

Marketing Promotion Strategies of Natural Health Products and Health Outcomes of Public Transport Passengers in Cameroon

ABSTRACT

Aims:The aim of this study was to examine marketing promotion strategies of natural health products and associate to health outcomes of public transport passengers in Cameroon.

Study design:This study adopted a cross sectional research design.

Place and Duration of Study:The data was collected using an online survey and the duration for data collection lasted for three months (December 2023 to February, 2024)

Methodology:The primary source of data was used for this study through the distribution of questionnaires to 385 respondents sampled through purposive and snow ball sampling techniques. Inferential statistics were used for analysis and bar charts, tables, frequencies, percentages, mean and standard deviations were used for descriptive statistics.

Results:The result of the study reveals that 92.5% of health outcome can be predicted from personal selling, sales promotion and consumer knowledge. Specifically, personal selling has a 13.5% significant effects on the health outcome of public transport passengers. Consumer knowledge has a 88.9% significantly positiveeffecton the health outcome of public transport passengers; meanwhile sales promotion insignificantly affects the health outcome of transport passengers negatively(-8%).

Conclusion:Natural health products are an integral part of most developing and traditional societies like that of Cameroon. However, marketing practices associated to such products should be controlled and reviewed so as not to render them detrimental to the same citizens they are out to contribute positively to their health. The major recommendation thus is to ensure a professional body is created for promoters of these products that will be highly monitored by the Ministry of Health.

Keywords: personal selling, sales promotion, consumer knowledge, natural health products and health outcome.

1. INTRODUCTION

In the early days marketing promotional strategies for natural health products were deeply rooted in traditional methods such as herbalist recommendations, local community engagements, and reliance on the perceived efficacy of natural remedies (Smith, 2024)¹. With the advent of printing presses and mass media, promotional strategies expanded to include print advertisements in newspapers, health magazines, and wellness publications. This allowed natural health product companies to reach a broader audience and capitalize on the growing interest in natural health alternatives (Jones., 2005)².

With technological innovations, promotional tactics moved to digital channels including websites, email marketing, and social media. This shift has made it possible for businesses to communicate with customers worldwide and showcase the advantages of natural health goods in a way that is more engaging and dynamic (Brown., 2012)³. Companies and natural health clinics have been able to legitimately market their natural health goods to specialized audiences and establish credibility in the sector by collaborating with authorities and wellness influencers (Garcia., 2019)⁴.

The market for natural health products has shown a steady and strong development trend in recent years, and this trend is anticipated to continue until 2030, according to the Industry Outlook Report (IOR) 2023 on natural health products (IOR., 2023)⁵. The market for natural health products is seeing a significant trend in the rising demand for eco-friendly and ecologically sustainable products. Another noteworthy finding in this market is the increasing adoption of technology to improve product efficiency and quality. Cutting-edge technologies like blockchain, machine learning, and artificial intelligence are being used to develop novel goods that outperform traditional choices in terms of efficacy and efficiency.

Since natural health products (NHPs) or traditional healing meet the main healthcare needs of a great majority of the population (about 80%), thereby playing a crucial role in black African culture (WHO, 2002)⁶. Herbal medicine has a long history of usage in Cameroon for the treatment of various illnesses. Regretfully, because of its disarray, traditional medicine's integration into the healthcare system is now ineffective (Nkongmeneck et al., 2007)⁷. However, the structure of traditional medicine is envisioned by government health programs as providing the primary trends for its development and integration (Anonymous., 2006)⁸.

1.1 Statement of the Problem

Since health affects every element of human existence, strategies for enhancing health services in developing nations like Cameroon to guarantee population health maintenance are an essential component of the overall development agenda. Natural health products are one way that this initiative aims to close the gap. The fact that certain natural health remedies generate both good and bad side effects in certain individuals makes them challenging to employ. Positive effects might include boosted immunity, more energy, and the delivery of vital nutrients that their diet could be deficient in. Antioxidant qualities in certain natural health products have also been discovered to help shield cells from harm brought on by free radicals.

Conversely, there are adverse consequences as well. There might be problems if some natural health items and pharmaceuticals interact. Furthermore, some people have negative side effects or allergic responses after using specific vitamins or plants. It's also crucial to remember that there have been cases of contamination or mislabeling, and that natural health products vary in quality and purity.

The growing popularity of natural health products (NHPs) among the general population has risen most especially in travelling agencies when passengers are boarding cars to their destinations in. These promoters of NHPs educate and sometimes convinced passengers to buy these products and they are the ones giving them the prescription dosage for consumption without any scientific evidence of the prescription pattern regarding their safety, effectiveness, and potential impact on health outcomes. Although NHPs are widely utilized, there aren't many comprehensive researches assessing their long-term effects on a variety of medical problems. This knowledge gap causes medical professionals to be less able to provide patients with evidence-based recommendations, which has an effect on overall health outcomes. Several studies have suggested that NHPs and prescription medications may interact, underscoring the need for more investigation to ascertain the safety and possible adverse effects of NHPs. Furthermore, there is confusion about the actual makeup and possible health effects of NHPs due to differences in product quality and inconsistent labeling(Smith., 2020)⁹.

in a bitto address these issues, the promoters of natural health products have formed a coalition to standardize their practices. According to the WHO Global Report on Traditional and Complementary Medicine (2019), the production and packaging of these products have been centralized to help eliminate or prevent adulterated natural products. Additionally, all agents carrying out marketing promotional strategies must be clearly identified with a membership card carrying his or her identity. Despite all these measures, a survey response

still proves that the marketing promotional strategies and health outcome. Therefore, this study is set to investigate marketing promotion strategies of natural health products and health outcomes of public transport passengers in Cameroon by looking at the following objectives.

- Investigate personal selling of NHPs on the health outcomes of public transport passengers in Cameroon.
- Assess sales promotion of NHPs on the health outcomes of public transport passengers in Cameroon.
- Identify key factors that mediate the relationship between marketing promotion of NHPs and health outcome.

1.2 Conceptual Review

Marketing Promotion Strategies

The term "marketing promotion strategies" describes the range of approaches and tactics employed by businesses to interact with their target market and influence them to buy their goods or services. One of the four components of the marketing mix, along with public relations, sales promotion, advertising, and personal selling, is promotion (Kotler and Armstrong., 2014)¹⁰. Marketing promotion tactics are defined by Shimp, (2019)¹¹ as the actions that convey the benefits of the product and convince the target market to purchase it. Marketing and promotion strategies for natural health products could include stressing the organic and natural ingredients, highlighting the health benefits, and utilizing channels like social media, wellness blogs, and health food stores that cater to health-conscious consumers.

Personal Selling

Through face-to-face interactions, salespeople may introduce items, address concerns, and eventually convince potential customers to make a purchase through the process of personal selling. Armstrong and Kotler, (2014)¹⁰ claim that when it comes to influencing a buyer's choice, conviction, and action, personal selling is the best strategy at specific points in the purchasing process. Personal selling in the context of natural health products might entail salespeople interacting with consumers at health food stores, answering any queries or concerns they may have, and educating them about the products' natural components and health advantages.

Sales Promotion

The term "sales promotion" describes the use of rewards and strategies to encourage the buying or selling of a good or service. It is a crucial component of the promotional mix, along with public relations, personal selling, and advertising. Sales promotions are frequently used to provide customers more value or inducements to buy in order to temporarily increase sales. Sales promotion techniques can be used to raise customer awareness, promote product trials, and boost sales of natural health goods. The understanding of sales promotion and its use in marketing has been enriched by the works of several authors.

Kotler and Armstrong, (2014)¹⁰ state that sales promotion encompasses a wide range of incentive tactics, the majority of which are short-term, intended to encourage customers or the trade to acquire certain goods or services more quickly or in larger quantities. A few examples of different formats for sales promotions are discounts, coupons, free samples, competitions, and rebates. These sales promotion tactics may be applied to draw in new clients, promote recurring business, and set items apart in the competitive natural health product industry.

According to Shimp, (2019)¹¹ sales promotions have a significant impact in driving impulse purchases and shaping customer behavior. Sales promotions are frequently used to instill a feeling of urgency in customers and encourage them to make a purchase, particularly when advertising goods that are thought to have health advantages, such natural health products. For example, giving away free samples of organic skincare items or offering time-limited discounts on natural health supplements will encourage clients to test the goods and possibly become regular customers.

Sales promotions are characterized as a crucial instrument for influencing customer purchasing behavior over the long and short terms in a research by Ailawadi et al, 2001)¹². The authors stress that customer reactions to sales promotions, such as brand switching, hoarding, and a decline in sales following the offer, may be strongly influenced. Sales promotions in the natural health goods sector may be used to inform customers about the advantages of natural components and provide them with a chance to test the items out for themselves. This might result in a long-term client base and advocacy.

Sales promotion strategies, when used to natural health goods, may raise awareness, encourage trial, and eventually boost sales by utilizing a variety of promotional instruments and techniques. Marketers of natural health goods may draw in and hold on to consumers while highlighting the special advantages of their products by providing incentives like freebies, samples, or other promotional offers.

Natural Health Products

Natural health products are made from materials found in nature, such minerals, plants, and animals, and are intended to either preserve or enhance health. Natural health products are defined by Health Canada as naturally occurring compounds used for health maintenance or restoration. These goods include probiotics, vitamins, minerals, herbal remedies, homeopathic remedies, and other conventional and alternative medical treatments. Marketed as safer and more ecologically friendly than synthetic medications, natural health products appeal to people looking for organic and eco-friendly ways to preserve their health.

Health Outcomes

The impacts of healthcare treatments on an individual's or a population's state of health are referred to as health outcomes. Kindig and Stoddart (2003)¹³ state that health outcomes cover a wide variety of metrics, such as the consequences of illness, disability, and mortality in addition to the influence of treatments on well-being and quality of life. Health outcomes in the context of natural health products might include possible side effects or interactions with other pharmaceuticals, as well as the effect of these products on certain health issues, such as enhanced immune function, decreased inflammation, or increased general well-being.

Public Transport

Mass transit, another name for public transportation, is the network of shared transportation options that are open to the general public, such as buses, trains, subways, ferries, and other similar vehicles. In order to provide mobility, lessen traffic congestion, lessen the impact on the environment, and improve accessibility to jobs, healthcare, and education, public transportation is essential. Population transportation may be useful when it comes to facilitating access to health food stores, farmers' markets, and other venues where natural health goods are offered for sale. This helps to ensure that these items are readily available and easily accessible to the general population.

Theoretical Review

Consumer Decision-Making Theory

The earliest formal explanation of consumer decision-making theory was provided by Nicholas Bernoulli almost 300 years ago. Von Neumann and Morgenstern expanded on it later, and it was called the Utility Theory. According to this notion, customers base their decisions on what they want to achieve. According to Michael, (2005)¹⁴ this model considered customers to be logical decision-makers who could calculate the probability consequences of many options and choose the one that would maximize their well-being.

The consumer decision-making process theory involves several stages that individuals go through when making a purchase. These stages typically include problem recognition, information search, and evaluation of alternatives, purchase decision, and post-purchase evaluation. In the context of natural health products, consumers often experience problem recognition when they identify a need for a health-related solution. This could be prompted by a desire to improve general well-being, address specific health concerns, or pursue alternative remedies. The information search stage involves gathering information about different natural health products, potentially through online research, reading product labels, or seeking advice from healthcare professionals. During the evaluation of alternatives stage, consumers compare different products based on factors such as ingredients, efficacy, safety, and price.

The purchase decision stage involves selecting a specific natural health product based on the information gathered and the evaluation of alternatives. Finally, the post-purchase evaluation stage occurs after the product has been used, during which consumers assess whether the product met their expectations and delivered the desired health benefits.

Review of Empirical Literature

Can & Arden, (2018)¹⁵ investigated patients' perceptions and use of natural health products (NHPs) in Canada. The objectives of the study were to determine patients' perception of the efficacy, safety and quality of NHPs and to characterize NHP use. A standardized, 18-question survey was distributed to the general public through a variety of methods. A total of 326 individuals completed the survey. Eighty-five percent of respondents take 1 or more NHPs. Forty-seven percent agreed/strongly agreed that NHPs are safer than prescription medications and 24% disagreed/strongly disagreed that prescription medications are more effective than NHPs. The finding reveals that patients appear to be comfortable foregoing education from health care professionals about the benefits and risks of NHPs.

Heather et al, (2012)¹⁶ explored how the product attributes of NHPs and conventional pharmaceutical sleep aids are linked to consequences and values in consumers' decision making. The study adopted 60 to 90-minute semi structured, laddering interviews based on the means-ends chain approach were conducted with 25 participants experiencing sleep problems in Toronto, Canada, who were selected to have a range of demographic characteristics. The result revealed that participants varied considerably in the complexity of their decision processes, as between 3 and 14 attribute-consequence-value associations were elicited per interview. The factors found to be most important in determining the type of sleep aid chosen by consumers were whether the product was natural or chemical, whether it was perceived to work or have side effects, and participants' perceptions of the impact of product use on their relationships and, subsequently, on their quality of life. The study concluded that naturalness and associated perceived lack of side effects of a product were more important than perceived efficacy for consumers selecting sleep aids for regular use.

A possible study gap was found after a review of the literature, since most researchers had overlooked the impact of marketing promotion methods on health outcomes. In order to bridge this gap, we want to examine the impact of several natural health product marketing and promotion tactics on health outcomes, with a focus on Cameroonian public transportation users. This can entail researching this group's present knowledge of and use

of natural health goods, as well as assessing the effects of various marketing strategies on their health-related behaviors and results.

2. METHODOLOGY

This study adopts a mixed-methods design. This design involves using both qualitative and quantitative research methods to gather data. By using both types of data collection methods, the researcher can gain a more comprehensive understanding of the link between the marketing strategies and the health outcomes of the passengers. The population of this study consists of passengers using public transport in Cameroon. These passengers are people travelling between some major cities in Cameroon; Buea, Bamenda, Yaoundé and Douala. The study adopts purposive and snow ball sampling techniques for data collection for reasons that purposive sampling allows the research to select participants who specifically fit the criteria of the study. And snow ball to enable use get respondents link the researcher to other possible respondents. In the case of studying public transport passengers in Cameroon, the researcher targeted individuals who use public transport and are potentially exposed to natural health products.

It cannot be feasible to know the number of passengers who fall into this category, thus the population of the study is infinite in nature. This we adopt the Cochran's formula for determining a sampling size from an infinite population as follows;

$$n = \frac{Z^2 pq}{e^2}$$

where:

- n is required sample size
- Z is the confidence level at 95% (standard value of 1.96)
- p is the sample proportion (0.5)
- q is 1-p (1-0.5 = 0.5)
- e is the error margin

$$n = \frac{(1.96)^2 (0.5) (0.5)}{(0.5)^2}$$
$$n = 384.16$$

Acknowledging the fact that there is no human being who is a fraction, the sample size is rounded up to the nearest whole number. Thus the sample size adopted for the study is 385.

Data for this study was collected through self-administered questionnaires. These questionnaires were distributed to respondents inside buses and at transport agencies in Douala, Yaounde, Buea and Bamenda. Furthermore, some of these respondents requested for time to fill the questionnaires as they said they were busy at that time so, the questionnaires were left with them to stay and fill at their convenience and dropped with workers at the agencies. This procedure went on continuously and intensively for a period of three months. The Microsoft excel was used to summarize the data and Statistical Package for Social Science was employed to analyse the data. The researcher employing a multiple linear regression analysis to investigate marketing promotion strategies of natural health products and health outcomes. In this case, the results were based on the model summary and ANOVA to determine the level of significant.

The statistical tests employ statistical measures such as R-square values, the standard deviation, t-statistics, and the F-ratio to find out how best and accurate the estimated

coefficients are. R-squared measure the extent to which the explanatory variables are responsible for the changes in the dependent variable of the relationship. The F-statistics are used to test the overall significance of the R-squared; it is out to show the degree of the reliability of the results. The *p*-value tells us the level at which our estimated coefficient is reliable.

Independent Variables: Marketing Promotion Strategies

Dependent Variable: Health Outcomes

Thus, the model of the study is expressed as follows;

$HO = f(PS1, SP2, CU3)$

$HO = \beta_0 + \beta_1PS1 + \beta_2SP2 + \beta_3CU3 + \mu$

A Priori:

$HO = \beta_0, SP1 > 0, SP2 > 0, CU3 > 0$

Whereby;

HO = Health Outcome, β_0 = Constant term, PS= personal sales, SP= sale promotion, CU= Customer understanding (intervening variable) and $\beta_0, \beta_1, \beta_2, \beta_3$ = Estimated Coefficients

3. RESULTS AND DISCUSSION

Of the questionnaire administered, 364 copies were returned while 21 were not returned; giving a questionnaire response rate of 94.55%. The questionnaire received were subjected to test of reliability for the individual constructs. As presented on Table 1, the Cronbach's alpha coefficients for all constructs were greater than 0.60. These reliability levels indicate that the constructs have high internal consistency and are reliable measures.

Table 1: Test of Reliability of Individual Constructs

Variables	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Personal Selling	0.953	0.954	5
Sales Promotion	0.962	0.964	5
Health Outcome	0.945	0.948	5
Consumer Knowledge	0.942	0.948	5

Source: Author, (2024)

The value for the coefficient of correlation globally shows 0.963 which interprets the fact that the predictors (personal selling, sales promotion, consumer knowledge) have a high positive correlation with the dependent variable (health outcome). The R-squared on Table 2 shows how well the data fit the regression model. The coefficient of determination (Adjusted R Square) shows a value of 0.925 which implies that 92.5% of health outcome can be predicted from personal selling, sales promotion and consumer knowledge. Therefore 7.4% of variation in health outcome of public transport passengers in Cameroon can be predicted from other factors not captured in the study.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.963 ^a	.926	.925	.16440

a. Predictors: (Constant), Personal Selling, Sales Promotion, Consumer Knowledge

Source:Author, (2024)

Analysis of variance

The results of ANOVA as presented on Table 3 brings out the sum of explained squares, residual sum of squares and the total sum of squares as well as the degree of freedom, mean square, Fischer values and global significance level of the model. The $P=0.00$ shows that the model is generally significant at 1% level of significance. Therefore, marketing promotion strategies are significant enough to determine the health outcomes of public transport passengers in Cameroon.

Table 3: Analysis of Variance (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	58.907	3	19.636	726.543	.000 ^b
Residual	4.676	361	.027		
Total	63.582	364			

a. Dependent Variable: Health Outcome

b. **Predictors:** (Constant), Personal Selling, Sales Promotion, Consumer Knowledge

Table 4: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.551	.052		10.619	.000
Personal Selling	.135	.064	.136	2.107	.037
Sales Promotion	-.081	.077	-.093	-1.049	.296
Consumer Knowledge	.889	.081	.924	11.015	.000

a. Dependent Variable: Health Outcome

b. **Source:**Computerised in SPSS, (2024)

influence on health outcome ($\beta_1 = 0.135$ and $p=0.037$. This shows that the result are significant at 5% level of significance, implying personal selling of natural health products has a significant effect on the health outcome of passengers using public transports.

For the first objective of the study consisting of investigating personal selling of Natural Health Products (NHPs) on the health outcomes of public transport passengers in Cameroon, results showed that personal selling has a positive and significant

For the second objective which is aimed at accessing sales promotion of Natural Health Products (NHPs) on the health outcomes of public transport passengers in Cameroon, the findings revealed that sales promotion has a negative and insignificant effect on health outcome $\beta_2 = -.0889$ and $p=0.296$. This result is not significant even at 10% level of significance. We therefore conclude that sales promotion on natural health products does not have a statistical significant effect on the health outcome of passengers using public transports.

On the other hand, consumer knowledge (control variable), the coefficient for consumer knowledge is 0.889, and the p-value is 0.000. The low p-value indicates consumer knowledge has a statistically significant positive relationship with health outcomes. This suggests that higher levels of consumer knowledge are associated with improved health outcomes among public transport passengers in Cameroon.

The findings of this study completely contrast that of Can & Arden, (2018) 15, who found out that patients completely ignore the education or knowledge of natural health products and this do not take them into consideration in deciding whether or not to consume. This study rather found out that consumer's knowledge about a natural health product significantly affects their health outcome. Additionally, the natural health products attributes are fundamental to patients decisions making, as revealed by Heather et al, (2012)¹⁶ this can be associated to the findings of this study in the dimension of customer knowledge. As attributes can only be explained when educating the customer about the health product in question.

4. CONCLUSION AND RECOMMENDATIONS

To conclude, natural health products are significant products in the health of most citizens in less developed countries who have a traditional orientation to health and who may not all have access to the modern health facilities provided by the state and other non-governmental organisations. However, the promotional strategies used in promoting the use and purchase of this products should be highly reviewed. Offering sales promotion just to push the audience to hear of cash discounts, free trials, bonuses attached to purchased outcome significantly yield a negative effect on their health. As such more education and sensitization should be made to improve on the knowledge of the customers about these products. Additionally, personal selling has proven to be beneficial as products tend to be tailored to an individual's health need, thus yielding a positive outcome to their health.

Based on the findings, a number of recommendations were made. Firstly, all producers and promoters of natural health products in Cameroon should belong to a professional body affiliated to the Ministry of Health. This body should be responsible for controlling the behaviour, conduct and practices associated with these products. The identification of such authorized persons should be made known to the public through heightened sensitization campaigns using all media (TV stations, social media, print media, church announcements, marketplace announcements and bus station sensitizations). The mobile promoters of natural health products should be banned and only natural health clinics be allowed to carry on with the diagnoses, education, prescription and follow up of customers. These are in an attempt to prohibit selling for financial gains at the detriment of health gains.

Informed Consent Statement:

Informed consent was obtained from all subjects involved in the study. Amongst them is the confidentiality of information provided will be ensured as participant names were not required. The researchers informed consents and ensure that they fully understand the purpose, risks, and benefits of the study. Participants also have the right to withdraw without

any negative consequences. The data was agreed to be kept confidential, with personal identities and sensitive information protected. A protocols were established to securely store and transmit data, minimizing potential risks of unauthorized access or misuse. The use of offensive discriminatory or other unacceptable language was avoided in the information of the questionnaire which went along way to produce consistence and realistic results for the research.

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