



## **Revisiting Attitude towards Advertising, its Antecedent and Outcome: A Two-Stage Approach using PLS-SEM**

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### **ABSTRACT**

Attitude towards advertising, its antecedent and outcome are well-documented in advertising literature. Moreover, the theory of reasoned action is often used to support the relationships between belief, attitude and intention towards advertising, especially in the western context. However, little is done to attest the dimensionality of belief factors in explaining attitude and intention towards advertising in the developing markets. Consequently, misspecification of model and omission of measures due to deficiencies in analysis may likely lead to irrelevant conclusion to knowledge and practices. Hence, the present study is aimed to revisit the belief-attitude-intention model in advertising research using two-stage approach in PLS-SEM. Belief factors are constructed as formative measurement to form personal and societal belief factors in higher order component model. Questionnaire-based survey was administered at universities in Malaysia and 347 respondents were subsequently sampled. The findings show that attitude of Malaysian young consumers towards advertising is formed by both positive and negative beliefs. In

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particular, personal belief factors are found to have greater impact on their attitude and intention than societal belief factors.

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## INTRODUCTION

Being a key concept in marketing and a ubiquitous component in the society today, advertising has been regarded as an economic and social phenomenon (Pollay and Mittal, 1993; Wang and Sun, 2010). Advertising does not only facilitate economic activities, it also has profound effect on the way people live, communicate and behave. Hence, attitude towards advertising (Aad) remains essential in understanding consumer behaviors in advertising studies. Past studies on Aad have not only shown the level of favorability about advertising, they have also revealed its influence on decision making process, thus explaining why consumers respond in certain ways (Ha, John, Janda and Muthaly, 2011; Olson and Zanna, 1993). Besides, the understanding of Aad is also pivotal to securing advertising effectiveness, be it advertising in general or specific advertising (Mehta, 2000). Due to its explanative capacities of subsequent actions, Aad has been continually researched in marketing studies (Korgaonkar, Silverblatt and O'Leary, 2001; Kwek, Tan and Lau, 2010; Pollay and Mittal, 1993).

Past studies have widely used behavioral intention as the outcome, and beliefs as the antecedent of Aad (citation). Such belief-attitude-intention model in advertising research is well supported by the theory of reasoned action (TRA) (Ting, De Run and Ramayah, 2015). Moreover, belief about advertising is often decomposed into factors so as to provide more explanation to attitude and intention towards advertising. In particular, the seven-factor belief model by Pollay and Mittal (1993) is widely adopted to explain Aad. Similar to what they did, past researchers have been constructing belief factors as independent variables pointing directly to Aad as dependent variable in various scenarios (Korgaonkar, et al., 2001; Ramaprasad and Thurwanger, 1998; Ting et al., 2015). Notwithstanding appropriate, little is done to attest the dimensionality of these factors in forming Aad and predicting intention towards advertising in a single model. Additionally, advertising studies with belief factors are predominantly done in the North American-European context (Ashill and Yavas, 2005; Walters, 2001; Wang, Sun, Lei and Toncar, 2009). Such deficiency could lead to model misspecification and premature omission of measures, thus compromising the theoretical implications and practical relevance of the subject in different settings. Due to the limitation of the first generation analysis and the advancement of algorithm in latent variable structural equation modeling (SEM), the present study is aimed to revisit advertising belief-attitude-intention model by using two-stage approach in Partial Least Squares Structural Equation Modeling (PLS-SEM). The purpose is to not only offer methodological input to the study, but also provide practical

understanding of advertising belief-attitude-intention in the context of developing markets.

## LITERATURE REVIEW

### *Attitude towards Advertising*

Attitude is an important concept in research on marketing. Attitude is generally described as a mental state used by individuals to structure the way they see their environment and guide the way they respond to it (Aaker, Kumar, and Day, 2001). It is also described as a learned predisposition to respond in a consistent manner (Fishbein, 1967). As such, attitude is not something instinctive. Rather it is something based on past experience or knowledge. In line with such predisposition, individuals would then respond to an object, an idea, a thing or a matter with permanent evaluation, emotional feeling, and action tendency (Aronson, Wilson and Akert, 2002; Kotler, 2000). It is asserted that individuals who holds a certain attitude will always demonstrate behavior that is consistent and compatible with their attitude (Hussain, 1984; Olson and Zanna, 1993).

Aad, in turn, is largely accepted as “a learned predisposition to respond in a consistently favorable or unfavorable manner to advertising in general” (Lutz, 1985, p. 53). It has long been a focus of attention and interest in marketing research (Mittal, 1994; O’Donohoe, 1995; Pollay and Mittal, 1993). Studies on Aad is perpetuated by constant evidence that shows the positive relationship between advertising attitude and advertising effectiveness (Greyser and Reece, 1971; Kotler, 1988; Mehta, 2000; Mehta and Purvis, 1995), and its effect on attitude towards specific brand and advertisement (Lutz, 1985). Moreover, Aad is also found to have direct effect on exposure and attention to advertisements (Shavitt, Lowrey and Haefner, 1998), and purchase intention and actual behavior (Bush, Smith and Martin, 1999; Ha, et al., 2011). Furthermore, it is claimed that the understanding of Aad can bring in better social policy initiatives (Calfee and Ringold, 1988, 1994; Pollay and Mittal, 1993), thus benefitting the society at large (Pollay and Mittal, 1993; Rotzoll, Haefner and Sandage, 1986). Therefore, it is imperative to understand and keep close track to Aad, given the fact that so much has changed due to rapid societal development and the burgeoning use of sophisticated communication devices (Jeong and Lambert, 2001; Chopra and Wallace, 2003; Khatibi, Haque and Karim, 2006).

### *Beliefs about Advertising*

In order to articulate the formation of Aad, past studies have delved into its antecedents and determinants. One of the most recognized preceding variables found in earlier empirical studies is the belief about advertising. Belief is largely described as specific statement about the attributes of an object (Brackett and Carr, 2001; Ducoffe, 1996; Pollay and Mittal, 1993; Wang, et al., 2009). One of the most widely adopted models on belief about advertising is the seven-factor belief model by Pollay and Mittal (1993). The model has been extensively used because of its comprehensiveness and validity (Korgaonkar, et al., 2001; Munusamy and Wong, 2007; Ramaprasad and Thurwanger,

1998). Two categories of factors are proposed in the model, and they are personal (micro) factors and societal (macro) factors. These factors are reviewed in the following paragraphs.

### ***Personal (Micro) Belief Factors***

Personal belief factors are made up by seven micro factors, namely product information, social role and image, and hedonic/pleasure. Product information describes advertising as the source of information, which contributes to communication process in marketplace. Although there have been debates about advertising's role as information provider, the public in general still believes advertising is a means to transmitting information (Eze and Lee, 2012; Wang and Sun, 2010). It is largely believed to have helped stimulate competition, encourage new product or brand entry, and facilitate consumer shopping (Korgaonkar, Karson, and Lund, 2000; Pollay and Mittal, 1993). Prior empirical studies have also shown the positive effect of product information on Aad (Eze and Lee, 2012; Munusamy and Wong, 2007; Taylor, Bonner, and Dolezal, 2002; Wolin, Korgaonkar, and Lund, 2002).

Another major component of advertising is directed at promoting social and lifestyle images for product (Korgaonkar, et al., 2000). Social role and image reflects the belief that advertising affects people's lifestyle and exemplifies current social status and recent trend (Wang, et al., 2009). It is believed that advertisements often attempt to convey messages about brand personality and image, and relate them to certain components of lifestyles. In so doing, it helps consumers to associate status and reputation with the ownership of given products. Consumers who find the ideas and messages appealing will be drawn to respond favorably in order to gain the desired social image and lifestyles (Tan and Chia, 2007). They believe advertisements provide them with up-to-date trends, hence having positive effect on Aad (Yaakop, et al., 2011). Besides, consumers are even willing to pay a higher price for something unique so as to achieve the ideal state or simply flaunt their status (Pollay and Mittal, 1993).

Hedonic/pleasure indicates that advertising can be amusing and entertaining at times. Advertising often comes with visual, auditory or printed elements which will stimulate responses. A good advertisement is often designed to touch the sentiment and arouse the sensory receptions of the audience in a favorable manner (Speck and Elliott, 1997). For example, music that is played in a TV advertisement can affect or generate a consumer's mood (Solomon, 2011). Some have even claimed that advertising is an entertainment itself (Petrovici and Marinov, 2007). As such, it can bring people more pleasure than other mass media (Pollay and Mittal, 1993). In light of the past literature, it is surmised that the three personal belief factors about advertising are positively related to Aad.

### ***Societal (Macro) Belief Factors***

Societal belief factors, in turn, are made up by four macro factors, namely good for the economy, materialism, falsity/no sense and value corruption. Good for the economy denotes the view that advertising facilitates consumers' adoption of new products, brings

in employment opportunities, reduces the cost of production, promotes healthy competitions between companies, and raises the standard of living (Belch and Belch, 2009). Specifically, advertising is perceived to have expedited consumers' adoption of new products (Eze and Lee, 2012; Wang, et al., 2009). Web advertising, for instance, is increasingly being used by companies to transmit information about new and innovative products more efficiently and to communicate with the consumers in a competitive environment more effectively (Korgaonkar, et al., 2001). Therefore, advertising promotes competition, and subsequently improves the standard of living and the economic condition of the country. Malaysians are found to also hold this belief (Munusamy and Wong, 2007).

Notwithstanding its positive aspects, Aad are also determined by negative beliefs (Singh and Vij, 2007). Even though it is known that advertising is a commercial medium which incites consumers' response to a certain product in various ways (Belk, 1988), it is criticized for promoting materialism, thus making the society more materialistic. Critics argue that consumers' interest in material products is not a result of a natural state of mind but that created by advertising (Korgaonkar, et al., 2000). In other words, advertising is more than often used to generate superficial and false wants. Consumers today are easily exposed to a multitude of advertisements on webpage, and billboards or printed materials. As a result, they can easily fantasize of having more and becoming more materialistic (Pollay and Mittal, 1993). They may end up buying unaffordable products just to show off and owning things which they do not really need (Pollay and Mittal, 1993). Besides, advertising is blamed by parents to have caused their children to buy and own more things than they do not need (Belk, 1988). Hence, materialism is posited to have negative impact on Aad.

Advertising can also be condemned because of its falsity, causing people to disbelieve the message. Falsity in advertising can be defined as providing fallacious information to their audiences (Greyser and Reece, 1971). It includes half-truths, deceptive claims, and intelligence-insulting prose (Korgaonkar, et al., 2000). It is most seen in advertising that often promises consumers magical results from the product they are promoting. Advertising has been regarded as deliberate attempt to mislead consumers' view and understanding (Pollay and Mittal, 1993). Some have even gone further to describe advertising as manipulative and intrusive (Alwitt and Prabhaker, 1992; Mittal, 1994). As such, falsity is also posited to have negative effect on Aad, thus leading to unfavorable outcomes.

Finally, advertising is also found to be able to corrupt values especially among the youths. Although advertisements generally portray positive messages, but negative components are more easily remembered by the audience (Munusamy and Wong, 2007). On that note, it is believed that advertising possesses a great power to distort and mould audiences' values (Korgaonkar et al., 2001). Particularly, advertisement has been seen as a culprit for disrupting the youths or uprooting the values instilled by their parents (Pollay and Mittal, 1993). Past empirical studies have also supported that value corruption negates Aad (Munusamy and Wong, 2007; Tan and Chia, 2007; Wang and Sun, 2010). It is therefore put forward that value corruption will also cause Aad to be unfavorable.

### ***Intention towards Advertising***

Aside the antecedents, the outcome is also looked into so as to enhance the understanding of Aad. Past research has supported that attitudes is a precursor of visible response towards advertising, such as behavioral intention (Wang, et al., 2009). Earlier studies have shown consistently that favorable Aad has a positive influence on both brand attitude and intention to purchase a brand (MacKenzie, Lutz and Belch, 1986; Ryan and Bonfield 1975). Hence, consumers with a more favorable Aad are more likely to be persuaded by advertising to buy the product (Mehta, 2000). As behavioral intention is often used to better understand how attitude can have an effect on actual behavior (Huang, Lee and Ho, 2004; Kim and Hunter, 1993), the present study adopts intention towards advertising as the outcome of Aad. Moreover, intention is found to provide better forecasts than a simple extrapolation from past sales trends (Armstrong, Morwitz and Kumar, 2000).

### ***Theoretical Consideration***

The theory of reasoned action (TRA) by Fishbein and Ajzen (1975) provides an important framework for understanding and predicting social behavior. It has been extensively used by marketing researchers, and is one of the most used models to predict the consumer's attitude and behavior (Bobbit and Dabholkar, 2001; Choo, et al., 2004; Chung and Pysarchik, 2000; Page and Luding, 2003; Soderlund, Vilgon and Gunnarsson, 2001). Despite being a theory developed some decades ago, TRA continues to be useful and relevant in understanding human behavior, and specifically in studies of Aad (Choo, et al., 2004; Netemeyer and Bearden, 1992; Ting, et al., 2015).

TRA stipulates that an individual's behavior is determined by intention to perform it. Intention, in turn, is predicted by attitude and subjective norm. While attitude is described as individual's positive or negative evaluation of performing a behavior, subjective norm is about individual's perceptions of social pressure from significant others to perform a behavior (Fishbein and Ajzen, 1975). Finally, attitude and subjective norm are predicted by behavioral and normative beliefs respectively, which is largely defined as specific descriptions of on object's attributes (Korgaonkar, et al., 2001). As most researchers agree that the influence of attitude on intention is stronger than that of subjective norm (Farley, Lehman & Ryan, 1981; Oliver & Bearden, 1985), this study will look only at the relationships between beliefs, attitude and intention towards advertising. The purpose is not to extend TRA in Aad studies, but rather to re-specify the model so as to ascertain the dimensionality of the belief factors and provide practical understanding towards Aad.

### ***Methodological Consideration***

The recent advancement in statistical analysis technique, specifically Partial Least Squares Structural Equation Modeling (PLS-SEM) permits the development of parsimonious predictive-based research model (Hair, Ringle and Sarstedt, 2011; Becker, Klein and Wetzels, 2012; Hair, Hult, Ringle and Sarstedt, 2013; Hair, Hult, Ringle and Sarstedt, 2016). Compared to covariance-based SEM (CB-SEM), which is more

confirmatory oriented, PLS-SEM uses variance-based technique and relaxes assumptions on sample size, number of indicators as well as data normality, thus making theory development possible and relevant in different contexts of study (Barroso, Carrión and Roldán, 2010).

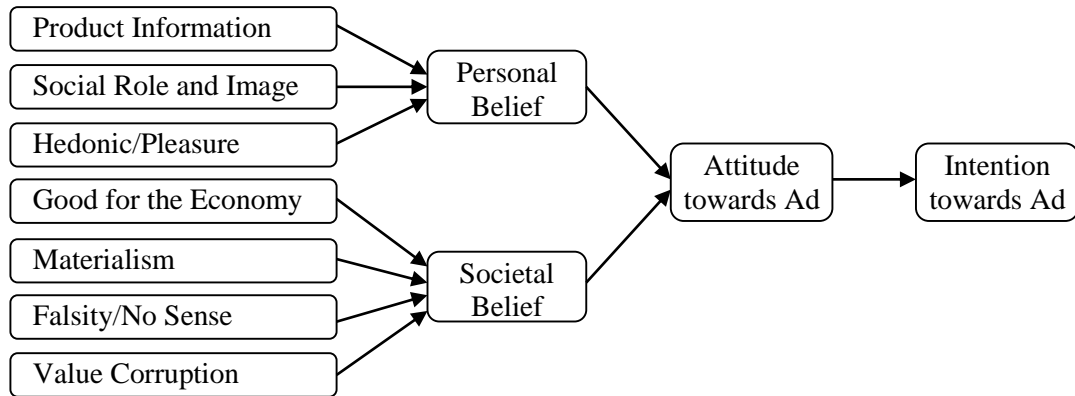
PLS-SEM complements CB-SEM in several ways, and one of them is that it facilitates the use of formative indicators/dimensions in the model. It addresses issues related to model specification, particularly in the field of marketing (Jarvis, MacKenzie and Podsakoff, 2003), and subsequently ignites concern over the validity of the results claimed by past researchers. In a study using meta-analysis, Jarvis et al. (2003) reported that the rate of misspecified models is as high as 32% in marketing studies. The study reveals that many indicators or dimensions which should have been measured formatively were measured reflectively, hence casting doubt on the practical meaningfulness of the results and implications.

Prior to the use of second generation statistical analysis technique, researchers had issues assessing the underlying dimensionality of multiple dimensions, and hence the assessment of higher order construct (HOC) was not feasible. When CB-SEM was brought into picture, researchers began to assess constructs with dimensions. Nevertheless, CB-SEM technique mainly deals with dimensions that are reflective in nature. In reality, some of the higher constructs are actually formed by distinct dimensions because they are found to have low correlation among one another. PLS-SEM holds an advantage in HOC model specification as it allows combination of reflective and formative measurement in the same model (Becker, et al, 2012).

In addition to attest the validity of TRA in advertising belief-attitude-intention model in the context of developing markets, the purpose of the present study is to test Aad model with HOCs. It is because belief factors cannot be highly correlated among one another. Using the framework proposed by Pollay and Mittal (1993) as the basis, it is posited that product information, social role and image, and hedonic/pleasure form personal (micro) belief factors whereas good for the economy, materialism, falsity/no sense and value corruption form societal (macro) belief factors, thus portraying a reflective-formative HOCs. Given the fact that PLS-SEM uses composite factoring technique, it is deemed to be better suited to assess the model under investigation.

## **RESEARCH MODEL AND HYPOTHESES**

In light of the aforementioned, the research model of the study is developed as shown in Figure 1. Instead of having each belief factor pointing directly to Aad, HOCs are used to cater personal belief factors and societal belief factors. Although Aad is the focal construct of the study, intention towards advertising is incorporated in the model to enhance the explanation to and understanding of Aad.



**Figure 1** Research Model

Based on past literature related to belief, attitude and intention in past advertising studies, directional hypotheses are formulated to investigate the relationship under investigation. Moreover, multiple items are used for each construct and dimensions in the model. Due to the use of HOCs, there are only three hypotheses, and they are stated as follows:

- H1: Personal beliefs about advertising have positive effect on attitude towards advertising (Aad).*
- H2: Societal beliefs about advertising have positive effect on attitude towards advertising (Aad).*
- H3: Attitude towards advertising (Aad) has positive effect on intention towards advertising*

## METHODOLOGY

In accordance to the research problems and objectives, quantitative approach, which assumes positivist stance, is adopted to investigate Aad and its relationship with beliefs and intention towards advertising. Being one of the leading countries in developing markets, Malaysia provides ideal environment to delve into the Aad research. However, only university students are selected as target population. They have always represented a meaningful and substantial segment of the general public (Beard, 2003), and young adult population (De Run, et al., 2010; Mokhlis, 2009). Research using young-adult consumers as target population has been carried out for many years (Grant and Waite, 2003). As young adults are growing into early adulthood, they are developing and consolidating their own personalities and manners of living (Holbrook & Schindler, 1989; Rogler, 2002). Hence, they can easily influence people around them with their opinions (Grant and Waite, 2003), and they often act as change agents in a group or society (Leslie, et al., 2001). Furthermore, since universities are made up by students from different states of Malaysia, it is relatively easy to sample young consumers purposively from all over the country.

Judgmental sampling strategy was therefore used to ensure that Malaysian university students were sampled purposefully to accomplish the objectives of the study



(Onwuegbuzie and Leech, 2007). A self-administered questionnaire-based survey was utilized to collect data. Seven-point Likert scale where 1 indicates ‘strongly disagree’ and 7 indicates ‘strongly agree’ was adopted for all items pertaining to beliefs, attitude and intention towards advertising. Since the model contains both reflective and formative measures, common method variance was not deemed to be an issue (Hair, et al., 2014). Before finalizing the questionnaire, pre-test was conducted on five respondents using debriefing method to eliminate potential problems with questionnaire design, and the comprehensiveness of the instructions and statements (Bazera, 1996; Hunt, et al., 1982). A total of 500 copies were distributed on the two campuses concurrently by enumerators, and 347 usable copies were collected in one month time in 2015. Data were then keyed-in into the Statistical Package for Social Science (SPSS) for subsequent analyses using SmartPLS 3.0 (Ringle, Wende and Becker, 2015).

Two-stage approach technique in PLS-SEM was used to cater the impact of HOCs in the model (Becker, 2012). Hair et al. (2014) have highlighted the need to have a clear forethought on model specification to avoid erroneous modeling which would lead to Type 1 and Type 2 errors (Edwards and Bagozzi, 2000; Diamantopolous and Winklhofer, 2001). Therefore, this study utilizes reflective-formative HOC model on the basis of TRA and Pollay and Mittal’s (1993) framework to accommodate distinct belief factors (i.e., product information, social role and image, hedonic/pleasure, good for the economy, materialism, falsity/ no sense and value corruption). While they are reflective in the lower order component model, they form personal belief factors and societal belief factors. Lastly, both attitude and intention use reflective measurement.

## FINDINGS AND DISCUSSIONS

Table 1 shows the demographic details of 347 young consumers sampled from the universities in Malaysia. Given the number of questionnaire copies distributed and collected, a response rate of 69% suggests appropriate administration of data collection process in a month time and that non-response error is not a major issue (Richardson, 2005; Nulty, 2008).

**Table 1** Respondent Profile

<i>Variable</i>		<i>Frequency</i>	<i>Percent</i>
Gender	Male	147	57.6
	Female	200	42.4
Age	15-24	155	44.7
	25-34	126	36.3
	35-44	54	15.6
	45 and above	12	3.5
Region	Peninsular Malaysia	213	61.4
	Sarawak and Sabah	134	38.6
Race	Malay	145	41.8
	Chinese	125	36.0
	Others	77	22.2

**Assessment of Measurement Model**

Table 2 depicts the assessment of construct reliability and convergent validity of the constructs in this study. As illustrated, the composite reliability (CR) values of 0.932 (ATT), 0.940 (INT) and the dimensions of societal belief factors (COR (0.907), FAL (0.904), MAT (0.888), ECO (0.838)), as well as personal belief factors (INF (0.890), SOC (0.892), HED (0.852)) indicate that these constructs possess internal consistency. Similarly, these constructs also demonstrate adequate convergent validity after removing items with low loadings. Hence, they achieve the minimum threshold value of 0.5 for average variance extracted (AVE), which indicates that the items loaded to the respective constructs explain more than 50% of the constructs’ variances (Hair, et al., 2014).

**Table 2** Internal Consistency and Convergent Validity

<i>Construct</i>	<i>Item</i>	<i>Loading</i>	<i>CR</i>	<i>AVE</i>	<i>Validity</i>
Intention	INT1	0.868	0.940	0.841	YES
	INT2	0.944			
	INT3	0.936			
Attitude	ATT1	0.915	0.932	0.820	YES
	ATT2	0.875			
	ATT3	0.925			
Product Information	INF1	0.852	0.890	0.730	YES
	INF2	0.854			
	INF3	0.858			
Social Role and Image	SOC1	0.861	0.892	0.733	YES
	SOC2	0.898			
	SOC3	0.808			
Hedonic/Pleasure	ENT1	0.791	0.852	0.657	YES
	ENT2	0.836			
	ENT3	0.804			
Good for the Economy	ECO1	0.851	0.838	0.721	YES
	ECO2	0.847			
Materialism	MAT1	0.773	0.888	0.666	YES
	MAT2	0.840			
	MAT3	0.818			
	MAT4	0.830			
Falsity/No Sense	FAL1	0.907	0.904	0.825	YES
	FAL2	0.910			
Value Corruption	COR1	0.917	0.907	0.829	YES
	COR2	0.905			

Table 3 and Table 4 illustrate the assessment of discriminant validity. To date discriminant analysis is assessed using the Fornell and Larcker (1981) criterion and Henseler’s heterotrait-monotrait (HTMT) (2015) criterion. In terms of Fornell and Larcker criterion, it is found that the square root of AVE for each of the constructs is larger than the correlation estimate of the constructs. This denotes that the constructs are distinctively different from one another. Similarly, Henseler’s HTMT criterion, which imposes more stringent assessment than the earlier criterion, suggests that all constructs are distinctively different at HTMT<sub>0,90</sub> threshold (Henseler, et al, 2015).

**Table 3** Fornell and Larcker Criterion

	ATT	COR	ECO	FAL	HED	INT	MAT	INF	SOC
ATT	<b>0.905</b>								
COR	-0.002	<b>0.911</b>							
ECO	0.609	0.090	<b>0.849</b>						
FAL	-0.148	0.618	0.081	<b>0.909</b>					
HED	0.676	0.169	0.575	0.081	<b>0.810</b>				
INT	0.682	0.074	0.438	0.007	0.469	<b>0.917</b>			
MAT	0.026	0.519	0.190	0.620	0.203	0.101	<b>0.816</b>		
INF	0.585	0.040	0.582	-0.028	0.532	0.469	0.087	<b>0.854</b>	
SOC	0.524	0.116	0.406	0.005	0.406	0.498	0.155	0.426	<b>0.856</b>

Note: Diagonal elements highlighted in bold represent the square root of AVE. Off diagonal elements are bivariate correlations between the constructs.

**Table 4** HTMT Criterion

	ATT	COR	ECO	FAL	HED	INT	MAT	INF	SOC
ATT									
COR	0.032								
ECO	0.825	0.127							
FAL	0.182	0.779	0.116						
HED	0.830	0.223	0.853	0.112					
INT	0.758	0.086	0.588	0.015	0.570				
MAT	0.110	0.637	0.265	0.763	0.261	0.123			
INF	0.687	0.061	0.822	0.070	0.683	0.549	0.127		
SOC	0.614	0.149	0.573	0.058	0.520	0.575	0.190	0.516	

Criteria: Discriminant validity is established at  $HTMT_{0.90}$

**Assessment of Formative Second Order Constructs**

Table 5 depicts the assessment of formative second order construct. Therefore, collinearity issues for the personal belief factors (PBF) and societal belief factors (SBF) are assessed. The evaluation of collinearity is crucial in order to ensure that the constructs do not measure the same belief factors. As shown in the table, the variance inflation factor (VIF) values for each of the formative constructs are lower than the threshold value of 3.3 (Diamantopoulous and Siguaw, 2006), suggesting that these constructs are distinct and are measuring different aspects of belief.

**Table 5** Collinearity Assessment

	PBF	SBF
INF	1.506	
SOC	1.293	
HED	1.476	
ECO		1.040
FAL		2.021
COR		1.699
MAT		1.758

The significance of weight of each of the formative constructs is subsequently assessed in explaining the first order constructs. Table 6, which depicts the bootstrapping results using sub-samples of 5000 cases, indicates the weights and path co-efficients for each of the formative second order constructs (Hair, et al., 2011). The bootstrapping results show that all belief factors are found to be significantly related to personal and societal belief factors respectively. Good for the economy (ECO) is found to be marginally significant at one-tail. Since ECO is in formative measurement, which indicates the relevance of ECO in forming societal factors in advertising, the result is not an issue.

**Table 6** Path Co-Efficient Assessment

	<i>Direct Effect</i> ( $\beta$ )	<i>Standard Error</i>	<i>T-statistic</i>	<i>P value</i>
INF → PBF	0.441	0.021	20.737**	0.000
HED → PBF	0.411	0.022	18.387	0.000
SOC → PBF	0.400	0.020	19.846	0.000
COR → SBF	0.291	0.014	21.263	0.000
ECO → SBF	0.080	0.048	1.659	0.049
FAL → SBF	0.312	0.016	19.677	0.000
MAT → SBF	0.546	0.018	30.352	0.000

\*\*p< 0.01, \*p<0.05 (one-tailed)

**Assessment of Structural Model**

Prior to assessing the structural model, it is important to ensure that there is no collinearity issue in the inner model of the study. Table 7 presents the outcome of collinearity test of the model. The VIF values below 3.3 for each of the constructs show that collinearity is not a concern (Diamantopoulous and Siguaw, 2006).

**Table 7** Collinearity Assessment

	ATT	INT
PBF	1.041	
SBF	1.041	
ATT		1.000

Table 8 illustrates the results of path co-efficient assessment using bootstrapping procedure for the hypothesized relationships. The relationships are found to be all significant (Personal Belief Factors → Attitude,  $\beta = 0.774$ ,  $p < 0.01$ ; Societal Belief Facotrs → Attitude,  $\beta = -0.137$ ,  $p < 0.01$ , Attitude→ Intention,  $\beta = 0.682$ ,  $p < 0.01$ ). Hence, it is concluded that all three hypotheses are supported.

**Table 8** Path Co-efficient Assessment

	<i>Direct Effect</i> ( $\beta$ )	<i>Standard Error</i>	<i>T-statistic</i>	<i>P value</i>
ATT → INT	0.682	0.034	19.854	0.000
PBF → ATT	0.774	0.033	23.690	0.000
SBF → ATT	-0.137	0.048	2.883	0.004

\*\*p< 0.01, \*p<0.05 (one-tailed)

Table 9 presents the assessment of co-efficient of determination ( $R^2$ ), the effect size ( $f^2$ ) as well as the predictive relevance ( $Q^2$ ) of exogenous variables on endogenous variable in this study. The value for co-efficient of determination ( $R^2$ ) for attitude is 0.575. This suggests that the exogenous variables in this study, namely personal and societal belief factors, explain 57.5% of variances in attitude. Similarly, the  $R^2$  value for intention is 0.465, suggesting that attitude explains 46.5% of intention. Overall, the  $Q^2$  value of 0.466 for attitude, which is larger than 0, suggests that both personal and societal belief factors possess predictive capacity over attitude (Hair, *et al.*, 2014). Likewise, the  $Q^2$  value of 0.387 for intention suggests that attitude possesses predictive capacity over intention. The results also show that personal belief factors ( $f^2 = 1.354$ ) have large effect size on attitude than societal belief factors ( $f^2 = 0.043$ ). This indicates that the former is more important than the latter in explaining and predicting Aad. Lastly, attitude ( $f^2 = 0.870$ ) has large effect size on intention.

**Table 9** Determination of Co-efficient ( $R^2$ ), Effect size ( $f^2$ ) and Predictive Relevance ( $Q^2$ )

	<i>Determination Co-efficient</i>	<i>Predictive Relevance</i>	<i>Effect Size <math>f^2</math></i>		
	$R^2$	$Q^2$	<i>ATT</i>	<i>INT</i>	<i>Effect Size</i>
INT	0.465	0.387			
ATT	0.575	0.466		0.870	Large
PBF			1.354		Large
SBF			0.043		Small

## IMPLICATIONS AND CONCLUSION

When validating the use of TRA in advertising research in developing markets, such as Malaysia, in a belief-attitude-intention model, it is important to understand how beliefs about advertising affect Aad and subsequently intention towards advertising. The findings correspond to past findings that product information, social role and image, and hedonic/pleasure (which make up personal belief factors) are stronger predictors of Aad than societal belief factors (Ting, De Run and Jee, 2015). Although beliefs about advertising of individuals in their late adolescence and early adulthood are found to be largely positive in a state of Malaysia (Ting and De Run, 2015), the findings of the present study point out that it is not necessarily true for the young-adult consumers in Malaysia. In fact, what is shown corresponds to studies by Pollay and Mittal (1993), Korgaonkar *et al.* (2001) and Wolin *et al.* (2002) whereby Malaysian young adults also hold both positive and negative beliefs about advertising. Nevertheless, the results using two-stage approach show that personal belief factors have greater impact on Aad than societal belief factors. This suggests that though young consumers in Malaysia believe that advertising promotes materialism, provides inaccurate information and corrupts human values in some instances, they still perceive advertising in a favorable manner (Yaakop, *et al.*, 2011).

On another note, it is critically imperative to realize that misspecification in the measurement model would impact the structural paths coming in or going out of the latent variables, thus leading to erroneous path coefficients (Jarvis, et al., 2005). Past empirical findings have shown that misspecification of the direction of causality between a construct and measures can result in inaccurate conclusions about the structural relationships between constructs (Law and Wong, 1999). Using two-stage approach in PLS-SEM in the present study not only preserves negative belief factors, which could be omitted due to insignificant relationships caused by the alleged collectivist culture, it validates the dimensionality of the constructs and provides more pragmatic conclusion to the phenomenon under investigation as mentioned in the preceding paragraph.

In spite of the magnitude of the present study from theoretical, methodological and empirical standpoints, it has a few limitations which underscore the need for further investigation. Firstly, this study is limited to looking only at Aad in general, rather than Aad of specific brands and products. Secondly, the use of purposive sampling and the selection of university students in the study could potentially reduce the generalizability of the findings to the population. Hence, future studies are suggested to delve into Aad of specific brands and products, and compare their Aad by generations and ethnic groups so as to broaden and deepen the use of attitudinal or behavioral theories in advertising research. Since developing countries like Malaysia are emerging as prospective and lucrative region for international marketing and business activities, the understanding of Aad in contemporary and dynamic societies using parsimonious model may prove to be pivotal to advertising strategies and effectiveness.

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