data-Gathering and Data-Screening Procedures

Data were collected through an online survey platform using the structured questionnaire. The survey gathered respondent profiles, age eligibility, prior encounters with the bakery or products, relevant sensory exposure, evaluations of sensory dimensions, purchase intention, and suggested improvement priorities.

Following data collection, responses were exported and screened for eligibility, completeness, and consistency with the inclusion criteria. Respondents who did not satisfy the specified age requirement or reported no prior encounter with the bakery or its products were excluded from the overall analytic sample. Those reporting no direct exposure to particular sensory cues were excluded from analyses requiring those encounters, while all generally qualified respondents were retained for Purchase Intention. Numeric scale responses were not automatically retained when a respondent's screening answer indicated no exposure to the relevant cue. No personally identifying information was required for the statistical analysis, and findings were summarized in aggregate form.

3.6 Statistical Treatment of Data

Frequency counts and percentages were used to summarize respondent characteristics, sensory exposure, modes of encountering the bakery, and selected priorities for improvement. Arithmetic means and standard deviations summarized the four sensory marketing dimensions and Purchase Intention. The five-point means were interpreted as follows: 4.21–5.00, Strongly Agree; 3.41–4.20, Agree; 2.61–3.40, Neither Agree nor Disagree; 1.81–2.60, Disagree; and 1.00–1.80, Strongly Disagree.

Cronbach's alpha was used to assess internal consistency. Pearson's product-moment correlation coefficient (r) examined the relationships between each sensory marketing dimension and Purchase Intention, using matched respondents with relevant exposure. Significance was evaluated at $\alpha = .05$. The protocol's absolute correlation magnitude ranges were .00–.19 (Very Weak), .20–.39 (Weak), .40–.59 (Moderate), .60–.79 (Strong), and .80–1.00 (Very Strong). The dimension with the highest observed positive correlation was identified descriptively as having the strongest association; this ranking did not constitute a statistical test comparing coefficients. Purposive sampling and the cross-sectional correlational design precluded causal or population-wide inferences.

4. Results and Discussion

Following eligibility screening, 73 respondents were included in the overall analysis. Exposure-specific samples comprised 70 respondents for visual packaging appeal, product presentation and display, and perceived freshness cues, and 60 respondents for aroma or olfactory appeal.

4.1 Assessment of Psychology-Based Sensory Marketing Cues

The respondents evaluated Visual Packaging Appeal, Product Presentation and Display, Aroma/Olfactory Appeal, and Perceived Freshness Cues. Table 1 presents the descriptive statistics.

Table 1. *Descriptive Statistics for Psychology-Based Sensory Marketing Cues*

Sensory marketing dimension	N	Mean	SD	Interpretation	Rank
Aroma/Olfactory Appeal	60	4.120	0.539	Agree	1
Product Presentation and Display	70	3.894	0.631	Agree	2
Perceived Freshness Cues	70	3.883	0.718	Agree	3
Visual Packaging Appeal	70	3.743	0.945	Agree	4

Note. Rankings are descriptive; comparisons of dimension means were not statistically tested, and exposure-specific sample sizes differ.

All four sensory marketing dimensions received favorable evaluations, with mean scores falling within the Agree range. Aroma/Olfactory Appeal obtained the highest mean (M = 4.120, SD = 0.539), indicating that respondents who had encountered the bakery's aroma generally evaluated this experience positively. The statement concerning the ability of freshly baked product aromas to attract attention received the highest item mean (M = 4.267). This is consistent with the contextual relevance of food-related odors discussed by Zhang and Spence (2023), although it does not establish a causal relationship between aroma and purchasing behavior.

Product Presentation and Display ranked second (M = 3.894, SD = 0.631). The highest-rated item concerned product arrangement that made bakery products easy to notice (M = 3.957). This suggests that visibility and organization were favorably perceived components of the bakery experience. Bialkova et al. (2020) similarly demonstrated the importance of product characteristics and placement in shaping consumer attention and choice.

Perceived Freshness Cues obtained a mean of 3.883 (SD = 0.718). Statements concerning visible freshness and suitability for immediate consumption received the highest item means (both M = 3.957). These evaluations suggest that respondents generally perceived the products favorably in terms of apparent freshness. Gong et al. (2025) and Ferreira et al. (2026) likewise emphasized the relevance of perceived freshness in food-related consumer evaluations and purchase-related responses.

Visual Packaging Appeal obtained the lowest mean (M = 3.743, SD = 0.945), although its overall evaluation remained favorable. Packaging color received the lowest item mean (M = 3.657), while attractive product presentation through packaging obtained the highest (M = 3.871). The comparatively lower evaluation suggests an opportunity for visual refinement. Prior research established the relevance of packaging color, design, imagery, and visual characteristics in consumer evaluations (Retamosa et al., 2024; Su & Wang, 2024; Wang et al., 2023).

Overall, the respondents evaluated sensory attributes positively, but relatively lower packaging ratings suggest scope for improvement. Rankings of the means are descriptive, especially because the exposure-specific samples differ.

4.2 Purchase Intention Among Generation Z Consumers

Purchase Intention was examined through five items measuring willingness and likelihood to purchase traditional bakery products. Table 2 presents the descriptive findings.

Table 2. *Descriptive Statistics for Purchase Intention*

Purchase intention indicator	Mean	SD
Intention to purchase bakery products in the future	4.000	0.764
Likelihood of purchasing when bakery products are needed	3.849	0.828
Consideration of the bakery among alternatives	3.849	0.828
Willingness to purchase traditional bakery products	3.781	0.854
Choice to purchase when given an opportunity	3.767	0.791
Overall Purchase Intention	**3.849**	**0.697**

Note. N = 73. All means are within the Agree response range.

The overall Purchase Intention mean (M = 3.849, SD = 0.697) indicates favorable purchasing intentions among the surveyed Generation Z consumers. The highest-rated indicator concerned intention to purchase in the future (M = 4.000, SD = 0.764). The statement concerning choice when given an opportunity received the lowest mean (M = 3.767, SD = 0.791). Although all indicators remained favorable, the variation suggests that willingness to consider purchasing was not uniformly expressed across purchasing circumstances.

These findings are relevant to heritage bakery enterprises because traditional products may continue to attract younger consumers amid changing market preferences. Chen and Lin (2024) identified the relevance of nostalgic emotion and authenticity to Generation Z purchase intentions toward traditional food, while Hoang et al. (2024) emphasized quality and authenticity in traditional food selection. The results indicate that respondents generally

considered the bakery a viable purchasing option. However, purchase intention is a self-reported behavioral disposition, not evidence of actual transactions or guaranteed future sales.

4.3 Relationship Between Sensory Marketing Cues and Purchase Intention

Pearson's product-moment correlation was used to examine the relationships between the four sensory marketing dimensions and Purchase Intention. Table 3 presents the results.

Table 3. *Relationships Between Sensory Marketing Cues and Purchase Intention*

Sensory marketing dimension	N	Pearson's r	p-value	Interpretation
Visual Packaging Appeal	70	.520	< .001	Moderate positive
Product Presentation and Display	70	.580	< .001	Moderate positive
Aroma/Olfactory Appeal	60	.550	< .001	Moderate positive
Perceived Freshness Cues	70	.519	< .001	Moderate positive

Note. Exposure-specific matched respondents were used. All correlations were statistically significant at α = .05; comparisons between correlations were not tested.

All four dimensions demonstrated statistically significant positive relationships with Purchase Intention. Under the study's criteria, the correlations were moderate in magnitude. Product Presentation and Display had the strongest observed association ($r = .580$, $p < .001$), indicating that respondents with more favorable display evaluations also tended to report stronger purchasing intentions. This pattern is consistent with Bialkova et al. (2020) and Cheng et al. (2022), whose studies emphasized the roles of product placement and presentation in consumer attention and evaluation.

Aroma/Olfactory Appeal showed the second-highest correlation ($r = .550$, $p < .001$). Among respondents who encountered the bakery's aroma, favorable olfactory evaluations were associated with stronger purchase intention. This is compatible with Zhang and Spence's (2023) discussion of contextual influences of food-related odors.

Visual Packaging Appeal also demonstrated a moderate positive relationship ($r = .520$, $p < .001$), consistent with the importance of packaging characteristics reported by Retamosa et al. (2024) and Su and Wang (2024). Perceived Freshness Cues similarly showed a moderate positive correlation ($r = .519$, $p < .001$), a pattern compatible with the research of Gong et al. (2025) and Ferreira et al. (2026).

Although Product Presentation and Display showed the highest observed coefficient, the numerical ranking does not establish that its relationship was statistically stronger than those of the other dimensions. No inferential comparison between correlation coefficients was performed. The results establish associations within the surveyed respondents, not that modifying any single sensory dimension would independently increase purchasing intention or sales.

4.4 Consumer Priorities for Sensory Marketing Improvement

Respondents identified the sensory marketing area they considered most important for improvement. These responses provide descriptive evidence for planning a strategy appropriate to the bakery's context.

Table 4. *Respondents' Priorities for Sensory Marketing Improvement*

Improvement priority	Frequency	Percentage
Visual Packaging Appeal	25	34.2%
Product Presentation and Display	20	27.4%
Perceived Freshness Cues	17	23.3%
Aroma/Olfactory Appeal	7	9.6%
Other	4	5.5%
Total	**73**	**100.0%**

Note. Percentages are based on the 73 qualified respondents.

Visual Packaging Appeal was the most frequently identified improvement priority (34.2%). This is notable because packaging also received the lowest descriptive mean. The convergence of findings suggests that packaging refinement is a relevant opportunity for improvement. Product Presentation and Display ranked second (27.4%) and also had the strongest observed correlation with Purchase Intention, warranting consideration of organization, visibility, accessibility, and presentation improvements.

Perceived Freshness Cues were selected by 23.3% of respondents and Aroma/Olfactory Appeal by 9.6%. The relatively low priority assigned to aroma is consistent with its favorable descriptive evaluation, although those measures represent different aspects of consumer experience. Open-ended responses also emphasized preserving

traditional taste, quality, heritage, history, and Filipino identity while updating packaging and presentation. These comments suggest that modernization need not entail abandoning established product characteristics. Translating consumer voice into marketing direction in this manner parallels prior work that derived a consumer-centered marketing framework from thematic analysis of community discourse (Espelita & Atento, 2025).

4.5 Integrated Discussion

The findings demonstrate that psychology-based sensory marketing cues are associated with purchase intention among the surveyed Generation Z consumers. All four sensory dimensions received favorable evaluations and statistically significant positive correlations with Purchase Intention. However, descriptive ratings, observed correlations, and improvement priorities provide distinct types of evidence that should be considered together.

A central distinction concerns attributes that receive favorable evaluations and those that offer opportunities for refinement. Aroma/Olfactory Appeal obtained the highest mean among aroma-exposed respondents, but Product Presentation and Display showed the strongest observed association with Purchase Intention. This highlights the importance of considering both consumer evaluations and statistical relationships rather than relying exclusively on descriptive rankings.

The result for product presentation is consistent with studies emphasizing visual organization, placement, and accessible product information (Bialkova et al., 2020; Cheng et al., 2022). In the heritage bakery context, organized and visible displays may help consumers observe and evaluate products. The observed correlation provides a rationale for considering display improvements but does not demonstrate their effectiveness as interventions.

Visual Packaging Appeal emerged as another relevant managerial consideration. Although it received a favorable overall evaluation, packaging had the lowest sensory mean and was the most frequently selected improvement area. This convergence supports testing packaging refinements. Research on packaging color, design, and attention provides further context for its role in consumer evaluation (Retamosa et al., 2024; Su & Wang, 2024; Wang et al., 2023).

Aroma/Olfactory Appeal and Perceived Freshness Cues, meanwhile, appear to represent favorable sensory characteristics to maintain. The positive aroma association reinforces the relevance of preserving authentic bakery experiences, but olfactory responses are context-dependent (Bala & San Juan, 2026; Zhang & Spence, 2023). Freshness perceptions were also positively associated with Purchase Intention, consistent with studies concerning freshness cues in consumer evaluation (Gong et al., 2025; Ferreira et al., 2026). Freshness communication should remain credible and should not substitute for actual product quality.

The respondents' open-ended comments also highlighted traditional taste, quality, history, and Filipino identity. Their emphasis on heritage is consistent with Chen and Lin (2024) and Hoang et al. (2024), who identified authenticity and nostalgia-related considerations in traditional food consumption. In a food-product context, Cai (2026) similarly reported that product quality and brand trust significantly predicted consumers' purchasing decisions, a pattern compatible with the respondents' emphasis on traditional taste and quality. Thus, contemporary sensory presentation and heritage preservation may be pursued as complementary objectives.

Taken together, the findings support a psychology-based sensory marketing strategy emphasizing packaging refinement, improved product presentation, authentic aroma, credible freshness cues, and heritage continuity. Such a strategy also intersects with broader scholarship that treats the food-service customer experience as cumulative, with perceptual and behavioral consequences that build across successive encounters (E. Mendoza et al., 2026). These priorities represent evidence-informed managerial propositions rather than proven causal interventions. Purposive sampling, cross-sectional measurement, and exposure-specific subsamples restrict generalizability and comparisons across dimensions. Nevertheless, the study contributes context-specific evidence on sensory evaluations and behavioral intention among Generation Z consumers of a Philippine heritage bakery.

5. Conclusions, Recommendations, and Implications

5.1 Conclusions

The study examined relationships between psychology-based sensory marketing cues and purchase intention among Generation Z consumers in a Philippine heritage bakery. The four sensory dimensions received favorable evaluations and demonstrated significant positive associations with purchase intention, supporting their relevance to consumer experience within the surveyed sample.

Aroma/Olfactory Appeal received the highest descriptive evaluation (M = 4.120), followed by Product Presentation and Display (M = 3.894), Perceived Freshness Cues (M = 3.883), and Visual Packaging Appeal (M = 3.743). All four means fell within the Agree range. Purchase Intention was likewise favorable (M = 3.849), indicating

respondents generally expressed willingness to consider purchasing traditional bakery products, not that purchases had already occurred or would necessarily occur.

Product Presentation and Display had the strongest observed correlation with Purchase Intention ($r = .580$), followed by Aroma/Olfactory Appeal ($r = .550$), Visual Packaging Appeal ($r = .520$), and Perceived Freshness Cues ($r = .519$). All four associations were positive, moderate under the study's interpretive criteria, and statistically significant ($p < .001$). The numerical differences do not establish statistically significant differences between correlation coefficients.

Packaging was identified as the leading improvement priority by 34.2% of respondents and received the lowest sensory evaluation. Product Presentation and Display also warrants strategic consideration because of its observed association with purchase intention and its selection as a priority by 27.4% of respondents. Favorable evaluations of aroma and freshness suggest that these sensory attributes should be maintained. Open-ended comments emphasized traditional taste, quality, history, and Filipino identity.

Collectively, the findings indicate that sensory modernization and heritage preservation need not be competing objectives. However, the purposive sample, exposure-specific subsamples, self-reported measures, and cross-sectional correlational design limit generalizability and preclude causal conclusions. The findings justify developing and evaluating proposed marketing interventions but do not establish their effectiveness.

5.2 Recommendations

Based on the findings, the study recommends an integrated psychology-based sensory marketing strategy organized around the five pillars of the SENSE framework: Style the Packaging, Elevate the Display, Nurture Authentic Aroma, Signal Freshness, and Embed Heritage. The framework translates the descriptive and correlational findings into areas for possible implementation, and each proposed action requires evaluation using measurable consumer and operational outcomes.

Style the Packaging. Visual Packaging Appeal received the lowest mean ($M = 3.743$) and was the most frequently identified improvement priority (34.2%). The enterprise should consider selective packaging refinement, including color combinations, typography, clearer visual hierarchy, product imagery, and product visibility. Practical features such as resealability or environmentally responsible materials may be explored where feasible. Packaging changes should preserve recognizable heritage cues and be piloted using consumer feedback, product inquiries, and observed sales patterns.

Elevate the Display. Product Presentation and Display showed the strongest observed association with Purchase Intention ($r = .580$). The enterprise should consider better product arrangement, cleanliness, visibility, organization, signage, and accessibility. Pilot changes may be evaluated through display ratings, customer interactions, product-level sales, and other behavioral indicators. The observed correlation motivates testing these improvements but does not establish a causal effect.

Nurture Authentic Aroma. Aroma/Olfactory Appeal had the highest mean ($M = 4.120$) and a positive correlation with Purchase Intention ($r = .550$). Authentic baking aroma should be preserved as part of the consumer experience. Where operationally feasible, baking and display schedules may be coordinated to make naturally occurring aroma perceptible during customer visits. Artificial scenting should not substitute for actual product quality or imply unsupported freshness. Feedback and in-store consumer evaluations can monitor its acceptability.

Signal Freshness. Perceived Freshness Cues received favorable evaluations ($M = 3.883$) and were positively correlated with Purchase Intention ($r = .519$). The enterprise should maintain credible freshness cues through appropriate handling, clean displays, visible product condition, suitable packaging, and orderly stock rotation. Transparent packaging and accurate batch or preparation information may be considered where feasible. Indicators include freshness ratings, customer complaints, returns, and waste levels.

Embed Heritage. Respondents emphasized traditional taste, quality, history, and Filipino identity. The enterprise should incorporate recognizable heritage elements into contemporary packaging, presentation, and communications, including authentic product stories and traditional brand cues. Customer feedback, heritage recognition, and repeat purchase patterns may indicate whether such initiatives remain appropriate to consumers.

The pillars should function together rather than as isolated interventions. Implementation should begin with limited pilots and systematic monitoring of customer evaluations, inquiries, actual transactions, repeat purchases, and operational costs. Further studies could use larger and more diverse samples, more precise age measurement, probability-based sampling where feasible, and experimental or quasi-experimental assessments of changes in packaging, display, and other sensory practices.

5.3 Implications of the Study

Theoretical and behavioral implications. The results contribute context-specific evidence concerning the relationships between sensory evaluations and behavioral intention. Product Presentation and Display showed the strongest observed correlation, whereas Aroma/Olfactory Appeal had the highest descriptive rating. This distinction illustrates why sensory dimensions should be examined separately and why descriptive ratings and statistical associations should not be conflated. The study does not establish underlying psychological mechanisms or causal directions.

Managerial and practical implications. The findings provide an empirical basis for prioritizing possible improvements in a heritage bakery's consumer experience. Packaging warrants attention owing to its comparatively low rating and high improvement priority; display warrants attention owing to its positive association with purchase intention. The SENSE framework offers a structured approach to aligning contemporary presentation with authentic sensory characteristics and heritage identity, subject to costs, feasibility, consumer acceptance, and subsequent outcome evaluation.

Methodological and research implications. Accounting for reported sensory exposure helped align individual analyses with the attributes respondents could directly evaluate. However, smaller exposure-specific samples, self-reported measures, purposive recruitment, and cross-sectional data constrain inference. Future investigations should consider behavioral purchase measures, broader samples, and designs capable of testing actual interventions. The study also highlights the complementary but distinct roles of consumer ratings, correlation coefficients, and expressed improvement priorities.

Heritage enterprise implications. The respondents' favorable purchase intention and emphasis on traditional taste and identity suggest that heritage-oriented products may remain relevant to the surveyed younger consumers. Modern presentation may be examined as a complement to cultural and product continuity rather than a replacement for it. A comparable logic has been applied to a family-owned enterprise in a Philippine provincial setting, where customer-experience redesign and expanded digital engagement were proposed as bases for differentiation beyond price competition (R. G. Atento et al., 2025). An evidence-informed approach can guide potential improvements while retaining the bakery's established character and evaluating results through observable customer outcomes.

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