

# Factors Influencing Healthcare Product Purchase Intentions among Gen-Y in Malaysia

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## Abstract

The increasing demand for healthcare products in Malaysia, particularly among Gen-Y, highlights the need to understand the key determinants influencing purchase intentions within this demographic. Grounded in the theory of planned behaviour (TPB), this study investigates the effects of Attitude, Subjective Norms, and Perceived Behavioural Control on Gen-Y's intention to purchase healthcare products, while integrating additional constructs Promotional Influence and Perceived Price Sensitivity to enhance model robustness. Data was collected through a structured questionnaire distributed to 501 respondents across Malaysia and analysed using SmartPLS 4.0. The findings reveal that Promotional Influence, Subjective Norms, and Perceived Behavioural Control significantly and positively influence purchase intentions, with Promotional Influence emerging as the strongest predictor. In contrast, Attitude and Perceived Price Sensitivity were found to have no significant effect. These results underscore the pivotal role of digital marketing and social influence in shaping Gen-Y's healthcare purchasing behaviour, suggesting that marketers and policymakers must tailor strategies that emphasize promotional channels and enhance perceived behavioural control to stimulate proactive healthcare engagement. This study contributes both theoretically by extending TPB and practically by informing targeted marketing approaches for health-related products in Malaysia.

**Keywords:** Purchase Intention, Generation Y, Healthcare Products, Theory of Planned Behaviour, Promotional Influence, Smartpls, Malaysia

## Introduction

Non-communicable diseases (NCDs) remain the leading cause of mortality in Malaysia, accounting for over 70% of annual deaths according to the Ministry of Health Malaysia (2022). This alarming trend has intensified the national focus on preventive healthcare measures, including the consumption of over-the-counter healthcare products such as dietary supplements, hygiene items, and wellness solutions. Concurrently, the rise of digital platforms and e-commerce channels has transformed consumer access and exposure to healthcare

products, particularly among Gen-Y consumers those born between 1981 and 1996 who are typically well-educated, tech-savvy, and socially connected.

Gen-Y, being digitally fluent, well educated, and socially engaged, is rapidly shaping Malaysia's consumer health market. However, despite increased awareness and availability of healthcare products online, actual purchase conversion remains inconsistent. Many Gen-Y individuals express interest in health-related goods but often hesitate to finalize purchases due to uncertainty, scepticism, or pricing concerns. While consumer behaviour in healthcare has been explored generally, there is limited insight into specific drivers influencing Gen-Y's purchase intentions, especially in the context of digital promotions and economic pressures. This study addresses this gap by adopting the theory of planned behaviour (TPB) as its foundational framework. The TPB, developed by Ajzen (1991), posits that behavioural intention is influenced by Attitude, Subjective Norms, and Perceived Behavioural Control. However, the TPB's traditional constructs may not fully capture the commercial and psychological complexities present in Gen-Y's purchasing environment. Therefore, this study extends the TPB model by incorporating Promotional Influence and Perceived Price Sensitivity as additional predictors to better reflect contemporary market dynamics.

Promotional Influence captures the impact of digital marketing tools such as influencer endorsements, flash sales, and targeted advertisements, while Perceived Price Sensitivity represents consumer responsiveness to pricing variations and affordability considerations. These extensions aim to provide a more holistic understanding of Gen-Y's decision-making process in healthcare product purchases.

This paper aims to examine the extent to which the five key variables Attitude, Subjective Norms, Perceived Behavioural Control, Promotional Influence, and Perceived Price Sensitivity influence healthcare product purchase intentions among Gen-Y in Malaysia. This integration is significant because it offers a deeper understanding of consumer behaviour in a digitally mediated context while providing practical guidance for marketers, e-commerce platforms, and public health strategists aiming to close the conversion gap among Gen-Y. In doing so, it supports Malaysia's broader agenda of improving preventive healthcare engagement and aligns with Sustainable Development Goal 3: Good Health and Well-being.

## **Theoretical Foundations and Hypotheses Development**

### *Theory of Planned Behaviour (TPB)*

The Theory of Planned Behaviour (TPB), developed by Ajzen (1991), is a widely applied psychological theory that explains human behaviour through three primary constructs: Attitude toward the behaviour, Subjective Norms, and Perceived Behavioural Control. Attitude refers to the degree to which a person has a favourable or unfavourable evaluation of the behaviour. Subjective Norms concern perceived social pressures from peers, family, or society to perform or avoid the behaviour. Perceived Behavioural Control reflects the perceived ease or difficulty of performing the behaviour and is influenced by past experiences and anticipated obstacles. TPB has been extensively used in health-related behavioural studies, including medication adherence, preventive screenings, and dietary practices (Armitage & Conner, 2001).

In the context of healthcare products, TPB provides a robust framework to assess how individual beliefs, societal expectations, and perceived capabilities influence the intention to purchase. However, given the evolving digital landscape and commercial marketing influence, additional constructs may be necessary to reflect modern purchasing environments. Therefore, this study extends TPB to include Promotional Influence and Perceived Price Sensitivity, aiming to capture more accurately the behavioural tendencies of Generation Y (Gen-Y) in Malaysia's healthcare marketplace.

### Conceptual Framework

Based on the theoretical foundations and empirical findings reviewed, Figure 1 illustrates the conceptual framework employed in this study. The model integrates the core TPB constructs Attitude, Subjective Norms, and Perceived Behavioural Control with two external variables: Promotional Influence and Perceived Price Sensitivity. Each of the five independent variables is hypothesised to have a direct relationship with Purchase Intention.

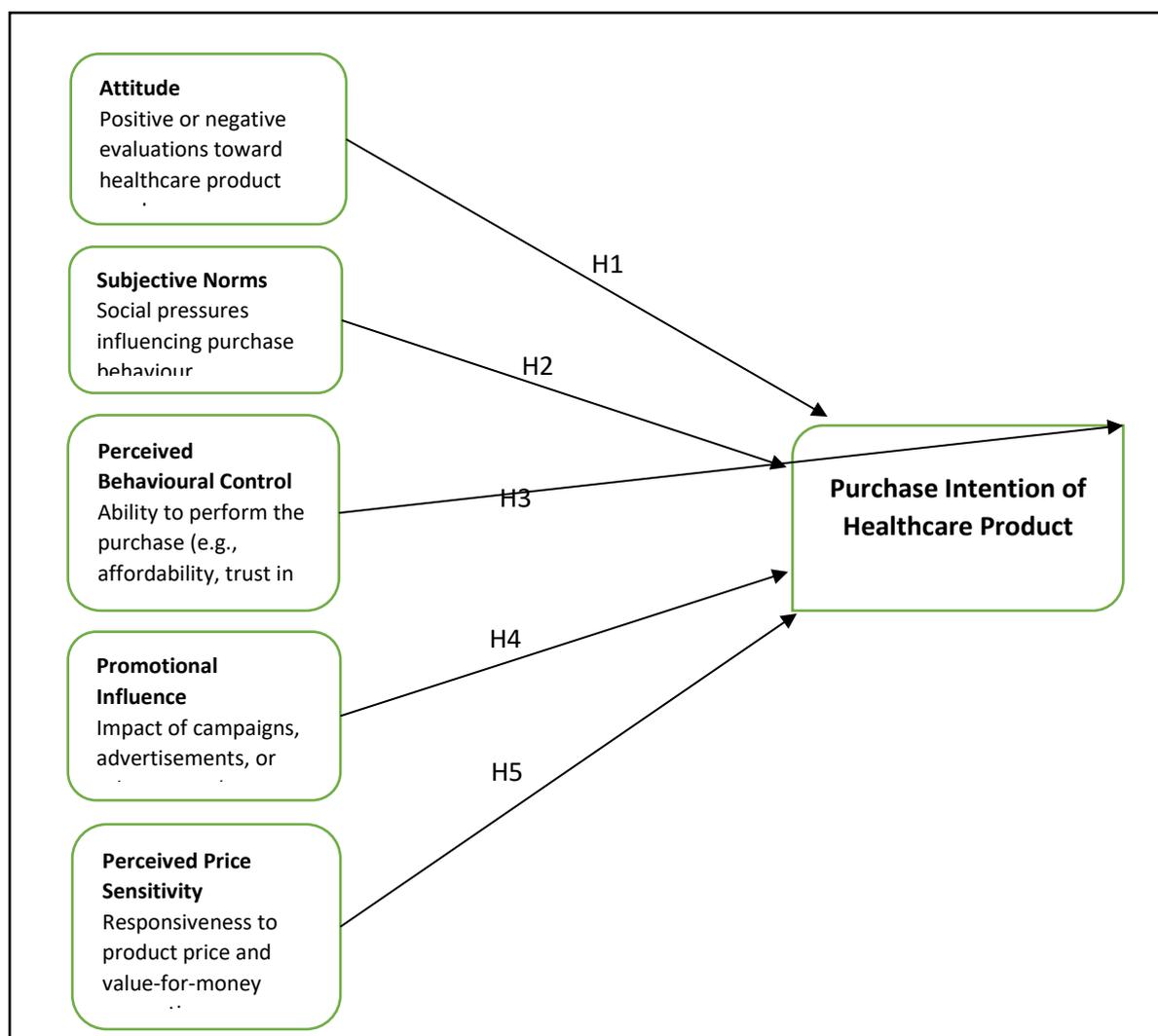


Figure 1 Conceptual Framework

#### *Attitude*

Attitude refers to an individual's positive or negative evaluation of performing a particular behaviour. In the context of healthcare products, a favourable attitude may be shaped by

beliefs about the effectiveness, necessity, or convenience of such products. Prior research suggests that a positive attitude significantly influences an individual's intention to adopt health-enhancing behaviours (Ajzen, 1991; Greaves et al., 2013). Among Gen-Y consumers, attitudes are often influenced by lifestyle values, peer norms, and digital content that frame health-related consumption as trendy or responsible.

*Hypothesis 1: Attitude has a positive effect on Gen-Y's healthcare product purchase intention.*

#### *Subjective Norms*

Subjective Norms refer to the perceived social pressure to perform or not perform a specific behaviour. This includes expectations from family, friends, colleagues, or digital peer networks. Studies have indicated that Subjective Norms strongly influence Gen-Y behaviour, especially in collectivist societies such as Malaysia, where social endorsement is highly valued (Das & Rangarajan, 2020; Wong & Alias, 2020). Online communities and influencer culture further amplify normative pressures to consume health-related products in line with prevailing trends.

*Hypothesis 2: Subjective Norms have a positive effect on Gen-Y's healthcare product purchase intention.*

#### *Perceived Behavioural Control*

Perceived Behavioural Control (PBC) captures an individual's perception of ease or difficulty in performing a behaviour, which is influenced by internal capabilities and external constraints. In the case of healthcare product purchases, this includes factors such as product accessibility, affordability, and ease of transaction. Research by Wang et al. (2018) and Asuquo (2018) has shown that PBC significantly affects health-related intentions and behaviours, particularly when consumers have prior experience or trust in e-commerce platforms.

*Hypothesis 3: Perceived Behavioural Control has a positive effect on Gen-Y's healthcare product purchase intention.*

#### *Promotional Influence*

Promotional Influence refers to the effect of marketing strategies—including influencer endorsements, social media campaigns, product bundling, and price-based discounts—on consumer decision-making. In a digital-first environment, Malaysian Gen-Y consumers are constantly exposed to targeted healthcare product promotions across platforms such as Shopee, Lazada, Instagram, and TikTok Shop. These campaigns shape perceptions of value, urgency, and credibility, especially when promotions are framed through peer-endorsed content or limited-time offers. Prior studies have shown that promotional activities significantly affect younger consumers' purchase decisions, especially when reinforced by digital influencers or trend-based messaging (Man et al., 2022; Wong & Alias, 2020). For Gen-Y, who are often skeptical yet highly responsive to digital engagement, promotional triggers can serve as a crucial motivator to bridge the gap between awareness and actual purchasing behaviour. Despite this, promotional influence remains an underexamined construct in behavioural models such as TPB, particularly in the Malaysian healthcare context.

*Hypothesis 4: Promotional Influence has a positive effect on Gen-Y's healthcare product purchase intention.*

### *Perceived Price Sensitivity*

Perceived Price Sensitivity refers to the extent to which price perception affects a consumer's intention to purchase. In the context of healthcare products, this construct reflects how Gen-Y consumers evaluate affordability and value-for-money, particularly in light of economic uncertainty and rising living costs. With Malaysia experiencing inflationary pressures and widespread digital price comparisons, even minor fluctuations in product pricing can significantly deter or motivate healthcare purchases. Ng et al. (2020) found that Malaysian consumers tend to deprioritize health-related purchases that are not deemed immediately essential when prices appear too high. While the original TPB framework addresses ease and control over behaviour, it does not specifically account for economic and psychological cost evaluations. Including Perceived Price Sensitivity helps contextualise Gen-Y's purchasing decisions within the real-world constraints of financial pragmatism and consumer budgeting. Hypothesis 5: *Perceived Price Sensitivity has a negative effect on Gen-Y's healthcare product purchase intention.*

## **Methods**

### *Research Design*

This study adopted a quantitative research design using a structured, self-administered online questionnaire to examine the factors influencing healthcare product purchase intentions among Generation Y (Gen-Y) consumers in Malaysia. Gen-Y is defined as individuals born between 1981 and 1996, and this group was selected due to its high engagement with digital platforms and growing awareness of preventive healthcare. The questionnaire was disseminated through various online channels, including WhatsApp, Facebook, and Instagram, targeting respondents who had experience purchasing healthcare products through e-commerce platforms such as Shopee, Lazada, or TikTok Shop. A purposive sampling technique was employed to ensure that only respondents with relevant experience were included in the study. A total of 501 valid responses were collected and subsequently used for data analysis. This sample size exceeded the minimum requirement recommended by Yamane's formula and ensured adequate statistical power for structural equation modelling.

### *Data Collection and Analysis*

The study evaluated variables such as purchase intention, attitude, subjective norms, perceived behavioural control, promotional influence, and perceived price sensitivity using a five-point Likert scale ranging from "strongly disagree" to "strongly agree." This scale is widely used to assess the level of agreement among participants regarding specific statements. Each item in the questionnaire was scored on a scale of one to five, representing the respondents' degree of agreement with each construct.

The questionnaire was divided into two main sections: Part A and Part B. Part A was designed to capture demographic information such as age, gender, education level, occupation, monthly income, and location. These details were used to describe the respondent profile and provide background context for the study. Part B focused on the factors influencing the intention to purchase healthcare products. This section included items related to the five independent variables and the dependent variable, all of which were based on previous validated measures and adapted to suit the Malaysian Gen-Y context.

The study used a quantitative research approach and employed partial least squares structural equation modelling (PLS-SEM) using SmartPLS 4.0 for data analysis. This method was chosen due to its ability to test complex models involving latent variables and its suitability for exploratory research. The analysis involved evaluating both the measurement model and the structural model to test the relationships between variables and validate the proposed hypotheses.

## Results

### *Demographic, Descriptive and Measurement Model Analysis*

This section presents a comprehensive overview of the demographic profile of the respondents, followed by descriptive statistics of the main constructs, and concludes with the assessment of the measurement model using PLS-SEM.

#### *Demographic Profile*

A total of 501 valid responses were collected and analyzed. Table 1 presents the demographic characteristics of the respondents, including age, gender, income, and education level. The majority of respondents were aged 37–40 (46.11%) and 41–44 (33.13%), which aligns with the targeted Gen-Y population. Female respondents constituted a higher proportion (61.28%) compared to males (38.72%).

In terms of income distribution, the most common income brackets were RM4,001–RM4,500 (28.74%), followed by RM4,501–RM5,000 (21.96%) and RM3,501–RM4,000 (19.36%). Educationally, most respondents held a bachelor's degree (54.49%) or diploma (30.34%), indicating a relatively well-educated sample.

Table 1

#### *Demographic Profile*

Demographic Profile	Category	Respondents (N=501)	Percentage (%)
Age	29 - 32	41	8.18
	33 - 36	63	12.57
	37 - 40	231	46.11
	41 - 44	166	33.13
Gender	Female	307	61.28
	Male	194	38.72
Income	RM 1,500 and below	5	1
	RM 1,501 - RM 2,000	4	0.8
	RM 2,001 - RM 2,500	16	3.19
	RM 2,501 - RM 3,000	28	5.59
	RM 3,001 - RM 3,500	31	6.19
	RM 3,501 - RM 4,000	97	19.36
	RM 4,001 - RM 4,500	144	28.74
	RM 4,501 - RM 5,000	110	21.96
Education	RM 5,001 and Above	66	13.17
	Bachelor's Degree	273	54.49

Diploma	152	30.34
Master's	39	7.78
Secondary	17	3.39
PhD	13	2.59
Primary	7	1.4

### *Descriptive Statistics*

Descriptive statistics were computed to understand the overall distribution of responses for the main constructs in the study. Table 2 summarizes the mean and standard deviation (SD) values of each construct. The results show that all constructs exhibit moderate to high mean values, suggesting positive perceptions and tendencies among Gen-Y consumers toward healthcare product purchases.

Attitude recorded a mean of 3.374 with a standard deviation of 0.928, indicating a neutral to slightly positive inclination toward purchasing healthcare products. Subjective Norms had a mean of 3.353 (SD = 0.959), reflecting moderate social influence in shaping purchase intention. Perceived Behavioural Control scored a mean of 3.251 with a standard deviation of 0.987, suggesting moderate confidence among respondents in their ability to make such purchases. Promotional Influence achieved a mean of 3.360 (SD = 0.916), signifying those promotions and advertisements moderately influenced purchasing behaviour. Perceived Price Sensitivity registered a mean of 3.373 with a standard deviation of 0.924, indicating average sensitivity toward pricing. Lastly, Purchase Intention recorded a mean of 3.332 (SD = 0.925), suggesting an overall moderate intention to purchase healthcare products among Gen-Y respondents.

Table 2

### *Descriptive Statistics*

No.	Constructs	Mean	Std. Deviation	Skewness		Kurtosis	
				Statistic	Std. Error	Statistic	Std. Error
1	Attitude	3.374	0.928	-0.261	0.141	-0.173	0.281
2	Subjective Norms	3.353	0.959	-0.185	0.141	-0.404	0.281
3	Perceived Behavioural Control	3.251	0.987	-0.062	0.141	-0.581	0.281
4	Promotional Influence	3.360	0.916	-0.192	0.141	-0.190	0.281
5	Perceived Price Sensitivity	3.373	0.924	-0.211	0.141	-0.228	0.281
6	Purchase Intention	3.332	0.925	-0.131	0.141	-0.287	0.281

### *Measurement Model Validation*

The measurement model was assessed using Partial Least Squares Structural Equation Modelling (PLS-SEM) to evaluate the reliability and validity of the constructs. The assessment

followed the recommended guidelines by Hair et al. (2017), including evaluation of indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Indicator Reliability was confirmed as all item loadings exceeded the minimum threshold of 0.70, indicating that the observed variables adequately reflect their respective latent constructs. Internal Consistency Reliability was measured using both Cronbach's Alpha and Composite Reliability (CR). All constructs reported values above the 0.70 threshold, confirming the reliability of the measures. Convergent Validity was established through the Average Variance Extracted (AVE), with all constructs exceeding the recommended minimum value of 0.50. This implies that more than 50% of the variance in the indicators is explained by the underlying construct. The measurement model results are presented in Table 3, validating that the constructs used in this study are both reliable and valid, thereby ensuring the robustness of subsequent structural model evaluation.

Table 3

*Measurement Model Validation*

Construct	Deleted Items	Items	Loadings	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
<b>Attitude</b>	–	ATT1	0.942	0.958	0.970	0.837
		ATT2	0.986			
		ATT3	0.985			
		ATT4	0.984			
		ATT5	0.985			
		ATT6	0.981			
		ATT7	0.987			
<b>Subjective Norms</b>	–	SN1	0.986	0.981	0.988	0.935
		SN2	0.983			
		SN3	0.988			
		SN4	0.980			
		SN5	0.986			
		SN6	0.920			
<b>Perceived Behavioural Control</b>	–	PBC1	0.980	0.943	0.962	0.781
		PBC2	0.980			
		PBC3	0.970			
		PBC4	0.968			
		PBC5	0.925			
		PBC6	0.969			
<b>Purchase Intention</b>	–	PI1	0.976	0.974	0.982	0.887
		PI2	0.987			
		PI3	0.985			
		PI4	0.983			
		PI5	0.980			
		PI6	0.976			
		PI7	0.964			
<b>Promotional Influence</b>	–	PROMO1	0.990	0.961	0.974	0.862
		PROMO2	0.985			
		PROMO3	0.985			
		PROMO4	0.984			

	PROMO5	0.984			
	PROMO6	0.958			
	PPS1	0.980	0.946	0.961	0.834
<b>Perceived Price Sensitivity</b>	PPS2	0.978			
	PPS3	0.985			
	PPS4	0.952			
	PPS5	0.969			
	PPS6	0.981			

**Main Results**

The structural model was evaluated using Partial Least Squares Structural Equation Modelling (PLS-SEM) with 5000 bootstrap resamples, following the recommendations by Hair et al. (2017). Among the five proposed hypotheses, three were supported. Promotional Influence emerged as the most influential predictor of Purchase Intention among Gen-Y consumers ( $\beta = 0.639$ ,  $t = 19.04$ ,  $p < 0.001$ ), indicating that digital marketing efforts and influencer promotions have a substantial impact on healthcare-related purchasing decisions. Perceived Behavioural Control was also significant ( $\beta = 0.200$ ,  $t = 6.15$ ,  $p < 0.001$ ), suggesting that consumers' confidence in their ability to access, afford, or evaluate products is a key driver. Subjective Norms demonstrated a significant positive relationship as well ( $\beta = 0.165$ ,  $t = 4.75$ ,  $p < 0.01$ ), highlighting the role of peer and societal influences.

Conversely, Attitude toward healthcare products was not significant ( $\beta = 0.019$ ,  $t = 0.18$ ,  $p > 0.05$ ), and Perceived Price Sensitivity also showed no meaningful effect ( $\beta = -0.017$ ,  $t = 0.45$ ,  $p > 0.05$ ). These results suggest that while individual preferences and price concerns may exist, they are outweighed by marketing influence, perceived behavioural control, and social expectations in determining purchase intentions. Accordingly, H2, H3, and H4 were supported, while H1 and H5 were not.

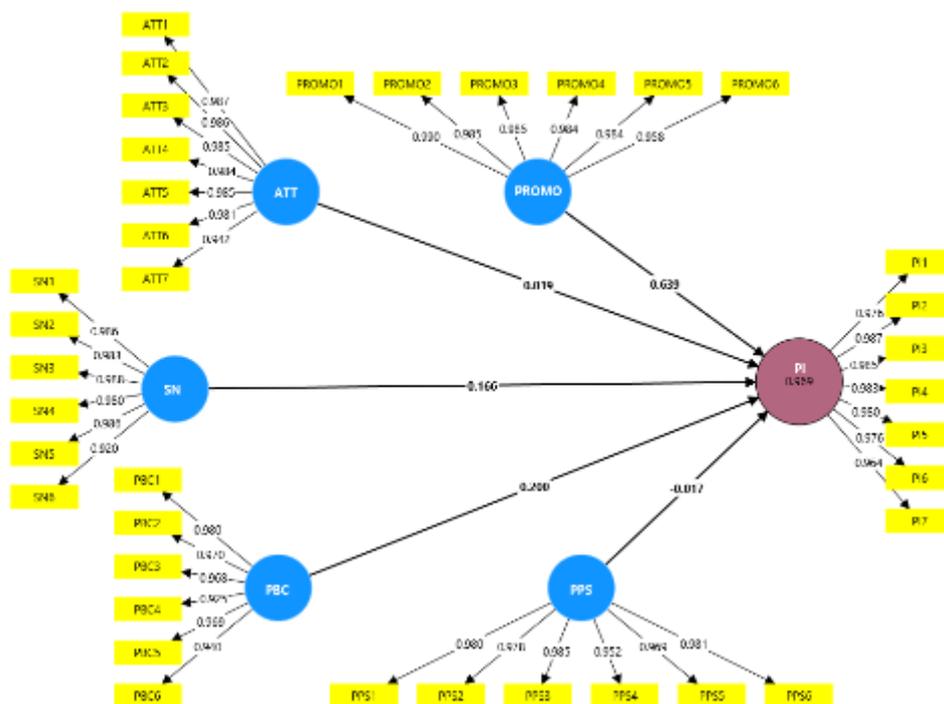


Figure 2 Structural Model Diagram

Table 4

*Hypothesis Testing Results*

Hypothesis	Relationship	Standard Beta	Standard Deviation	T-Value	P-Value	Decision
H1	Attitude → Purchase Intention	0.019	0.103	0.18	0.857	Not Supported
H2	Subjective Norms → Purchase Intention	0.165	0.035	4.75	0.000	Supported
H3	Perceived Behavioural Control → Purchase Intention	0.200	0.033	6.15	0.000	Supported
H4	Promotional Influence → Purchase Intention	0.639	0.034	19.04	0.000	Supported
H5	Perceived Price Sensitivity → Purchase Intention	-0.017	0.037	0.45	0.653	Not Supported

*Model Evaluation Summary*

The structural model's adequacy was assessed through the model's explanatory power ( $R^2$  and adjusted  $R^2$ ), effect sizes ( $f^2$ ), and predictive relevance ( $Q^2$ ). As shown in Table 5, the  $R^2$  value for Purchase Intention was 0.969, with an adjusted  $R^2$  of 0.968, indicating that the model explains a substantial portion of the variance in the dependent variable. Among the predictors, Promotional Influence exhibited the strongest effect size ( $f^2 = 0.748$ ), followed by Perceived Behavioural Control ( $f^2 = 0.051$ ) and Subjective Norms ( $f^2 = 0.032$ ). Attitude and Perceived Price Sensitivity had trivial effect sizes ( $f^2 = 0.001$  each), reflecting limited predictive contribution. The  $Q^2$  value of 0.623 further demonstrated the model's high predictive relevance, confirming that the extended TPB framework used in this study provides reliable and meaningful insights into Gen-Y healthcare product purchase intentions.

Table 5

*Model Evaluation Summary*

Hypothesis	Relationship	R <sup>2</sup>	R <sup>2</sup> Adjusted	f <sup>2</sup>	Q <sup>2</sup>
H1	ATT → PI	0.969	0.968	0.001	0.623
H2	SN → PI			0.032	
H3	PBC → PI			0.051	
H4	PROMO → PI			0.748	
H5	PPS → PI			0.001	

*Summary of Predictive Relevance*

Although no additional robustness or moderation analyses were conducted, the model demonstrated strong predictive relevance as indicated by the high values of R<sup>2</sup> (0.969), adjusted R<sup>2</sup> (0.968), f<sup>2</sup>, and Q<sup>2</sup> (0.623). The dominant role of Promotional Influence, followed by Perceived Behavioural Control and Subjective Norms, highlights the critical influence of external marketing stimuli and consumers' perceived control in shaping the healthcare product purchase intentions of Malaysian Gen-Y. These findings affirm that the extended TPB model is not only statistically robust but also practically meaningful in capturing the complex decision-making processes of this demographic group.

**Discussion**

This study examined the factors influencing healthcare product purchase intentions among Generation Y (Gen-Y) consumers in Malaysia by extending the theory of planned behaviour (TPB) with two additional constructs: Promotional Influence and Perceived Price Sensitivity. Drawing on data collected from 501 respondents and analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM), the findings confirmed support for three out of the five proposed hypotheses.

Promotional Influence was identified as the most significant predictor of purchase intention ( $\beta = 0.639$ ,  $p < 0.001$ ), indicating that digital marketing strategies and influencer-led promotions play a central role in shaping Gen-Y's health-related purchasing decisions. This result is consistent with prior literature suggesting that targeted social media advertisements, limited time offers, and influencer endorsements are powerful drivers of purchase behaviour, particularly among younger and digitally connected consumers (Man et al., 2022; Chong et al., 2023). The dominance of promotional triggers over intrinsic evaluative processes underscores the susceptibility of Gen-Y to extrinsic marketing cues in a digital-first economy. In alignment with TPB assumptions, Perceived Behavioural Control ( $\beta = 0.200$ ,  $p < 0.001$ ) and Subjective Norms ( $\beta = 0.165$ ,  $p < 0.01$ ) were also found to have significant positive effects on purchase intention. These findings validate Ajzen's (1991) theoretical assertion that behavioural intentions are influenced by both the perceived ease of performing the behaviour

and the social pressures surrounding it. The significance of these variables highlights the importance of perceived accessibility (e.g., affordability, product availability) and the influence of peer groups, online communities, and social norms in shaping Gen-Y's healthcare purchasing patterns.

Contrary to expectations, Attitude toward healthcare products ( $\beta = 0.019$ ,  $p > 0.05$ ) did not significantly influence purchase intention. While this finding deviates from traditional TPB outcomes and past studies emphasizing the importance of personal evaluations (Yadav & Pathak, 2016), it may reflect a shift among Gen-Y consumers towards more reactive and context-driven purchasing decisions. In digital environments saturated with persuasive marketing, underlying beliefs may be diluted by more salient promotional stimuli and peer endorsements.

Similarly, Perceived Price Sensitivity ( $\beta = -0.017$ ,  $p > 0.05$ ) did not emerge as a significant predictor, suggesting that Gen-Y consumers may place less emphasis on affordability when the perceived value, convenience, or promotional benefits are high. This aligns with research indicating that younger consumers often prioritize brand credibility, digital convenience, and influencer trust over price considerations (Lim et al., 2023).

In sum, the findings reaffirm the theoretical strength of TPB while substantiating the inclusion of Promotional Influence as a critical extension. Although Attitude and Price Sensitivity were not significant, the confirmed influence of Subjective Norms and Perceived Behavioural Control suggests that Gen-Y healthcare purchasing is socially driven and shaped by perceived self-efficacy. The results highlight a behavioural paradigm increasingly influenced by digital marketing ecosystems and peer-driven consumption norms, offering important insights for both academics and practitioners.

### **Limitation and Future Research**

While this study offers important insights into the purchase intentions of healthcare products among Gen-Y consumers in Malaysia, it is not without limitations. Addressing these limitations could enhance both theoretical understanding and practical relevance in future research.

Firstly, the use of a cross-sectional research design limits the ability to infer causality or observe behavioural changes over time. This approach captures consumer intentions at a single point, potentially overlooking how factors such as economic shifts, health crises, or promotional trends evolve and influence consumer decisions longitudinally. Future research is encouraged to adopt longitudinal or panel study designs to track changes in Gen-Y's healthcare product consumption over time and better understand the durability of promotional effects.

Secondly, the study employed non-probability purposive sampling, which constrains the generalizability of the findings to the broader Malaysian Gen-Y population. Although efforts were made to capture a demographically diverse and digitally active group, the sample may not reflect less-connected or rural Gen-Y individuals. Future research should consider adopting probability sampling techniques or comparative generational studies involving Baby

Boomers, Gen X, and Gen Z to provide a richer perspective on generational differences in healthcare consumption.

Thirdly, the research measured behavioural intention rather than actual purchasing behaviour. While intention is a well-established proxy for behaviour, it does not always translate into action. Incorporating behavioural tracking data, such as online purchase histories or transaction logs, would offer stronger empirical validation of the proposed model and reveal gaps between intention and behaviour.

Fourth, although the study extended the TPB by incorporating Promotional Influence and Perceived Price Sensitivity, several other potentially impactful variables were not included. Constructs such as trust in e-commerce platforms, perceived product efficacy, health consciousness, and digital health literacy may provide additional explanatory value. Future research could integrate theories such as the Health Belief Model (HBM), Unified Theory of Acceptance and Use of Technology (UTAUT), or Technology Acceptance Model (TAM) to develop more comprehensive predictive frameworks.

Lastly, the study aggregated digital promotions under a single construct without distinguishing between different promotional formats. Given the varying influence of influencer endorsements, flash sales, health education campaigns, and bundled pricing, future studies could explore the differential impact of these strategies. Additionally, examining mediating or moderating variables such as trust, emotional appeal, or perceived risk could offer nuanced insights into how promotional messages shape consumer intentions. By addressing these limitations, future research can deepen the theoretical contributions and practical implications of behavioural models in the context of healthcare product marketing, especially among digitally native populations such as Gen-Y.

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