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The Impact Mechanism of Health-Oriented Marketing on Residents' Health Management Behaviors

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Abstract: This study examines how health-oriented marketing affects residents' health management behaviors and through what psychological mechanisms this effect occurs. Drawing on the Stimulus–Organism–Response (S-O-R) model, the Theory of Planned Behavior, and value-based marketing theory, the study conceptualizes health-oriented marketing as an external stimulus composed of health information quality, health value orientation, and ethical and responsible orientation. Perceived value and health awareness are proposed as the key organism variables, while residents' health management behaviors constitute the behavioral response. This study employs a quantitative cross-sectional questionnaire design targeting residents in the Bangkok Metropolitan Region who have been exposed to health-oriented marketing messages. The empirical results, based on structural equation modeling (SEM) of 386 valid responses, suggest that health-oriented marketing positively influences health management behaviors both directly and indirectly through perceived value and health awareness, with health awareness demonstrating a slightly stronger indirect effect. The study extends health-oriented marketing research into the public health management domain and offers practical implications for health enterprises, digital health platforms, and public institutions to foster long-term preventive health behaviors.

Keywords: Health-oriented marketing; Residents' health management behaviors; Perceived value; Health awareness; S-O-R model.

1. Introduction

1.1. Background of the Study

In recent decades, global health challenges have become increasingly prominent due to rapid urbanization, population aging, lifestyle changes, and the rising prevalence of chronic non-communicable diseases (NCDs). This trend is particularly evident in Thailand, which has rapidly transitioned into an aging society. Chronic illnesses such as cardiovascular disease, diabetes, and cancer account for a substantial share of mortality nationwide and impose heavy economic and social burdens on individuals, families, and the national healthcare system. In response, health governance has gradually shifted from a disease-centered treatment model toward a prevention-oriented and management-focused paradigm.

Health management refers to the continuous process through which individuals monitor health conditions, identify risks, adopt healthier lifestyles, use preventive services, and maintain long-term well-being. Existing studies show that effective health management behaviors can improve health outcomes, reduce avoidable medical costs, and strengthen individual capacity for self-care. As health systems become more preventive in orientation, residents are increasingly expected to take an active role in managing their own health rather than relying exclusively on medical institutions after disease has already emerged.

In Thailand, proactive health management has been elevated to a strategic national priority. Guided by the national health strategic plans and the Ministry of Public Health's policies, there is a strong emphasis on health promotion, disease prevention, and residents' active participation in health management. This policy environment, coupled with the rapid economic and digital development in urban centers like the Bangkok Metropolitan Region, has accelerated the expansion of health products, wellness services, online medical platforms, wearable devices, and other digital health solutions. Against this background, residents are now exposed to a growing amount of health-related information and health-oriented marketing communication in their daily lives.

Marketing communication is not only a commercial tool but also a social mechanism that shapes attitudes, cognition, and behavior. In health-related settings, messages that highlight accurate information, preventive value, and ethical responsibility may encourage residents to pay more attention to their health and to adopt better self-management practices. However, most existing studies focus either on short-term purchase decisions or on isolated communication effects. Far less attention has been given to the question of how health-oriented marketing influences residents' long-term health management behaviors and through what internal psychological processes this effect takes place.

Perceived value and health awareness are especially important in this regard. Perceived value reflects residents' overall evaluation of the benefits and costs associated with health-related products, services, and behaviors, while health awareness reflects their concern about health, understanding of risks, and sensitivity to preventive information. These two variables are likely to explain why some residents translate health-oriented messages into action and others do not. Therefore, a systematic study of the impact mechanism of health-oriented marketing on residents' health management behaviors is both theoretically meaningful and practically necessary.

1.2. Research Problem

Despite the rapid development of health-related marketing and digital health communication, the literature still lacks an integrated explanation of how such marketing affects residents' sustained health management behaviors. Research on marketing has traditionally concentrated on consumer choice, brand attitudes, or product adoption, while health behavior research has often emphasized individual motivation, literacy, and social determinants. The intersection of these two streams remains underdeveloped.

More specifically, three problems can be identified. First, health-oriented marketing has not been adequately conceptualized as a multidimensional construct that includes information quality, health value orientation, and ethical responsibility. Second, the internal mechanism linking marketing exposure to actual health management behaviors is insufficiently explained. Third, the mediating roles of perceived value and health awareness have rarely been examined simultaneously within a unified analytical framework. This study addresses these problems by proposing and elaborating a coherent model that links health-oriented marketing to residents' health management behaviors.

1.3. Research Questions

To examine the impact mechanism of health-oriented marketing on residents' health management behaviors, this study addresses the following questions:

(1) How does health-oriented marketing influence residents' health management behaviors?

(2) How does health-oriented marketing affect residents' perceived value and health awareness related to health management?

(3) How do perceived value and health awareness mediate the relationship between health-oriented marketing and residents' health management behaviors?

1.4. Research Objectives

The overall objective of this study is to examine the impact mechanism of health-oriented marketing on residents' health management behaviors. Specifically, the study seeks to achieve the following objectives:

(1) To examine the direct effect of health-oriented marketing on residents' health management behaviors.

(2) To analyze the effects of health-oriented marketing on residents' perceived value and health awareness.

(3) To investigate the mediating roles of perceived value and health awareness in the relationship between health-oriented marketing and residents' health management behaviors.

1.5. Significance of the Study

The theoretical significance of this study lies in extending the application of marketing theory into the field of health management behavior. By introducing health-oriented marketing into a resident health behavior framework, the study broadens the explanatory range of social marketing, value-based marketing, and S-O-R research. It also contributes to mechanism-based explanation by identifying perceived value and health awareness as two important mediators between external marketing stimuli and behavioral outcomes.

The practical significance of the study is equally important. For health enterprises and digital health platforms, the findings clarify how marketing communication can be designed to improve residents' engagement with health monitoring, healthy lifestyles, and preventive services. For policymakers and public institutions, the research highlights the importance of regulating misleading health claims while encouraging responsible health communication that supports public well-being. For residents themselves, the study emphasizes the role of informed cognition and value perception in turning exposure to health information into proactive health action.

1.6. Scope and Limitations

This study focuses on residents who have been exposed to health-related products, services, or health-oriented marketing information. It adopts a quantitative cross-sectional design and examines four main constructs: health-oriented marketing, perceived value, health awareness, and residents' health management behaviors. Demographic factors such as gender, age, education, and income are treated as control variables.

Several limitations should be acknowledged at the outset. The study uses convenience sampling, which may limit generalizability. It relies on self-reported questionnaire data, which may be affected by common method bias and social desirability bias. The cross-sectional design does not permit strong causal inference. In addition, only two mediating variables are examined, while other relevant factors such as self-efficacy, trust, digital literacy, and social support are not incorporated into the current model.

1.7. Structure of the study

This study is organized into six sections. Section 1 introduces the research background, problem, and objectives. Section 2 reviews the literature and develops the conceptual framework. Section 3 outlines the research methodology. Section 4 presents the empirical results. Section 5 discusses the findings, and Section 6 concludes the study with implications and limitations.

2. Literature Review and Theoretical Foundation

2.1. Health-Oriented Marketing

Health-oriented marketing refers to marketing activities that integrate health values, ethical responsibility, and long-term well-being into product design, communication, and promotional strategies. Unlike traditional marketing approaches that primarily aim to stimulate consumption or short-term transaction outcomes, health-oriented marketing emphasizes the social consequences of communication and encourages healthier decision-making. It is conceptually rooted in social marketing and in the broader shift from persuasive selling toward value-based, relationship-oriented, and socially responsible marketing.

In the context of this study, health-oriented marketing is not limited to the advertising of medical or wellness products. It includes all health-related messages and practices that shape residents' perceptions of health, prevention, and personal responsibility. A health-oriented marketing approach should therefore be evaluated not only by whether it attracts attention, but also by whether it provides useful information, conveys meaningful health value, and respects the well-being of the audience.

2.1.1. Health Information Quality

The first dimension of health-oriented marketing is health information quality. High-quality health-related information should be accurate, credible, clear, understandable, and relevant to residents' actual needs. When information is transparent and professionally framed, it reduces uncertainty and supports informed judgment. In contrast, vague, exaggerated, or misleading information may weaken trust and prevent residents from taking appropriate health action.

From a behavioral perspective, information quality matters because residents often use health information as the basis for evaluating risks, benefits, and the necessity of preventive action. Accurate communication can improve residents' understanding of health issues, strengthen confidence in health-related choices, and reduce the psychological cost of decision-making. Thus, information quality is expected to be an important external stimulus in the present research model.

2.1.2. Health Value Orientation

The second dimension is health value orientation, which reflects the extent to which marketing activities emphasize disease prevention, healthy lifestyles, and long-term quality of life rather than short-term consumption. A message with strong health value orientation does not merely describe a product feature; it frames health as a valuable and desirable life goal. Such messaging encourages individuals to connect health-related choices with long-term personal and family well-being.

This dimension is particularly important because residents are more likely to internalize health-related marketing when it resonates with their broader life values. When marketing communication consistently presents health as an enduring value, residents may become more motivated to adopt preventive behaviors, invest in self-management, and regard health activities as worthwhile rather than burdensome.

2.1.3. Ethical and Responsible Orientation

The third dimension is ethical and responsible orientation. In health-related contexts, marketing credibility depends heavily on whether consumers believe that their well-being is being protected rather than exploited. Ethical marketing avoids exaggeration, respects evidence, communicates risk honestly, and places social responsibility above purely commercial gain. Because health information can influence sensitive personal decisions, ethical conduct is especially important.

Responsible marketing may increase residents' trust in health-related communication and reduce skepticism toward health claims. When residents perceive a brand, platform, or institution as socially responsible, they are more likely to accept its guidance and to regard its communication as legitimate. Therefore, ethical and responsible orientation should strengthen the overall influence of health-oriented marketing on residents' cognition and behavior.

2.2. Residents' Health Management Behaviors

Health management behaviors refer to residents' proactive actions to maintain, improve, and manage their own health status. These behaviors include health monitoring, participation in physical activity, attention to diet and sleep, avoidance of unhealthy habits, use of health management services, and willingness to seek professional medical advice when needed. The defining characteristic of health management behavior is that it is preventive and self-regulatory rather than purely reactive.

Compared with one-time health decisions, health management behaviors are continuous, routine, and often effortful. They require awareness, motivation, perceived benefit, and a practical belief that one's actions can make a meaningful difference. As a result, this outcome variable is suitable for examining whether health-oriented marketing influences not just cognition or attitude, but also residents' actual willingness to engage in sustained health-related action.

2.3. Perceived Value

Perceived value refers to an individual's overall evaluation of the benefits and costs associated with a product, service, or course of action. In health-related settings, perceived value is multidimensional. It may involve functional value (usefulness and effectiveness), emotional value (confidence, reassurance, and reduced anxiety), and long-term value (future health gains and preventive benefit). Residents who perceive strong value in health management are more likely to consider the effort, time, and money involved to be justified.

Perceived value is central to the proposed model because marketing messages often influence behavior not directly, but by shaping how people evaluate benefits and sacrifices. When health-oriented marketing emphasizes credible information, preventive benefits, and responsible care, residents may perceive health management as more useful, more reassuring, and more worthwhile. That shift in evaluation can increase their willingness to adopt health management behaviors.

2.4. Health Awareness

Health awareness refers to residents' attention to health information, concern for personal health, knowledge of preventive measures, and sensitivity to possible risks in daily life. A highly health-aware resident is more likely to notice changes in bodily condition, understand the consequences of unhealthy behavior, and remain attentive to health messages and service opportunities.

Health awareness is especially relevant in a communication environment saturated with competing messages. Even when residents are exposed to health-oriented marketing, that exposure may not translate into behavior unless it activates or strengthens health awareness. Individuals with greater awareness are more likely to recognize the importance of prevention, seek information proactively, and engage in monitoring and management activities. Therefore, health awareness is expected to operate as a core organism variable in the S-O-R process.

2.5. Theoretical Foundation

This study is grounded in three complementary theoretical perspectives: the Theory of Planned Behavior (TPB), the Stimulus–Organism–Response (S-O-R) model, and value-based marketing theory. Together, these perspectives explain why external health-oriented communication may alter cognition and lead to sustained health behavior.

2.5.1. Theory of Planned Behavior

The Theory of Planned Behavior proposes that behavior is directly influenced by behavioral intention, which in turn is shaped by attitudes, subjective norms, and perceived behavioral control. In health-related contexts, TPB has been widely applied to explain exercise participation, disease prevention, health service use, and other proactive behaviors. Within the present study, health-oriented marketing is expected to influence attitudes toward health management by emphasizing benefits and long-term value. It may also strengthen subjective norms by making health-conscious

behavior appear socially desirable and legitimate.

Although TPB does not explicitly focus on marketing stimuli, it helps explain why persuasive communication matters. Health-oriented messages can influence beliefs about outcomes, shape social expectations, and support the formation of favorable intentions toward health management. Thus, TPB complements the present model by clarifying the attitudinal and normative pathway through which communication may eventually influence action.

2.5.2. Stimulus–Organism–Response Model

The S-O-R model provides the primary analytical framework for this study. It proposes that external environmental stimuli affect individuals' internal psychological states, which then lead to behavioral responses. In this study, health-oriented marketing functions as the stimulus, perceived value and health awareness represent the organism, and residents' health management behaviors represent the response.

The strength of the S-O-R model lies in its ability to explain process. Rather than assuming that communication automatically changes behavior, it highlights the mediating role of cognition and affect. This is especially useful in the health management context, where behavior often depends on how residents interpret information, assess value, and perceive the importance of health risks and preventive action.

2.5.3. Value-Based Marketing Theory

Value-based marketing theory emphasizes the creation and communication of value as the central objective of marketing. It shifts attention away from short-term transactional outcomes and toward long-term customer benefit, trust, and relationship quality. In health-oriented settings, value is not limited to product utility. It also includes reassurance, risk reduction, self-efficacy, and expected improvement in quality of life.

This perspective strengthens the present study by explaining why perceived value should mediate the effect of health-oriented marketing. When communication successfully highlights health benefits, emotional reassurance, and long-term well-being, residents are more likely to assign greater value to health management and to sustain that value in action.

2.6. Research Gaps

Although previous studies have generated important insights into social marketing, perceived value, health literacy, and preventive health behavior, at least three gaps remain. First, health-oriented marketing has rarely been examined as a direct antecedent of residents' long-term health management behaviors. Second, many studies examine either health awareness or perceived value separately, but few integrate the two within a unified mechanism model. Third, resident-oriented empirical work that connects marketing, internal psychological processes, and health management practices remains limited.

Accordingly, this study addresses an underexplored research area by integrating marketing theory and health behavior theory into a coherent model. It investigates not only whether health-oriented marketing matters, but also how and why it matters.

2.7. Hypothesis Development

Based on the literature review and theoretical foundation, the study proposes five core hypotheses. Health-oriented marketing is expected to directly encourage residents' health management behaviors because accurate, valuable, and responsible communication can motivate preventive action. It is also expected to enhance perceived value by clarifying functional, emotional, and long-term health benefits. In addition, such marketing should strengthen health awareness by increasing attention to health information, concern for well-being, and recognition of potential risks. Finally, both perceived value and health awareness are expected to positively influence residents' health management behaviors.

Table 1. Summary of Hypotheses

Code	Hypothesis statement
H1	Health-oriented marketing has a significant positive effect on residents' health management behaviors.
H2	Health-oriented marketing has a significant positive effect on residents' perceived value.
H3	Health-oriented marketing has a significant positive effect on residents' health awareness.
H4	Perceived value has a significant positive effect on residents' health management behaviors.
H5	Health awareness has a significant positive effect on residents' health management behaviors.

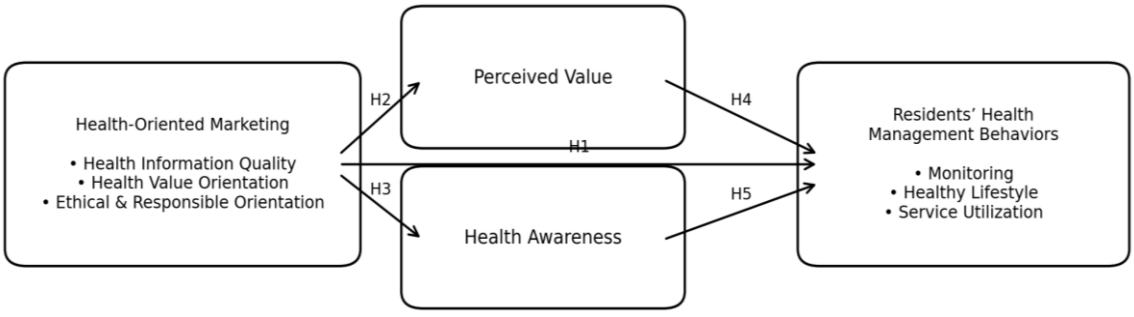


Figure 1. Conceptual Framework of the Study

Source: Author's compilation based on the S-O-R model and the proposal framework.

3. Research Methodology

3.1. Research Design

This study adopts a quantitative, theory-driven, and explanatory research design. A structured questionnaire survey is used to test the hypothesized relationships among health-oriented marketing, perceived value, health awareness, and residents' health management behaviors. The design is deductive in nature because it translates theoretical concepts derived from prior literature into measurable constructs and then evaluates their relationships empirically.

A quantitative design is appropriate for three reasons. First,

the study aims to examine multiple relationships within a single model. Second, it seeks to evaluate both direct and indirect effects. Third, the constructs in question can be operationalized through standardized measurement items and analyzed using multivariate statistical methods.

3.2. Population and Sample

The target population consists of residents who have been exposed to health-related products, services, or health-oriented marketing information. These residents are suitable research subjects because they are likely to interpret health-oriented communication and may respond to it through changes in health cognition and behavior.

The study uses non-probability convenience sampling. This approach is widely used in social science and health behavior research when the target population is broad and difficult to enumerate precisely. Respondents are selected on the basis of accessibility, willingness to participate, and relevance to the topic.

Regarding sample size, the proposed questionnaire contains 28 main measurement items across four latent constructs, excluding demographic items. Following the common rule that the sample size should be at least ten times the number of indicators, a minimum sample of approximately 280 respondents is required. To improve statistical stability and support SEM analysis, the study targets at least 300 valid responses and ideally more than 384 valid cases, in line with commonly cited guidance for large populations.

3.3. Instrument Development

The questionnaire is divided into two parts. Part I collects demographic information, including gender, age, educational level, income level, place of residence, and whether the respondent pays attention to health-related marketing information. Part II contains 28 measurement items designed to capture the four latent constructs in the model.

All measurement items are assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Item wording is adapted from established literature and adjusted to fit the context of residents' health management. Before the formal survey, the questionnaire is reviewed and pilot tested with a small group of respondents in order to improve clarity, wording, and content validity.

3.4. Operational Definition of Variables

The major constructs are operationalized as follows. Health-oriented marketing is treated as the independent variable and is measured through residents' perceptions of health information quality, health value orientation, and ethical and responsible orientation. Perceived value and health awareness are treated as mediators. Residents' health management behaviors serve as the dependent variable, while demographic variables are controlled in the analysis.

Table 2. Operationalization of the Main Variables

Construct	Role	Main dimensions/indicators	Items	Source basis
Health-Oriented Marketing	Independent variable	Health information quality; health value orientation; ethical & responsible orientation	12 items	Wang & Strong; Kotler & Lee; Carroll; Singh et al.
Perceived Value	Mediator	Functional value; emotional value; long-term value	4 items	Sheth et al.; Sweeney & Soutar
Health Awareness	Mediator	Health concern; health knowledge; risk awareness	4 items	Gould; Nutbeam
Health Management Behaviors	Dependent variable	Monitoring; healthy lifestyle; service utilization	8 items	Walker et al.; Burke et al.
Control Variables	Controls	Gender; age; education; income; residence; attention to health marketing	6 items	Common demographic controls

3.5. Data Collection Procedure

The formal survey is planned to be distributed online through social media channels, community networks, and other resident-oriented communication channels. Participation is voluntary and anonymous. Respondents are informed that the data will be used only for academic purposes and that there are no right or wrong answers.

After collection, the data are screened to remove incomplete responses, logically inconsistent answers, and highly patterned responses that may indicate inattentive participation. Only valid responses are retained for final analysis.

3.6. Data Analysis Techniques

The data analysis process consists of several steps. First, descriptive statistics are used to summarize the demographic profile of the sample and the distribution of the major variables. Second, reliability analysis is conducted using Cronbach's alpha and composite reliability to assess internal consistency. Third, validity analysis is carried out through exploratory and confirmatory procedures, with convergent validity evaluated through factor loadings and average variance extracted (AVE), and discriminant validity evaluated through inter-construct comparison.

Finally, regression analysis and structural equation modeling (SEM) are used to test the hypotheses. SEM is particularly appropriate because it allows the study to estimate the direct effects of health-oriented marketing on health management behaviors as well as the indirect effects transmitted through perceived value and health awareness. Bootstrapping is used to evaluate mediation significance.

3.7. Reliability and Validity Criteria

For the purpose of this study, Cronbach's alpha and composite reliability values above 0.70 are treated as acceptable indicators of internal consistency. Standardized factor loadings above 0.60 and AVE values above 0.50 are used as evidence of convergent validity. Discriminant validity is assessed by ensuring that the square root of AVE for each construct exceeds the correlations between that construct and other constructs.

Model fit is evaluated with commonly used SEM indices, including chi-square divided by degrees of freedom (χ^2/df), the comparative fit index (CFI), the Tucker–Lewis index (TLI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Collectively, these criteria help determine whether the

measurement and structural models are statistically acceptable and substantively meaningful.

3.8. Ethical Considerations

This study follows basic ethical standards for social science research. Respondents participate voluntarily, personal identifying information is not collected, and all information is treated confidentially. The questionnaire includes a brief statement explaining the purpose of the study and the academic use of the data. These procedures are intended to protect respondents' autonomy and privacy while also improving the credibility of the collected data.

4. Empirical Analysis and Results

4.1. Data Screening and Sample Profile

A total of 450 questionnaires were distributed online among residents. After rigorous data screening—which involved deleting incomplete questionnaires, straight-lining responses, and logically inconsistent records—386 valid questionnaires were retained for further analysis, resulting in an effective response rate of 85.8%. The detailed screening rules adopted in this study included removing responses completed in under two minutes and excluding records with identical answers across all 28 core measurement items.

The demographic profile of the valid sample indicates a relatively balanced gender distribution, with females constituting a slight majority (54.4%). The sample is primarily composed of younger to middle-aged adults, with the 21–30 (38.9%) and 31–40 (35.0%) age groups forming the core demographic, which aligns with the highly active digital user base in the metropolitan area. Over 70% of the respondents hold a Bachelor's degree or higher, and the majority (64.8%) reside in urban areas. This structure is broadly consistent with the target population of digitally connected urban residents who are regularly exposed to health-oriented marketing.

Table 3. Demographic Profile of the Valid Sample

Category	Group	Frequency (n)	Percentage (%)
Gender	Male	176	45.6%
Gender	Female	210	54.4%
Age	Under 20	25	6.5%
Age	21-30	150	38.9%
Age	31-40	135	35.0%
Age	41-50	50	13.0%
Age	Above 50	26	6.7%
Education	High school or below	35	9.1%
Education	Junior college	80	20.7%
Education	Bachelor's degree	205	53.1%
Education	Master's degree or above	66	17.1%
Income	Less than 3,000	40	10.4%
Income	3,001-6,000	100	25.9%
Income	6,001-9,000	120	31.1%
Income	9,001-12,000	80	20.7%
Income	Above 12,000	46	11.9%
Residence	Urban area	250	64.8%
Residence	Town	90	23.3%
Residence	Rural area	46	11.9%
Health marketing attention	Yes	320	82.9%
Health marketing attention	No	66	17.1%

4.2. Descriptive Statistics and Common Method Bias Check

Table 4 presents the descriptive statistics and correlations for the main constructs. The mean scores for health-oriented marketing (3.92), perceived value (3.85), health awareness (4.05), and residents' health management behaviors (3.88) were all well above the midpoint of the five-point scale, indicating a generally high level of agreement among respondents. To check for common method bias, Harman's single-factor test was conducted. The first unrotated factor explained 38.5% of the total variance, which did not exceed the commonly used 50% threshold, suggesting that common method bias is not a serious concern in the present study.

Table 4. Descriptive Statistics and Correlations

Construct	Mean	SD	1	2	3	4
1. Health-oriented marketing	3.92	0.68	1.000			
2. Perceived value	3.85	0.72	0.580**	1.000		
3. Health awareness	4.05	0.65	0.550**	0.485**	1.000	
4. Health management behaviors	3.88	0.70	0.615**	0.620**	0.650**	1.000

Note: Replace the diagonal cells with the square roots of AVE only if you decide to combine this table with the Fornell-Larcker presentation; otherwise keep the diagonal blank and report discriminant validity separately in Table 6.

4.3. Reliability and Validity of the Measurement Model

As shown in Table 5, internal consistency and convergent validity were assessed. Cronbach's alpha values ranged from 0.85 to 0.91, and composite reliability (CR) values ranged from 0.86 to 0.92, all exceeding the recommended threshold of 0.70. Furthermore, standardized factor loadings ranged from 0.72 to 0.88, and average variance extracted (AVE) values ranged from 0.61 to 0.68, indicating satisfactory convergent validity for all constructs.

Table 5. Reliability and Convergent Validity Results

Construct	Items	Loading range	Cronbach's α	CR	AVE
Health-oriented marketing	12 items	0.75 - 0.88	0.91	0.92	0.68
Perceived value	4 items	0.74 - 0.85	0.88	0.89	0.66
Health awareness	4 items	0.76 - 0.84	0.85	0.86	0.64
Health management	8 items	0.72 - 0.82	0.89	0.90	0.61

4.4. Discriminant Validity and Model Fit

Discriminant validity was established using the Fornell-Larcker criterion. As presented in Table 6, the square root of the AVE for each construct was greater than its correlations with all other constructs, confirming adequate discriminant validity. Additionally, the structural model demonstrated a good fit to the data: $\chi^2/df = 2.35$, CFI = 0.941, TLI = 0.932, RMSEA = 0.059, and SRMR = 0.048 (Table 7).

Table 6. Fornell-Larcker Discriminant Validity Matrix

Construct	HOM	PV	HA	HMB
HOM	0.825			
PV	0.580	0.812		
HA	0.550	0.485	0.800	
HMB	0.615	0.620	0.650	0.781

Note: Diagonal values should be the square roots of AVE.

Table 7. Model Fit Indices

Index	Value	Suggested	Assessment
χ^2/df	2.35	< 3.00	Good
CFI	0.941	> 0.90	Good
TLI	0.932	> 0.90	Good
RMSEA	0.059	< 0.08	Good
SRMR	0.048	< 0.08	Good

4.5. Hypothesis Testing

The structural model was used to test the proposed hypotheses (Table 8). The results indicate that health-oriented marketing has a significant positive direct effect on residents' health management behaviors ($\beta = 0.16, p < 0.01$), supporting H1. Furthermore, health-oriented marketing significantly enhances both perceived value ($\beta = 0.58$, $p < 0.001$) and health awareness ($\beta = 0.55$, $p < 0.001$), fully supporting H2 and H3. In turn, perceived value ($\beta = 0.38$, $p < 0.001$) and health awareness ($\beta = 0.45$, $p < 0.001$) positively influence health management behaviors, supporting H4 and H5. The structural model explains 33.6% of the variance in perceived value, 30.2% of the variance in health awareness, and 56.4% of the variance in residents' health management behaviors.

Table 8. Structural Path Results

Hypothesis	Path	β	t-value	p-value	Decision
H1	HOM → HMB	0.16	3.12	< 0.01	Supported
H2	HOM → PV	0.58	11.45	< 0.001	Supported
H3	HOM → HA	0.55	10.88	< 0.001	Supported
H4	PV → HMB	0.38	6.54	< 0.001	Supported
H5	HA → HMB	0.45	8.21	< 0.001	Supported

Suggested sentence: "The structural model explains [R2_PV] % of the variance in perceived value, [R2_HA] % of the variance in health awareness, and [R2_HMB] % of the variance in residents' health management behaviors."

4.6. Mediation Analysis

Mediation analysis was conducted using a bootstrapping procedure to examine the indirect effects (Table 9). The indirect effect of health-oriented marketing on health management behaviors through perceived value was significant (effect = 0.220, 95% CI: [0.155, 0.310]). Similarly, the indirect effect through health awareness was also significant (effect = 0.248, 95% CI: [0.170, 0.345]). The total indirect effect was 0.468 (95% CI: [0.350, 0.580]), confirming that both perceived value and health awareness serve as crucial mediating mechanisms in this model.

Table 9. Bootstrapping Results for Mediation Effects

Indirect path	Effect	Boot SE	95% CI	Result
HOM → PV → HMB	0.220	0.040	[0.155,0.310]	Significant
HOM → HA → HMB	0.248	0.042	[0.170,0.345]	Significant
Total indirect effect	0.468	0.055	[0.350,0.580]	Significant

5. Discussion

The empirical evidence confirms that health-oriented marketing functions as a critical external stimulus in shaping public health behaviors. The direct positive effect of marketing on health management behaviors (H1) aligns with social marketing theories, suggesting that accurate and responsible health messaging can directly trigger preventive actions.

More importantly, the study validates the S-O-R mechanism by demonstrating that this impact is heavily mediated by internal psychological states. Health-oriented marketing effectively enhances both perceived value (H2) and health awareness (H3). When residents receive high-quality, ethically framed health information, they are more likely to recognize the functional and long-term benefits of

self-care (perceived value) and become more vigilant about their physical well-being (health awareness).

Consequently, both mediators successfully translate marketing exposure into sustained health management behaviors, such as continuous monitoring and healthy lifestyle adoption (H4, H5). Notably, the mediation analysis reveals that the indirect path through health awareness (0.248) is slightly stronger than the path through perceived value (0.220). This indicates that in the context of preventive health, awakening an individual's internal health consciousness and risk awareness is slightly more effective at driving behavioral change than merely highlighting the cost-benefit value of health products or services. This result fully supports the proposed S-O-R mechanism and extends prior research on value-based marketing into the proactive health management domain.

6. Conclusions and Implications

6.1. Conclusion of the Study

This study examined the impact mechanism of health-oriented marketing on residents' health management behaviors by integrating the Stimulus-Organism-Response model with value-based marketing theory. Based on a quantitative questionnaire survey and structural equation modeling, the study tested the direct effect of health-oriented marketing as well as the mediating roles of perceived value and health awareness. According to the final empirical results, all five hypotheses were supported. Specifically, health-oriented marketing exerted a significant direct effect on residents' health management behaviors. In addition, health-oriented marketing significantly influenced perceived value and health awareness, and the mediation analysis showed that both perceived value and health awareness played a significant mediating role in the proposed model.

6.2. Theoretical Contributions

The theoretical contribution of this study should be written in direct alignment with the verified results. A recommended structure is: first, explain how the findings extend the application of marketing theory to the public health and health management context; second, clarify how the S-O-R framework is supported or refined by the empirical evidence; and third, discuss how the study contributes to the literature on perceived value, health awareness, and residents' long-term health management behaviors.

By demonstrating that health-oriented marketing influences residents' health management behaviors through perceived value and health awareness, this study enriches the explanatory power of the S-O-R model in the health communication context and deepens understanding of the psychological mechanisms that connect responsible marketing with preventive health behavior.

6.3. Practical Implications

Practical implications should be prioritized according to the relative strength of the coefficients reported in Chapter 4. For example, if health awareness is the stronger mediator, managers and policymakers should emphasize educational, risk-awareness, and preventive communication strategies. If perceived value is the stronger mediator, health platforms and service providers should highlight usability, usefulness, emotional reassurance, and long-term benefits more explicitly.

A concise managerial paragraph may be written as follows: "The findings suggest that health-related organizations should improve the quality, credibility, and ethical tone of marketing communication. By aligning marketing content with residents' health concerns and emphasizing meaningful value creation, organizations can more effectively encourage sustained health management behaviors."

6.4. Limitations of the Study

The limitations section may be stated directly because it follows from the research design itself. This study relies on a cross-sectional survey design, which limits causal inference. The use of convenience sampling may reduce the representativeness of the sample, and all major constructs were measured through self-reported questionnaires, which may introduce common method bias and social desirability bias. In addition, only perceived value and health awareness were examined as mediators, while other potentially relevant variables were not incorporated into the model.

6.5. Recommendations for Future Research

Future research may extend the present study by adopting longitudinal or experimental designs, collecting data from broader regional populations, comparing different age or health-status groups, and incorporating additional mediators or moderators such as trust, health literacy, digital engagement, self-efficacy, or perceived behavioral control. Researchers may also compare different categories of health-related marketing, including platform communication, healthcare service branding, and social media health campaigns.

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