Shaping Consumer Intention in Emerging Markets: The Role of Personality Traits in Foreign Product Preference

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ABSTRACT

This study examines what drives consumers in an emerging market to choose foreign hygiene products, using the Theory of Planned Behaviour (TPB) as its foundation. It focuses on two key influences, social norms and perceived behavioural control and explores whether personality traits play a mediating role in shaping purchase intention. Data were gathered from 260 Malaysian consumers through a structured survey and analysed using partial least squares structural equation modelling (PLS-SEM). The findings show that both social norms and perceived control significantly affect purchase intention. Perceived control also shapes personality traits, which themselves influence intention, though personality traits do not mediate the overall relationships. By extending TPB with personality factors, this study sheds light on consumer decision-making in the context of foreign products, an area often overlooked in emerging market research. From a business perspective, the results suggest that companies should focus on strengthening consumers' sense of control and responding to social influence rather than relying on personality-based segmentation. These insights are valuable for multinational firms and local entrepreneurs aiming to refine product positioning and build stronger connections with consumers in globalised markets.

1. Introduction

The health and beauty sectors in Malaysia have experienced rapid growth over the past decade, reflecting changing consumer preferences and increased spending power. According to the International Trade Administration (ITA, 2024), major international brands have successfully established a string foothold in Malaysia's hygiene and personal care market. Supporting this trend, the Department of Statistics Malaysia (DOSM) reported that Malaysian consumers spent approximately USD 407 million on imported toiletries and cosmetics in 2013. This figure underscores the market's significant potential and increasing demand for foreign-made hygiene products. Despite the sector's robust expansion, scholarly attention

towards understanding the underlying behavioural drivers of consumer purchase intentions remains insufficient, particularly in emerging market contexts such as Malaysia.

In the broader landscape of consumer behaviour research, PT have been acknowledged as pivotal in shaping purchasing decisions. Amichai-Hamburger (2002) highlighted the relevance of personality factors in determining consumer behaviour. However, empirical investigations that specifically integrate PT into models of purchase intention, especially in the hygiene product domain are still limited (Anser et al., 2021). Moreover, existing studies have predominantly focused on general product categories in developed markets, overlooking cultural and socio-economic distinctions present in emerging economies. This gap signals the need for a more nuanced understanding of how individual-level psychological factors, such as PT, interact with social pressures and perceived control to influence hygiene product purchase decision-making. Ali et al. (2024) highlighted that Malaysian consumers demonstrate varying levels of psychological and neurological readiness suggesting that these factors play a crucial role in shaping purchasing behaviour and consumer decision making.

Malaysia, as a culturally diverse and economically developing nation, presents a unique context where Western hygiene brands co-exist with local cultural norms. This setting necessitates deeper inquiry into how individual-level psychological factors interact with broader social and behavioural determinants. Given this background, the present study aims to examine the mediating role of PT in the relationship between SN and PBC on INT among selected Malaysian consumers. By doing so, the study contributes to closing the empirical gap in the literature and provides practical insights for international marketers targeting emerging markets.

2.   Literature review

This current study forms a framework using the Theory of Planned Behaviour (TPB) and the Big Five Personality Traits which consists of openness to experience (OPE), Conscientiousness (CONS), Extraversion (EXT), Agreeableness (AGR), and Neuroticism (NEU). The aim of the present study is to examine the SN and PBC towards INT among millennial consumers in Malaysia with mediate effect of PT. A previous Malaysian study on personal care products with Generation Y or Millennial found that SN and PBC had influence on purchase intention but attitude was not a significant predictor (Mohamad Yunus et al., 2018). Furthermore, to maintain model parsimony and reduce multicollinearity, the analysis focused on the two predictors most relevant to the study context. Hence attitude was excluded to enable clearer interpretation of the results while aligning with the main objectives of this study.

According to Smith and Nichols, millennials are the individuals born between 1980 and 2000. Millennial was chosen since it is one the generations that dominate the workplace (Kaifi et al., 2012). According to PwC survey, the millennial generation born between 1980 and 2000 has shape the world of work for years to come in which as of 2020, millennial will form 50 per cent of the global workforce. Statista (2023) mentioned that millennial is the largest group that will be a major part of the population in many years. As at 2019, there are 1.8 billion millennials around the world that contribute to 23 per cent of the global population (Neufeld, 2021). Being the most powerful spending generation, the millennial spending habits and their undeniable buying power attracted the marketers everywhere. This generation is willing to pay a premium for products that reflect their ethical values and brands that engage in fair trade practice (Gupta et al., 2018). Millennials are particularly concerned with health and wellness (Friedman et al., 2019). This significantly affects their hygiene product choices. Hygiene products (e.g. soap, toothpaste, deodorant) are directly linked to health and well-being. Table 1 highlights the proportion and size of the millennial population across regions. This demographic distribution is relevant to the present study because millennials represent the most powerful spending generation.

Table 1. Revision of World Population Prospects

Region	Millennials % of Region Population	Number
Asia	24 %	1.1B
Africa	21 %	278M
Latin America/Caribbean	23 %	155M
Europe	20 %	148M
North America	21 %	76M
Oceania	22 %	9M
World	23 %	1.8B

Source: United Nations (2019)

One notable gap in the literature is the integration of PT into TPB-based models. Although Amichai-Hamburger (2002) argued that personality is a fundament determinant of consumer choice, most studies have neglected this variable in the context of hygiene product consumption. Recent works by Anser et al. (2021) suggest that incorporating PT may significantly enhance the predictive power of behavioural model. These traits shape how consumers process social influence and exert control over their purchasing action, thereby potentially mediating the effects of SN and PBC.

2.1 Theory of Planned Behaviour (TPB)

According to TPB, behavioural intention is determined by attitude, subjective norm, and perceived behavioural control. However, this present study chooses to examine only SN and PBC as Ajzen (1991) acknowledged that the model can be extended, modified, and partially applied, depending on the research context. Within this framework, SN refers to the perceived social pressure to perform or not to perform a certain behaviour, while PBC reflects one's perceived ease or difficulty of performing that behaviour (Ajzen, 1991). The TPB was developed by Icek Ajzen in the 1980s as an extension of the Theory of Reasoned Action (TRA), which proposed earlier by Ajzen and Fishbein in 1975. Ajzen expanded the TRA to the TPB in 1991 by adding a third component, PBC. TPB has been known as the most influential theory and has been extensively used to explain and predict various forms of consumer behaviour, including purchase intentions.

2.1.1 Subjective Norm (SN) and Purchase Intention (INT)

In the context of hygiene product consumption, SN is particularly relevant in collectivist societies like Malaysia, where group influence and cultural expectations significantly affect individual decisions (Chin et al., 2018). Ajzen (1991) defined subjective norms as the perceived social pressures an individual feels to engage in a particular behaviour, such as making a purchase. These norms are shaped by what individuals believe significant others, such as family and friends, expect of them. Karahanna, Straub, and Chervany (1999) stated that, although SN can be divided into informational and normative influence, the typical application of TPB holds that the SN only includes the normative influence (family and friends). Boon, Fern, and Chee (2020) found that there is no significant relationship between subjective norm and purchase intention. Past studies have affirmed that SN is a strong predictor of purchase intention in Asian markets, especially for products tied to personal care and image (Ng et al., 2014). The study proposes the following hypothesis:

H1: Subjective norm (SN) has a positive effect on purchase intention (INT)

2.1.2 Perceived Behavioural Control (PBC) and Purchase Intention (INT)

Perceived behavioural control is the perception of people regarding the difficulty or ease to perform a behaviour (Ajzen, 2002). Ajzen (1991) stated that PBC reveals the perception of whether the behaviour is

controllable (control beliefs of resources and opportunities). In the context of purchase intention, PBC encompasses factors such as resources, skills, and external barriers that affect the likelihood of engaging in a purchase. If a n individual feels they have high control (e.g., financial resources), they are more likely to form stronger purchase intentions (Ajzen, 1991). Conversely, if someone believes a product is too expensive or unavailable, their perceive control over purchasing is reduced, weakening their intent to purchase (Cheng et al., 2014). Boon et al. (2020) found that there was no significant relationship between PBC and purchase intention. However, Rohm et al. (2012) stated that recommendations and endorsement from friends can have strong impact on their purchase intentions. PBC has shown positive effects on consumer intention, especially when access, affordability, or product knowledge varies across different market segments (Yadav and Pathak, 2016). The study proposes the following hypothesis:

H2: Perceived behavioural control (PBC) has a positive effect on purchase intention (INT)

2.2 Big-Five Personality Traits Model

Goldberg (1992) suggested that the five dimension personality traits model, also known as the "big five" which comprises of Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. McCrae and Costa (1992) proposed the Five-Factor Theory as an attempt to conceptualize the findings about personality traits. Bosnjak et al. (2007) stated that customers' personality positively affected the customers 'consumption choices. Huang (2024) highlights that PT significantly influence consume choices, including preferences for product attributes and brand selections for instance, individuals high in OPE are inclined towards innovative and novel products, while conscientious consumers tend to make deliberate and health-conscious choices, aligning with the selection of quality hygiene products. In the Malaysian context, Jie et al. (2024) found that extraversion and neuroticism are strong predictors of impulsive buying behaviour. This suggests that highly extroverted individuals may be more susceptible to social influences in purchasing decisions while those with high neuroticism may engage in impulsive buying as a coping mechanism. These insights are crucial for marketers aiming to tailor strategies that resonate with specific personality profiles. Furthermore, integrating the Big-Five PT into the TPB framework can enhance the predictive power of models assessing INT. While TPB considers SN and PBC as key determinants, incorporating PT offers a more nuanced understanding of consumer behaviour. For instance, agreeable individuals may be more influenced by social expectations (SN), whereas conscientious individuals may perceive higher control over their purchasing decisions. Despite growing body of research, there remains a paucity of studies examining the mediating role of PT between TPB constructs and INT in the hygiene product sector within emerging markets. Addressing this gap, the current study aims to examining how the Big-Five mediate the relationships between SN, PBC, and INT among Malaysian consumers. This approach not only contributes to theoretical advancements but also provides practical insights for developing targeted marketing strategies in culturally diverse and economically developing contexts.

2.2.1 Subjective Norm (SN) and Personality Traits (PT)

The relationship between SN, PT, and purchase intention is a key area of interest in consumer behaviour research. In understanding how consumer makes purchase decisions, both SN and PT are crucial factors. According to Bagozzi et al. (2000), extraverts may have stronger purchase intention when they perceive that a product is popular or favoured by their social circle. Agreeable individual likely to conform to SN, which can increase their intention to purchase products endorsed by those they care about (John and Srivastava, 1999). Gupta and Pathak (2012) highlighted that agreeable consumers are more likely to exhibit higher purchase intentions in response to positive SN. According to Robers et al. (2006), highly conscientiousness consumers may still be influenced by subjective norms if they align with their personal values. Those high in OPE may be less influenced by SN due to tendency to seek novelty and more drive by personal preferences which can either increase or decrease purchase intention depending how much the product aligns with their desire (McCrae, 1996).

H3**:** Subjective norm (SN) has a positive effect on purchase intention (INT) mediated by personality traits (PT)

2.2.2 Perceived Behavioural Control (PBC) and Personality Traits (PT)

PT have been found to influence how individuals perceived their control over behaviours, including purchase decisions. PT may affect how consumers assess their ability to make purchases or their confidence in the ability to overcome barriers to purchase. According to Bagozzi et al. (2000), EXT individuals and their openness to social interaction and new experiences may also reduce perceived barrier, leading to higher purchase intentions. Higher CONS can be associated with increased purchase intention, especially goal-directed purchases (Roberts et al., 2006). People in high OPE might perceived fewer barriers to trying new products and this potentially increase their perceived behavioural control and purchase intention (McCrae, 1996). AGR individuals may feel more comfortable purchasing when they perceive social support or approval, thus increasing their perceived behavioural control (John and Srivastava, 1999).

H4**:** Perceived behavioural control (PBC) has a positive effect on purchase intention (INT) mediated by personality traits (PT)

2.2.3 Personality Traits (PT) and Purchase Intention (INT)

Personality traits based on the Big-Five model have been found to significantly influence purchase intention across various consumer contexts. Consumers high in OPE showing stronger intention to purchase (Syed et al., 2024). CONS individuals often make consumption decision based on trust and information reliability (Zhang et al., 2024). Zhao et al. (2018) examined how PT influence consumer decisions in the context of purchase, showing that EXT and AGR positively correlated with purchase intentions driven by social influence. Those high in EXT are socially oriented, particularly in environments with high social interaction, while AGR enhance purchase intention for ethically marketed products and peer-recommended items (Syed et al., 2024). Meanwhile NEU shows a dual effect, which some individuals engage in impulsive buying while others ae risk-averse, leading to reduced purchase intention (Ali and Hassan, 2024). According to Vu et al. (2022), big-five traits significantly influence the purchase attitudes and further influencing purchase intention.

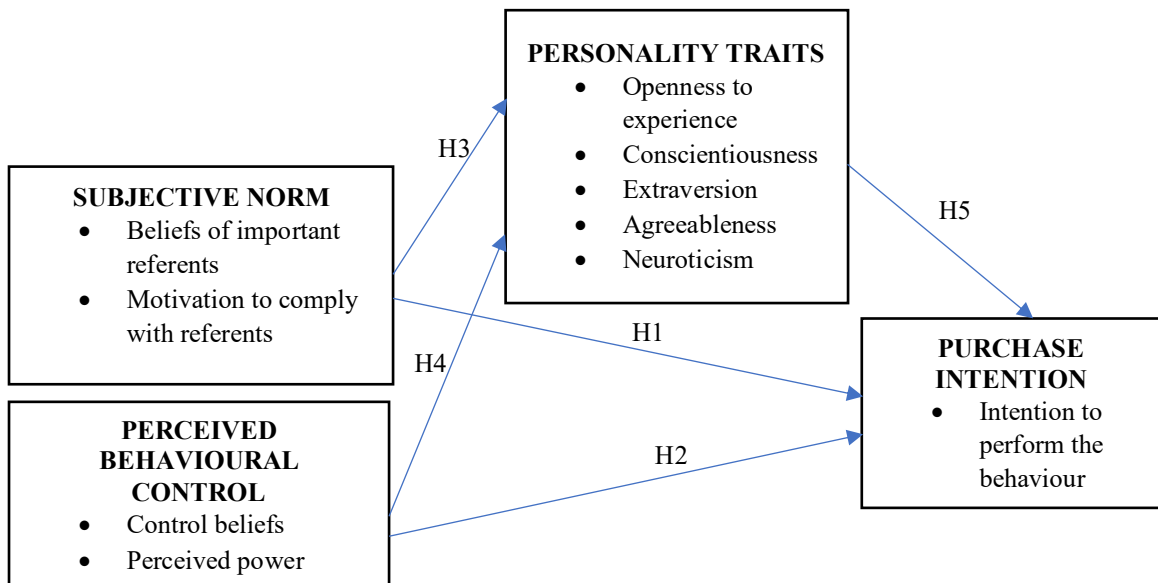H5**:** Personality traits (PT) have a positive effect on purchase intention (INT).

Figure 1: Theoretical framework

3.　Methodology

This study employed a purposive sampling method to collect primary data from Malaysian consumers across all 13 states and 3 federal territories. According to priori power analysis using G*Power 3.1.9.4, the minimum required sample size for medium effect size at a power level of 0.80 was 77 respondents. However, to improve the statistical power and representativeness of the findings, a total of 260 valid responses were obtained and used for further analysis. A structured, self-administered questionnaire was developed as the primary data collection instrument. The questionnaire consisted of three sections which are (i) demographic information, (ii) independent and dependent variables, and (iii) mediating variable. The independent variables included Subjective Norm (SN), and Perceived Behavioural Control (PBC), while the dependent variable was Purchase Intention (INT). The mediating variable, Personality Traits (PT), was conceptualized using the Big Five dimensions: Openness (OPE), Conscientiousness (CONS), Extraversion (EXT), Agreeableness (AGR), and Neuroticism (NEU).

A total of six items were used to measure SN, six items for PBC, and six items for INT. PT was measured through 24 items: five items each for OPE, CONS, EXT, and NEU, and four items for AGR. All items were adapted from established scales in previous literature and were measured using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Prior to the main data collection, the instrument underwent content validity by a panel of three academic experts. Three to ten experts are typically sufficient for content validity assessment (Polit and Beck, 2006). A pilot study involving 79 respondents was conducted to assess the reliability and clarity of the questionnaire. All constructs demonstrated acceptable internal consistency, with Cronbach's alpha values exceeding 0.70, satisfying the recommended threshold (Hair et al., 2021).

This study obtained ethical approval from the university's Research Ethics Committee. Participation was voluntary, and respondents were informed of the rights and data confidentiality. Anonymity and informed consent were ensured throughout the data collection process. Data were first screened and analysed using IBM SPSS Statistics version 28.0 for descriptive statistics and data cleaning. For hypothesis testing and model valuation, Partial Least Squares Structural Equation Modelling (PLS-SEM) was employed using SmartPLS version 4.0. the mediating construct, PT, was modelled as a reflective-reflective higher-order construct (HOC), comprising five reflective fist-order constructs. The repeated indicators approach was applied to estimate the HOC in accordance with the procedures recommended by Hair et al. (2021).

4.　Findings

This study aims at examining the relationships between SN and PBC towards INT of hygiene product among millennial consumers in Malaysia mediated by PT. A total of 260 responses were used for this present study analysis. For the demographic analysis, there was 170 female respondents and 90 male respondents. There were 90 respondents age between 24-30 years old, 84 respondents age between 31-37 years old, and 86 respondents age between 38-44 years old. There were 7 respondents of salary less than RM1500, 105 respondents of salary between RM1501-RM4000, 69 respondents of salary between RM4001-RM6000, 59 respondents of salary between RM6501-RM9000, and 20 respondents with salary more than RM9000.

Based on Table 2, the results show that all the item loadings are between 0.665 to 0.956 which indicate that all item loadings meet the minimum requirement of 0.65 as the threshold value for factor loadings (Hair, Black, Babin, and Anderson, 2010). The Cronbach's Alpha and composite reliability (CR) values are greater than the threshold value of 0.7 which indicates that high reliability and strong internal

consistency. The AVE values are greater are greater than the threshold value of 0.5. Hence, the reliability and convergent validity of the instruments used are confirmed.

Table 2. Construct reliability and validity

Construct	Loadings	AVE	CR	Cronbach's alpha
I1	0.878	0.854	0.972	0.966
I2	0.920			
I3	0.929			
I4	0.951			
I5	0.936			
I6	0.930			
SN1	0.907	0.859	0.973	0.967
SN2	0.899			
SN3	0.956			
SN4	0.956			
SN5	0.929			
SN6	0.913			
P1	0.835	0.739	0.944	0.929
P2	0.885			
P3	0.864			
P4	0.913			
P5	0.842			
P6	0.816			
O1	0.722	0.669	0.909	0.874
O2	0.864			
O3	0.825			
O4	0.764			
O5	0.900			
S1	0.834	0.644	0.900	0.860
S2	0.822			
S3	0.827			
S4	0.851			
S5	0.665			
T1	0.849	0.710	0.924	0.897
T2	0.897			
T3	0.902			
T4	0.848			
T5	0.702			
G1	0.854	0.645	0.878	0.816
G2	0.667			
G4	0.857			
G5	0.819			
N1	0.817	0.718	0.927	0.910
N2	0.862			
N3	0.839			
N4	0.837			
N5	0.880			

    The discriminant validity was assessed using the Fornell and Larcker's criterion. Discriminant validity of the model is assessed and the indicators should load more strongly on their own constructs than on other constricts in the model (Fornell and Larcker, 1981). The correlations and discriminant validity are shown in Table 3. Based on the findings, the result shows that the square root of AVE exceed the correlations between the measure and all the other constructs. Hence, all constructs exhibit satisfactory discriminant validity in which the square root of AVE is larger than the correlations for all reflective constructs. This present study had proven that all reliability and validity tests conducted for the measurement model had achieved the satisfactory level.

Table 3. Fornell and Lacker's Criterion

	AGR	CONS	EXT	INT	NEU	OPE	PBC	SN
AGR	0.803							
CONS	0.534	0.803						
EXT	0.461	0.412	0.843					
INT	0.218	0.212	0.215	0.924				
NEU	0.100	0.167	0.132	-0.125	0.847			
OPE	0.498	0.655	0.448	0.193	0.072	0.818		
PBC	0.416	0.462	0.268	0.647	0.067	0.445	0.860	
SN	0.212	0.225	0.253	0.702	-0.139	0.152	0.535	0.927

    Table 4 depicts a method of discriminant analysis by means of comparing the cross loadings between constructs and each indicator shown in the table load high on its own constructs but low on other constructs. This indicates that the discriminant validity is achieved as the constructs are distinctly different from each other.

Table 4. Cross loadings

	AGR	CONS	EXT	INT	NEU	OPE	PBC	SN
I1	0.224	0.202	0.191	0.878	-0.116	0.173	0.583	0.601
I2	0.226	0.225	0.237	0.920	-0.093	0.201	0.600	0.642
I3	0.202	0.205	0.187	0.929	-0.107	0.184	0.597	0.634
I4	0.200	0.183	0.199	0.951	-0.110	0.170	0.607	0.669
I5	0.183	0.195	0.197	0.936	-0.142	0.179	0.595	0.659
I6	0.180	0.166	0.180	0.930	-0.122	0.163	0.607	0.683
SN1	0.225	0.269	0.290	0.584	-0.116	0.207	0.489	0.907
SN2	0.195	0.241	0.279	0.661	-0.102	0.171	0.539	0.899
SN3	0.198	0.201	0.234	0.669	-0.114	0.149	0.524	0.956
SN4	0.204	0.206	0.268	0.665	-0.139	0.147	0.484	0.956
SN5	0.170	0.168	0.168	0.666	-0.162	0.076	0.454	0.929
SN6	0.186	0.165	0.163	0.653	-0.139	0.095	0.483	0.913
P1	0.344	0.312	0.236	0.718	0.002	0.279	0.835	0.606
P2	0.371	0.430	0.259	0.548	0.048	0.356	0.885	0.486
P3	0.368	0.396	0.247	0.587	0.093	0.405	0.864	0.512
P4	0.360	0.475	0.258	0.505	0.052	0.434	0.913	0.408
P5	0.353	0.411	0.170	0.436	0.056	0.440	0.842	0.313
P6	0.350	0.367	0.201	0.503	0.101	0.400	0.816	0.391
O1	0.345	0.517	0.489	0.029	0.163	0.722	0.203	0.105
O2	0.427	0.553	0.325	0.172	0.074	0.864	0.374	0.133
O3	0.425	0.495	0.339	0.245	-0.073	0.825	0.470	0.159
O4	0.367	0.482	0.284	0.164	0.068	0.764	0.329	0.083

O5	0.461	0.618	0.390	0.179	0.062	0.900	0.433	0.137
S1	0.428	0.834	0.331	0.187	0.153	0.673	0.475	0.173
S2	0.402	0.822	0.319	0.196	0.117	0.526	0.433	0.264
S3	0.470	0.827	0.256	0.185	0.046	0.571	0.413	0.145
S4	0.473	0.851	0.363	0.170	0.142	0.496	0.369	0.177
S5	0.364	0.665	0.399	0.102	0.227	0.327	0.118	0.141
T1	0.369	0.262	0.849	0.224	0.013	0.327	0.202	0.227
T2	0.410	0.447	0.897	0.197	0.110	0.466	0.244	0.216
T3	0.469	0.480	0.902	0.198	0.136	0.499	0.279	0.240
T4	0.407	0.215	0.848	0.161	0.167	0.291	0.228	0.202
T5	0.253	0.262	0.702	0.112	0.131	0.236	0.153	0.172
G1	0.854	0.543	0.411	0.203	0.104	0.472	0.387	0.170
G2	0.667	0.230	0.246	0.093	0.068	0.205	0.154	0.148
G3	0.857	0.480	0.379	0.197	0.088	0.458	0.410	0.202
G4	0.819	0.396	0.415	0.185	0.059	0.403	0.328	0.160
N1	0.017	0.121	0.067	-0.071	0.817	-0.013	0.035	-0.064
N2	0.021	0.091	0.081	-0.118	0.862	-0.033	0.001	-0.127
N3	0.020	0.089	0.061	-0.080	0.839	-0.004	0.005	-0.079
N4	0.041	0.110	0.108	-0.124	0.837	0.020	0.064	-0.152
N5	0.188	0.209	0.166	-0.118	0.880	0.177	0.105	-0.136

As shown in the Table 5, all the values fulfil the criterion of HTMT 0.85 and this indicates that discriminant validity has been ascertained. The result of HTMT inference also shows that the confidence internal does not show a value of 1 on any of the constructs that confirms the discriminant validity.

Table 5. HTMT Criterion

	AGR	CONS	EXT	INT	NEU	OPE	PBC	SN
AGR								
CONS	0.614							
EXT	0.519	0.457						
INT	0.238	0.231	0.228					
NEU	0.097	0.181	0.138	0.127				
OPE	0.566	0.746	0.488	0.212	0.123			
PBC	0.457	0.508	0.285	0.675	0.072	0.497		
SN	0.238	0.247	0.270	0.725	0.139	0.165	0.555	

Based on the analysis above, the positive results in key measures indicate that the model is acceptable. The positive item loadings indicate that the items are strongly related to their respective constructs. Cronbach's alpha result suggests that the construct has good internal consistency that means that the items within a construct are reliable. The positive results in discriminant validity indicate that each construct is distinct and does not overlap too much with others. In summary, positive values in these tests show that the model is reliable, valid and accurately reflects the relationships between variables.

4.1 Structural model assessment

To test the hypothesized relationships, bootstrapping (with 5000 sub-samples) was performed using SmartPLS 4.0. All hypotheses were tested by examining the significance of respective path coefficients.
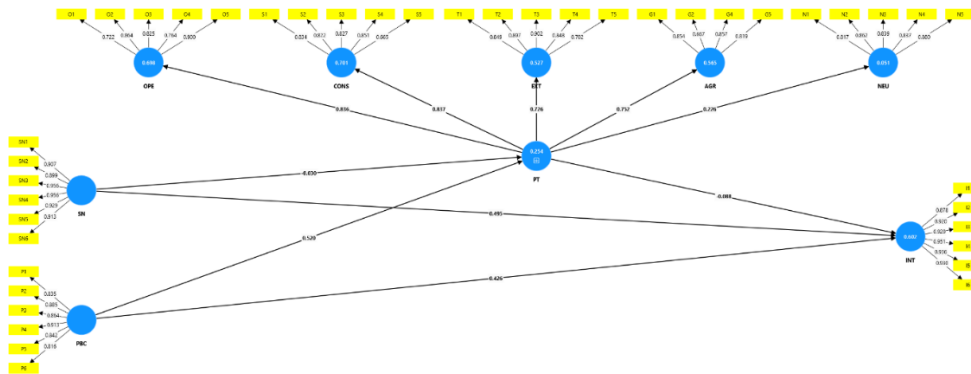
Figure 2. Measurement model

Table 6. Higher order measurement model

Path	β	SE	*t*-value	*p*-value	Decision	VIF	F2	R2
PT -> OPE	0.836	0.023	35.861	0.000	Supported	1.000	2.313	0.698
PT -> CONS	0.837	0.025	33.868	0.000	Supported	1.000	2.345	0.701
PT -> EXT	0.726	0.036	20.172	0.000	Supported	1.000	1.112	0.527
PT -> AGR	0.752	0.041	18.296	0.000	Supported	1.000	1.300	0.565
PT -> NEU	0.226	0.080	2.811	0.005	Supported	1.000	0.054	0.051

Each first-order constructs were evaluated for internal consistency reliability, convergent validity, and discriminant validity. Using the repeated indicator approach, all indicators from the five first-order constructs were assigned to the higher-order construct personality traits. The result demonstrated that outer loadings of the five first-order constructs on the HOC all positive and statistically significant (p<0.001). As shown in Table 6, the relationships between the higher-order construct and its lower construct of Personality Traits (PT) are significant with p values <0.05. therefore, it implies that the results have met the required evaluation criteria for the higher-order measurement model.

Table 7. Structural model assessment

Path	β	SE	T value	*p*-value	Decision	VIF	F2	R2
SN -> INT	0.495	0.051	9.760	0.000	Supported	1.403	0.439	0.602
PBC -> INT	0.426	0.054	7.924	0.000	Supported	1.764	0.259	
PT -> INT	-0.088	0.042	2.080	0.038	Supported	1.341	0.014	
SN -> PT	-0.030	0.066	0.458	0.647	Not supported	1.402	0.001	0.254
PBC -> PT	0.520	0.068	7.698	0.000	Supported	1.402	0.258	

The variance inflator factor (VIF) is used to check multicollinearity. As shown in table 7, the VIF for the direct path is less than 5.0 (Hair et al., 2017) therefore acceptable. The path coefficient which is the T value for PBC -> PT -> INT and SN -> PT -> INT were 1.873 and 0.396 respectively. Therefore, both paths are not significant at 0.05 level of significance. Coefficient of determination (R^2) for all paths were 0.602 and 0.254 respectively and above the 0.26 value as suggested by Cohen (1988) which indicates a substantial model. Next, the effect size (F2) of this present study was very insignificant with 0.003, however, not for PT -> INT and SN -> PT.

4.2 *Mediation analysis*

Table 8. Mediation analysis

Path	β	SE	*t*-value	*p*-value	Confidence Interval		Decision
					LL (2.5%)	UL (97.5%)	
PBC -> PT -> INT	-0.046	0.024	1.873	0.061	-0.103	-0.004	Not supported
SN -> PT -> INT	0.003	0.007	0.396	0.692	-0.007	0.021	Not supported

In the structural model assessment in Table 7, there were positive relationships between SN and INT, PBC and INT, PT and INT, and PBC and PT. However, there was a negative relationship found between SN and PT. Based on this study, the mediation analysis in Table 8 shown that PT did not mediate the relationships between PBC and SN with INT.

Out of seven hypotheses proposed, four are supported and three not supported. Since PT was found not mediating the relationships between PBC and SN and INT, perhaps in future literature can use PT as moderating variable. Cheng et al. (2014) found that PBC directly influenced INT, with PT like conscientiousness and openness moderating the relationship. To summarize, the findings of this current study recognize the positive relationships between personality traits, social norm and perceived behavioural control with purchase intention, and perceived behavioural control and personality traits.

5.   Conclusion

This study extends the Theory of Planned Behaviour (TPB) by examining personality traits (PT) alongside perceived behavioural control (PBC) and subjective norms (SN) in predicting purchase intention (INT). Findings show that PT, PBC, and SN directly influence INT, with PT serving as an independent predictor rather than a mediator. The association between PBC and PT suggests that perceived control can shape how personality is expressed in consumer choices. Theoretically, this study refines the TPB framework by clarifying the role of PT and reaffirming the central influence of PBC. Empirically, the results highlight consumer decision-making dynamics in an emerging market context. The limited role of SN may also signal cultural transitions in Malaysia, where traditional collectivist norms intersect with more individualistic behaviours shaped by global consumer culture. Such shifts resonate with broader trends across Southeast Asia, where rapid modernization and exposure to foreign brands are reshaping purchasing patterns.

Practically, the findings offer valuable insights for businesses and policymakers operating in regional and international markets. Strategies that reduce barriers, improve access, and build consumer confidence can enhance perceptions of control, while personality-driven segmentation may increase message relevance across diverse cultural settings. Policymakers should also account for psychological and cultural factors when promoting or regulating hygiene products, especially in industries facing international competition. Although limited by its cross-sectional design and single-country sample, this study opens avenues for comparative research across Southeast Asia. Future studies could examine how cultural diversity, historical trajectories, and regional integration influence consumer adoption of foreign products.

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