

Consumer Attitudes and Behaviors Influencing Perceived Benefits of “Tosakan Nakas” Herbal Balm: A Case Study of SCG Grand Martech Co., Ltd.*

Ntapat Worapongpat

*Eastern Institute of Technology Suvarnabhumi (EIT)
and Research and Development Center, SCG Grand Co., Ltd., Thailand
E-mail: dr.thiwat@gmail.com*

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Abstract

This study investigates the factors influencing consumers’ perceived benefits of the “Tosakan Nakas” herbal balm produced by SCG Grand Martech Co., Ltd. The research objectives are threefold: (1) to examine the effects of demographic differences on perceived benefits, (2) to analyze the influence of consumer attitudes toward herbal products on perceived benefits, and (3) to explore the impact of consumer purchasing and usage behaviors on perceived benefits. A quantitative research design was employed. Data were collected from 400 consumers who had previously purchased or used the product, using a structured questionnaire. The data were analyzed using descriptive statistics, including frequencies, percentages, means, and standard deviations, as well as inferential statistics through multiple regression analysis. The findings reveal that selected demographic factors significantly influence consumers’ perceived benefits of the herbal balm. In addition, consumer attitudes toward herbal products and consumer behaviors related to herbal product usage and purchasing were found to have a positive and statistically significant effect on perceived benefits. Among the examined factors, consumer attitudes and behaviors demonstrated a stronger influence than demographic characteristics. The results provide practical implications for herbal product manufacturers and marketers, particularly in developing strategies that emphasize positive consumer experiences, brand credibility, and attitude-building to enhance perceived product benefits.

Keywords: Consumer Attitudes; Consumer Behavior; Perceived Benefits; Herbal Balm; Tosakan Nakas

Introduction

In recent years, herbal health products have received increasing attention as consumers become more aware of health maintenance and disease prevention and show a growing preference for natural and chemical-free remedies (Kim et al., 2022). Among

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these products, herbal balms are particularly popular in Thailand due to their effectiveness in relieving muscular pain, (Worapongpat, 2025i). reducing physical tension, and promoting relaxation (Manaswatcharapong, 2021).

Consumers' perceived benefits play a crucial role in purchasing decisions for herbal health products (Ningsih et al., 2025). Perceived benefits reflect consumers' evaluations of product effectiveness and value, which significantly influence product selection, usage, and continued consumption. (Worapongpat, 2025c). Previous studies suggest that demographic characteristics, consumer attitudes, (Worapongpat, et.al., 2025). and consumer behaviors are key factors shaping perceived benefits and explaining variations in herbal product adoption and expectations regarding efficacy (Oppong et al., 2021).

“Tosakan Nakas” herbal balm, developed by SCG Grand Martech Co., Ltd., is formulated based on traditional Thai herbal knowledge and aims to alleviate pain, reduce tension, and enhance relaxation. (Worapongpat, 2025d). Examining consumer attitudes and behaviors that influence perceived benefits of this product can provide valuable insights into determinants of purchase decisions, usage patterns, and word-of-mouth communication. Such insights are essential for developing effective marketing strategies, strengthening brand positioning, and designing communication campaigns that align with consumer expectations in the contemporary herbal health product market.

Objectives

- 1.To examine the influence of consumer demographic characteristics on the perceived benefits of the “Tosakan Nakas” herbal balm.
- 2.To investigate the impact of consumer attitudes on the perceived benefits of the “Tosakan Nakas” herbal balm.
- 3.To explore the effect of consumer behavior on the perceived benefits of the “Tosakan Nakas” herbal balm.

Literature Review

1. Demographics

Demographic characteristics constitute fundamental variables in consumer behavior studies, particularly in marketing and health-related research (Oppong, et.al., 2023). Factors such as gender, age, educational level, occupation, and income significantly influence patterns of herbal product usage. (Putra, et.al., 2023). For instance, older adults and individuals with medium to high income levels tend to prefer health-oriented herbal products. Moreover, consumers with higher education levels and greater health awareness generally exhibit more positive attitudes toward the use of herbal balms. (Qolbi, et.al, 2024).

2. Attitude

Attitude is a critical determinant of individual behavior, comprising three primary components: affective, cognitive, and behavioral (Singh, Malik, 2022). Consumer attitudes toward herbal products including beliefs regarding safety and

efficacy play a decisive role in purchase decisions and perceived benefits (Sofiana, 2021).

3. Consumer Behavior

Consumer behavior refers to the decision-making processes and actions related to the selection, usage, and evaluation of products (Srisunthron, Daungprom, 2025, March). In the context of herbal balms, research indicates that contemporary consumers are increasingly health-conscious and inclined toward natural, body-safe products. (Worapongpat, 2021). Perceptions of product quality, scent, and usage experience significantly influence satisfaction and brand loyalty (Worapongpat, 2023a).

4. Perceived Benefit

Perceived benefit is defined as the consumer's understanding and interpretation of the value and advantages obtained from a product (Worapongpat, 2023b). The perception process involves processing stimuli, sensory experiences, prior knowledge, and contextual factors (Worapongpat, et.al., 2023). For herbal balms, perceived benefits may include pain relief, tension reduction, and relaxation enhancement. These perceptions directly affect consumers' purchase decisions and satisfaction levels. (Worapongpat, 2024a).

5. Summary of Literature Review

The literature indicates that demographic characteristics, attitudes, and consumer behavior are key determinants of perceived benefits in health-related herbal products. (Worapongpat, 2024b). Conducting an in-depth study within the context of the "Tosakan Nakas" herbal balm provides insights into these factors, thereby supporting effective marketing planning and targeted communication strategies. (Worapongpat, Uttamavangso, 2024).

Methodology

1. Population and Sample

The study targeted residents in Bangkok and surrounding areas. The sample comprised 400 individuals who had used or had the opportunity to use the "Tosakan Nakas" herbal balm. Due to the unknown total population size, the Cochran formula for unknown population was applied, with a 95% confidence level and a 5% margin of error, resulting in a sample size of 400 respondents.

2. Research Instrument

The primary instrument was a structured questionnaire divided into five sections:

Section 1: Demographic Information

Variables: Gender, Age, Education, Occupation, Income

Question Type: Closed-ended

Analysis: Mean, Frequency, Percentage

Section 2: Consumer Attitudes

Measured beliefs, feelings, and opinions toward using the herbal balm

Question Type: Closed-ended, 5-point Likert scale (1 = least to 5 = most)

Section 3: Consumer Behavior

Investigated product usage behavior, purchase sources, and rational selection criteria

Question Type: Closed-ended, 5-point Likert scale

Section 4: Perceived Benefits

Assessed perceived benefits such as:

Pain relief

Tension reduction

Safety for the body

Comfort enhancement

Question Type: Closed-ended, 5-point Likert scale

Section 5: Open-ended Questions

Collected additional suggestions or opinions regarding the herbal balm

Validity and Reliability Testing: Content Validity: Consulted three experts; calculated the Item-Objective Congruence (IOC) index

Reliability: Cronbach's alpha for attitudes and consumer behavior ≥ 0.7

3. Data Collection

Data Type: Primary data

Method: Self-administered questionnaires

Sample Size: 400 respondents

Location: Bangkok and surrounding provinces

Respondents: Individuals who had used or had the opportunity to use the "Tosakan Nakas" herbal balm

4. Data Analysis

4.1 Descriptive Statistics

Demographic variables: Frequency, Percentage, Mean

Attitude, Consumer Behavior, Perceived Benefits: Mean and Standard Deviation

4.2 Inferential Statistics

H1: Examined using independent sample t-tests (for two groups) and One-Way ANOVA (for three or more groups) at a 0.05 significance level

H2 & H3: Examined using Multiple Regression Analysis to assess the influence of independent variables on perceived benefits

Results

1. Demographic Profile of Respondents

The analysis of respondents' personal information, categorized by gender, age, education level, occupation, and monthly income, revealed the following:

Gender: The majority of respondents were female (n = 294, 73.5%), followed by male respondents (n = 106, 26.5%).

Age: Most respondents were aged 20–25 years (n = 188, 47.0%).

Education Level: The largest group held a bachelor's degree (n = 291, 72.8%).

Occupation: Most respondents were private-sector employees (n = 203, 50.8%).

Monthly Income: The majority earned between 10,000–20,000 THB per month (n = 148, 37.0%).

2. Consumer Attitudes toward “Tosakan Nakas” Herbal Balm

Consumer Attitude Aspect	Mean ($\bar{X}$)	SD	Interpretation
Confidence in herbal ingredients	1.65	0.74	Low
Perceived product quality (scent, heat, efficacy)	1.70	0.70	Low
Brand image and credibility	1.54	0.72	Low
Overall	1.55	0.75	Low

Interpretation: Respondents' attitudes toward the herbal balm across all dimensions were generally low, indicating limited perception and trust regarding the product and brand.

3. Consumer Behavior

Consumer Behavior Aspect	Mean ($\bar{X}$)	SD	Interpretation
Frequency of use	1.62	0.54	Low
Convenience of purchase	1.61	0.50	Low
Situations of use (pain, dizziness, insect bites)	1.60	0.48	Low
Overall	1.52	0.51	Low

Interpretation: Consumer engagement with the herbal balm is low, suggesting that regular or habitual use in daily life is minimal.

4. Perceived Benefits of "Tosakan Nakas" Herbal Balm

Perceived Benefit Aspect	Mean ($\bar{X}$)	SD	Interpretation
Efficacy in relieving symptoms	1.60	0.54	Low
Safety and suitability for the body	1.53	0.52	Low
Satisfaction after use	1.50	0.50	Low
Overall	1.53	0.55	Low

Interpretation: Consumers' perceived benefits of the herbal balm were low, indicating limited recognition of the product's outcomes.

5. Hypothesis Testing

5.1 Hypothesis 1: Influence of Demographic Factors on Perceived Benefits

Gender Differences:

Perceived Benefit	t	df	Sig.
Efficacy	-2.765	400	.006*
Safety	-2.101	400	.008*
Satisfaction	-3.126	400	.011*

*Significant at $\alpha = 0.05$

Interpretation: Gender differences significantly influence perceived benefits in all aspects. H_0 is rejected, and H_1 is accepted.

Age Differences (ANOVA):

Aspect	Sig.	Result
Efficacy	.113	Not significant
Safety	.044	Significant
Satisfaction	.703	Not significant

Interpretation: Age affects perceived safety only; other aspects are not significantly different.

Education Level (ANOVA):

Aspect	Sig.	Result
Product attributes	.044	Significant
Importance level	.041	Significant
Satisfaction	.052	Not significant

Interpretation: Education level significantly affects perceived product attributes and importance, but not satisfaction.

Occupation: All variables: Sig. > .05 → Not significant

Interpretation: Occupation does not significantly affect perceived benefits.

Monthly Income (ANOVA):

Aspect	Sig.	Result
Product attributes	.012	Significant
Importance level	.016	Significant
Satisfaction	.021	Significant

Interpretation: Monthly income significantly affects all aspects of perceived benefits.

5.2 Hypothesis 2: Influence of Consumer Attitudes on Perceived Benefits (Multiple Regression)

Variable	Sig.	Result
Product awareness (X1)	.021	Significant
Perceived quality (X2)	.016	Significant
Brand relationship (X3)	.021	Significant

Model Summary: Sig. = .018 < .05, $R^2 = 0.852$

Interpretation: Consumer attitudes significantly influence perceived benefits, explaining 85.2% of the variance.

5.3 Hypothesis 3: Influence of Consumer Behavior on Perceived Benefits (Multiple Regression)

Variable	Sig.	Result
Benefit awareness (X1)	.015	Significant
Ease of purchase (X2)	.028	Significant
Daily life behavior (X3)	.018	Significant

Model Summary: Sig. = .036 < .05, $R^2 = 0.872$

Interpretation: Consumer behavior significantly influences perceived benefits, accounting for 87.2% of the variance.

Overall Summary of Hypotheses Testing:

- Gender: Significant effect on all perceived benefit aspects (Sig. < .05)
- Age: Significant effect only on perceived safety
- Education Level: Affects product attributes and importance, not satisfaction
- Occupation: No significant effect
- Monthly Income: Significant effect on all perceived benefit aspects
- Attitudes: Significant positive influence on perceived benefits
- Consumer Behavior: Significant positive influence on perceived benefits

Discussion

Hypothesis 1 : Influence of Demographic Factors on Perceived Benefitshe findings indicate that demographic factors namely gender, age, education level, occupation, and income differentially influence certain aspects of perceived benefits of Tosakan Nakas herbal balm. These results suggest that consumers' backgrounds in herbal product usage and health perspectives vary across demographic groups, resulting in diverse responses to the product. For example: Older consumers may prioritize pain and muscle relief. Higher-income consumers may emphasize brand image and source credibility. Working-age consumers may focus on portability or versatility of product benefits. These findings align with previous studies on herbal products in the Thai context, which (Era, 1886, December 3). (Bhattacharjee, et.al., 2024). indicate that demographic differences often affect perceptions of health benefits, safety, and herbal efficacy, especially for products related to self-care. Thus, consumer perceptions of herbal balm are not solely determined by (Worapongpat, 2025a). and (Worapongpat, 2025e). the product itself but are also shaped by prior experiences, cultural beliefs, and the usage context of each consumer group.

Hypothesis 2: Influence of Consumer Attitudes on Perceived Benefitshe results demonstrate that consumer attitudes significantly affect perceived benefits. This finding is consistent with consumer behavior theory, which posits that attitudes determine

individuals' feelings, beliefs, and interpretations of product value. Consumers with positive attitudes toward Thai herbal products such as beliefs in natural, chemical-free, and safe ingredients tend to perceive higher benefits. They may evaluate the balm as effective for: Pain relief, Respiratory comfort, Muscle relaxation, Feeling of safety from using herbal products. Conversely, neutral or negative attitudes may lead to skepticism regarding: Efficacy of the herbal ingredients, Credibility of (Huang, et.al., 2025). And (Worapongpat, 2025f) product components, Product standards. This reduces perceived benefits. (Worapongpat, 2025b). and (Worapongpat, et.al., 2023). These results correspond with belief-driven buying theories, highlighting that brand image and beliefs about herbal efficacy strongly influence perceived product value, especially in health and self-care markets.

Hypothesis 3 : Influence of Consumer Behavior on Perceived Benefits The study shows that actual usage behaviors and purchase patterns influence consumers' perception of benefits. Key factors include: Frequency of use, Purpose of use (pain relief, muscle relaxation, cold symptom alleviation), Selection of purchase channels, Information acquisition from media or word-of-mouth. Regular users of herbal products perceive greater effectiveness, whereas inexperienced users may have limited understanding and rely mainly on marketing communication. (2025b). (Worapongpat, 2025g). This underscores that herbal products are highly experience-driven compared to conventional industrial products. Consumers often evaluate herbal balm based on tangible outcomes rather than label information, consistent with (Khayru, et.al., 2021). And (Worapongpat, 2025h). social science perspectives on consumer behavior indicating that actual usage directly impacts perceived efficacy and value. Thus, differences in consumer behavior explain variations in perceived benefits effectively.

New Knowledge Contribution

The study generates several important insights into consumer attitudes, behaviors, and perceived benefits of Tosakan Nakas herbal balm:

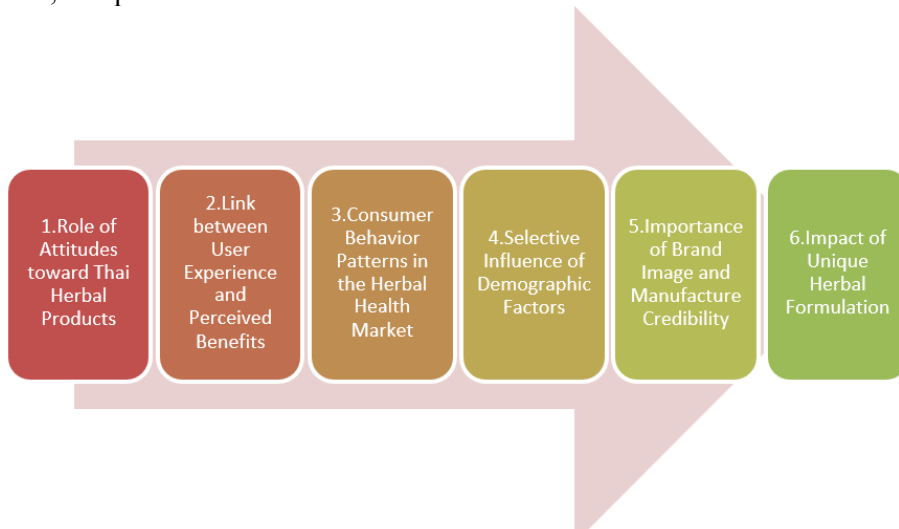


Figure 1 New Knowledge Contribution

1. Role of Attitudes toward Thai Herbal Products

Consumer attitudes directly influence perceived benefits, confirming that beliefs and feelings shape perceptions more than some objective product information. This reinforces consumer behavior theory, highlighting that cultural beliefs are more influential than price or packaging in herbal products.

2. Link between User Experience and Perceived Benefits

Regular users demonstrate higher perception of product efficacy than inexperienced users. This emphasizes the importance of direct experience, showing that perceived benefits depend more on actual usage than marketing communication.

3. Consumer Behavior Patterns in the Herbal Health Market

The study provides insights into modern consumer behavior in the Thai herbal balm market, including:

- Reasons for product choice
- Usage frequency
- Information channels (family, healthcare providers, online, pharmacies)
- Trust in herbal ingredients

This constitutes new knowledge about contemporary consumer behavior, which differs from previous generations relying solely on traditional wisdom.

4. Selective Influence of Demographic Factors

Gender, age, education, occupation, and income do not uniformly determine perceived benefits, affecting only specific aspects such as safety or ingredient credibility. This suggests that perceived benefits increasingly transcend demographic boundaries.

5. Importance of Brand Image and Manufacturer Credibility

Brand image and credibility of SCG Grand Martech significantly influence perceived benefits, marking a shift from reliance solely on local traditional knowledge toward organizational trust in Thai herbal products.

6. Impact of Unique Herbal Formulation

Consumers perceive greater value from unique multi-herb blends, distinctive formulas, and characteristic scents, highlighting that innovation in herbal formulations enhances perceived efficacy compared to traditional products.

Summary of New Knowledge:

- Positive attitudes toward herbal products increase perceived benefits.
- Direct user experience is more influential than marketing communication.
- Consumer behavior in the Thai herbal market is becoming more modernized.
- Demographic factors are not the primary determinants of perceived benefits.
- Brand image and manufacturer credibility are critical.
- Specialized herbal formulations enhance perceived product efficacy.

Conclusion

This study aimed to examine consumer attitudes, behaviors, and perceived benefits toward the “Tosakan Nakas” herbal balm, including the influence of demographic factors on these perceptions. The findings provide important insights into both consumer characteristics and factors affecting product acceptance.

The demographic analysis revealed that the majority of respondents were female, aged between 20–25 years, held a bachelor’s degree, worked in the private sector, and earned a monthly income of 10,000–20,000 THB. This profile reflects a

relatively young, educated, and working-age consumer group, which is typically considered an important target segment for consumer products.

Despite this, the overall findings indicate that consumer attitudes toward the herbal balm were low across all dimensions, including confidence in herbal ingredients, perceived product quality, and brand image. Similarly, consumer behavior related to the product—such as frequency of use, convenience of purchase, and usage situations—was also at a low level. In addition, perceived benefits, including efficacy, safety, and satisfaction, were consistently rated low. These results suggest that the product currently lacks strong market positioning, consumer trust, and engagement.

The hypothesis testing further revealed that demographic factors partially influence perceived benefits. Gender and monthly income significantly affected all aspects of perceived benefits, while age influenced only perceived safety, and education level affected perceptions of product attributes and importance. Occupation, however, showed no significant effect. These findings indicate that consumer perceptions vary depending on specific demographic characteristics, particularly economic capacity and gender-related differences in product evaluation.

Moreover, the study found that consumer attitudes and behaviors play a critical role in shaping perceived benefits. Both multiple regression analyses demonstrated that attitudes and behaviors significantly influence perceived benefits, with high explanatory power ($R^2 = 0.852$ and 0.872 , respectively). This indicates that improving consumer awareness, perceived quality, brand relationships, ease of purchase, and everyday usage behavior can substantially enhance consumers' perception of the product's benefits.

In conclusion, although the “Tosakan Nakas” herbal balm has potential as a consumer health product, its current level of acceptance remains low. The findings highlight the need for stronger marketing strategies, improved brand credibility, enhanced consumer education, and better distribution channels to increase product awareness and usage. Ultimately, increasing positive consumer attitudes and encouraging regular usage behavior are key factors in improving perceived benefits and achieving greater market success.

Recommendation

1.Exploration of Additional Behavioral and Social Factors

Future studies should investigate personal motivation, cultural beliefs, safety perception, and health trends affecting attitudes and behaviors toward herbal balm. This will support the development of new hypotheses aligned with diverse consumer behaviors and enable practical marketing applications.

2.Qualitative Research

Incorporating in-depth interviews or focus groups can provide deeper insights into consumers' perspectives, beliefs, feelings, and experiences with herbal balm, which cannot be fully captured by quantitative surveys alone.

3.Further Examination of Demographic Impacts

Although current findings suggest limited demographic effects, future research should explore other influencing factors such as trial usage, access to information, or interest in Thai herbal products to better understand consumption decisions.

4.Legal and Safety Considerations

Future studies should monitor and analyze herbal regulations and safety standards to ensure accurate marketing communication, enhance credibility, and improve perceived benefits.

5. Advanced Statistical and Analytical Techniques

Methods such as Path Analysis, Structural Equation Modeling (SEM), and Subgroup Analysis can provide deeper insights into complex, multidimensional relationships affecting consumer attitudes and behaviors.

Overall Recommendation:

Future research should integrate individual, social, cultural, and experiential factors, combine qualitative and quantitative analyses, and consider safety standards to produce comprehensive insights that are actionable for marketing and product development.

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