

The Moderating Effect of Perceived Benefit on the Relationship between Attitude and Actual Purchase of Herbal Product in Malaysia

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ABSTRACT

This study examines the moderating effect of perceived benefit on the relationship between attitude and actual purchase. Mall intercept survey was used to collect data from six various states in Malaysia. A total of 473 respondents (about 82%) completed and returned the questionnaire. A seven point likert scale was used to measure responses. The data were analyzed using Partial Least Squares (PLS) path modeling (Ringle, Wende & Becker, 2015). The path coefficient results supported the direct influence of intention on actual buying. Similarly, the findings reveal that perceived risk does not moderate the relationship between product safety and buying intention.

Keywords: Buying intention, actual buying, product safety, perceived risk, consumer behavior.

1. INTRODUCTION

The global demand on herbal products have increased due to the worldwide awareness and preferred trend for natural alternatives to synthetic products (Ab Karim, Nasouddin, Othman, Mohd Adzahan & Hussin, 2011; Abdullah & Salleh, 2010; Jamal, 2006). Herbal products have also been associated with health care solutions in treating and preventing various diseases. For instance, it has been reported that herbal products are used to relieve symptoms related with HIV/AIDS (WHO, 2011). There are several factors that contribute to these phenomena's (Raghavendra, 2009; Saokaew, 2011) namely; inefficient conventional medicine that result in side effects and other problems, accessibility of conventional medicine, perception of the herbal product i.e. harmless, desire for self-medication and cheaper costs.

Previous studies on herbal products was carried out by several researchers relate the use of herbal therapy (Ritho *et al.*, 2002), the frequency of using herbal supplements (Al-Naggar & Chen, 2011; Kelly *et al.*, 2005; Tangkiatkumjai, Boardman, Praditpornsilpa & Walker, 2013), the use of herbal medicine (CAM) (AlBraik, Rutter, & Brown, 2008; Arcury *et al.*, 2007; Aziz & Tey, 2009), the use of herbal products (Abdullah & Salleh, 2010; Brown, Emmett, & Chandra,

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2009), herbal drink (Chelliah & Chin, 2011; Hassali, Khan, Shafie, & Nazir, 2009), the purchase of herbal cosmetics (Thanisorn, Byaporn & Bunchapattanasakda, 2012), intention to use functional food (Rezai, Teng, Mohamed & Shamsudin, 2012). Hence, past research also exposes that there is lack of studies that examine the influence actual purchase of herbal products in Malaysia.

2. LITERATURE REVIEW

2.1 Actual Purchase

Actual purchase has long been of interest to researchers. Knowledge regarding actual purchase will help researchers understand the needs and wants of customers. Thus, the data obtained from the actual purchase can help to identify the marketing strategy (Kim & Chung, 2011), customer satisfaction, and to ensure the continuity of the business (Carneiro *et al.*, 2005; Ibrahim & Najjar, 2008; Paul & Rana, 2012). Certain studies found that actual purchase is complex and vary by segment (Chiang, Wang & Chen, 2010; Shafiq, Raza & Zia-ur-rehman, 2011). Ajzen (1985) define actual purchase behavior as an “individual's readiness and willingness to purchase a certain product or service”. Past studies have identified several predictors of actual behavior: intention (Akehurst, Afonso & Gonçalves, 2012; Al-Ekam, 2013; Facchinetti *et al.*, 2012; Rezai, Mohamed, & Shamsudin, 2011) and perceived behavior control (Ahmed Al-Qasa, 2013; Maldonado, Khan, Moon & Rho, 2011; Zia-ur-Rehman & Dost, 2013) subjective norm (Albayrak, Aksoy & Caber, 2013; Pomsanam, Napompech, & Suwanmaneepong, 2014; Son, Jin, & George, 2013).

2.2 Intention

Fishbein and Ajzen (1975) in the theory of planned behavior described intention as a determinant of behavior, where the intention is influenced by three construct: attitude toward the behavior, subjective norms and behavioral control. Intention refers to the expression during decision making process that depends on the attitudes and beliefs of the product (Ajzen & Fishbein, 1980; Ajzen, 1991; Fishbein & Ajzen, 1975). Clear intention plays an important role in human actions, however, some studies have revealed that there are difficulties in translating intentions and actual behavior (Ajzen, 2001). Therefore, purchase intention is seen as an important concept and widely used to predict the behavior of the actual purchase (Armstrong, Morwitz & Kumar, 2000; Chen, Chen & Huang, 2012; Qing, Lobo & Chongguang, 2012; Tsiotsou, 2006).

2.3 Attitude

The attitude is a widely researched topic amongst social science researchers to predict consumer behavior (Ajzen, 2001; de Vries, Dijkstra & Kuhlman, 1988; Spears & Singh, 2004). The attitude of the individual assessment is either positive or negative towards different products (Ajzen & Fishbein, 1980, 2005; Ajzen, 1991). Fishbein and Ajzen (1975) concluded that attitude can influence behavior through intention. Hence, attitude is seen as an important aspects to ascertain the influence of individual belief against products and understanding their behavior (Chaniotakis & Lymperopoulos, 2009; Haque, Rahman & Haque, 2011), where any changes in attitude will affect the behavior (Ajzen & Fishbein, 2005). Past studies shows that an individual assessment or action whether positive or negative is based on personal factors that influence attitudes towards the actual purchase (Ahmad & Juhdi, 2008; Ajzen & Fishbein, 1980; Conner, Kirk, Cade & Barrett, 2003). In the process of making an assessment, the attitude of the consumers depends on the perception, motivation and external factors (Fishbein & Ajzen, 1975; Wu, 2003). Individual attitude towards product is influenced by the cognitive constructs and also different emotions (Mihaela-Roxana & Yoon, 2010).

2.4 Perceived Benefit

Perceived benefits are related to positive beliefs on the behavior (Amin *et al.*, 2011; Chandon, Wansink & Laurent, 2000). Past studies found that individuals who choose herbal products to improve their health are dissatisfied with conventional medicines (Vos & Brennan, 2010). While some other studies also found that people who see the advantages and benefits of herbal products are more likely to use it (Furnham & Lovett, 2001; O'Connor & White, 2009). Study conducted by Goldstein, Lee, Ballard-Barbash and Brown (2008) found that respondents believe that there are benefits in herbal products. While, Kanodia, Legedza, Davis, Eisenberg and Phillips (2010) found that 60% of respondents find that herbal products provide benefits to them.

3. SAMPLE AND PROCEDURES

The data in this study was collected through mall intercept survey at six various states in Malaysia. The survey included measures of actual buying, buying intention, attitude and perceived risk. A total of 576 questionnaires were distributed, but only 473 were returned representing a total of 82% response rate. Out of 473 respondents, 64.3% was dominated by female, while male accounted for 35.7% of total response. The distribution of respondents was dominated by Malays (55.8%), followed by Chinese (28.8%), Indian (15.9%), and others had 0.2%.

4. MEASURES

The measurement scales of constructs were taken from past studies. In particular, actual purchase is measured using four items adapted from two sources (Chaudhuri & Holbrook, 2001; Hassan, 2011b). This study used four items adapted from three sources (Chaudhuri & Holbrook, 2001; Conner, Kirk, Cade, & Barrett, 2001; Jaafar, Pan, & Mohamed@Naba, 2012) to assess the purchase intention. Attitude is measured using five item adapted from two sources (Hassan, 2011a; Pawlak *et al.*, 2007). Perception of risk is measured using five items adapted from three sources (Forsythe, Liu, Shannon & Gardner, 2006; Huy Tuu, Ottar Olsen, & Thi Thuy Linh, 2010; Liu, Brock, Shi, Chu, & Tseng, 2013; Lynch & Berry, 2007). This study used seven point Likert scale ranging 1=strongly disagree to 7=strongly agree. Furthermore, the use of the above source scale is justified as it has been found to be reliable and reached acceptable alpha coefficients of more than 0.70 (Nunnally, 1978).

5. RESULT

Before proceeding to the regression analysis, several assumptions need to be met: i) missing values, ii) assumption of outliers, iii) normality assumption and iv) Multicollinearity assumption (Hair, Black, Babin, & Anderson, 2010; Tabachnick & Fidell, 2007). In particular, all data were screened for missing values using SPSS. No missing data was found. Next, multivariate outliers were checked and thirty two items were detected as outliers. All items in the dataset were screened to ensure that normality assumption was not violated.

5.1 Measurement Model

In order to ensure the construct validity, we followed a two-step modeling approach as suggested by Hair, Hult, Ringle and Sarstedt (2014). At first, convergent validity and reliability were assessed, followed by the discriminant validity, then internal consistency reliability as shown in Table 1 and Table 2 respectively. As a rule of thumb, construct validity is ascertained if the loadings are greater than 0.7, composite reliability is greater than 0.7, average variance extracted is greater than 0.5, and Cronbach's alpha is greater than 0.7.

Table 1: Results of measurement model

Latent Variable	Items	Loading	Average variance extracted	Composite Reliability	Cronbach's Alpha
Actual Buying	BS56	0.830	0.712	0.908	0.865
	BS57	0.878			
	BS58	0.821			
	BS59	0.845			
Attitude	S40	0.821	0.720	0.928	0.903
	S41	0.844			
	S42	0.842			
	S43	0.875			
	S44	0.861			
Intention	N54	0.809	0.554	0.830	0.725
	N55	0.850			
	N9	0.696			
	N6	0.596			
Perceived Benefit	PM36	0.776	0.687	0.898	0.847
	PM37	0.859			
	PM38	0.828			
	PM39	0.848			

Discriminant validity was also conducted following Fornell and Larcker(1981) recommendations. On the basis of their recommendations, the average variance shared between each construct and its measures should exceed the variance shared between the construct and other constructs (Fornell & Larcker, 1981).

Table 2: Discriminant validity of constructs

Latent variable	Actual Buying	Attitude	Intention	Perceived Risk
Actual Buying	0.844			
Attitude	0.720	0.849		
Intention	0.693	0.693	0.744	
Perceived Benefit	0.677	0.759	0.649	0.829

Note: Diagonals (bold face) represent the square root of the average variance extracted while the other entries represent the correlations.

As shown in Table 2, the correlations for each construct is less than the square root of the average variance extracted suggesting adequate discriminant validity of the constructs(Hair *et al.*, 2010).

5.2 Structural Model

Following the measurement model next was the structural model. The results are presented in Table 3 and Figure2. The R^2 values of 0.59 which suggest that the modeled variables can explain 59% of variance in actual buying.

Table 3: Path coefficients and hypothesis testing

Hypothesis	Relation	Beta	Standard Error	T Statistics	Finding
H1	$A \rightarrow AB$	0.263	0.061	4.346***	Supported
H2	$A \rightarrow I$	0.693	0.029	23.732***	Supported
H3	$I \rightarrow AB$	0.322	0.049	6.584***	Supported
H4	$PB * A \rightarrow AB$	-0.100	0.035	2.882***	Supported
H5	$PB \rightarrow AB$	0.210	0.046	4.538***	Supported

Actual Buying (R^2) = 59%

Note: ***p < 0.01, **p < 0.05

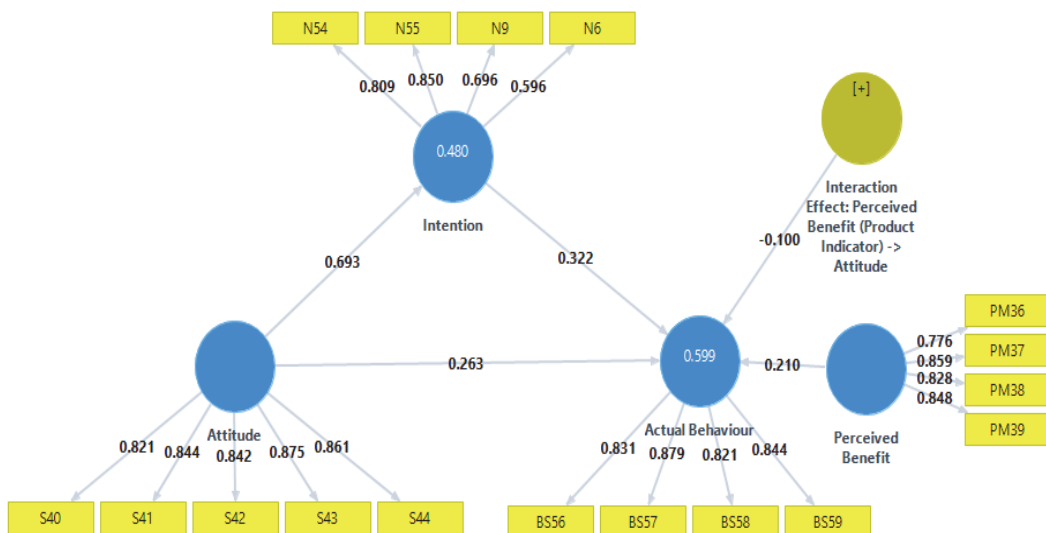


Figure 2: Structural Model Analysis output

6. DISCUSSION

This study investigated the influence of perceived benefit on the relation between attitude and actual purchase of herbal product in Malaysia. The result showed that the perceived benefit moderate the relationship between attitude and actual purchase. The result demonstrated that customers belief with the benefit that herbal product provide for them. The finding of this study also revealed that perceived benefit are significant predictor of actual purchase and this finding is found to be similar with previous study e.g Lee (2009). The other finding of this study revealed that attitude is positively related to actual buying. This finding is consistent with the result of previous research e.g. Ali, Ali Khan and Ahmed (2011). Intention is also found to be positively related to actual purchase and the finding is consistent with result from the previous research e.g Voon *et al.* (2011).

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