CAN ETHNICALLY TARGETED ADVERTISING WORK FOR MALAY ADOLESCENTS?: THE MODERATING ROLE OF THE STRENGTH OF ETHNIC IDENTITY

Muhammad Mohsin Butt^{1*} and Ernest Cyril de Run²

¹Faculty of Management Sciences, International Islamic University Islamabad Pakistan ²Faculty of Economics and Business, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak

*Corresponding author: mohsinbutt@hotmail.com

ABSTRACT

This article expands the existing research on ethnic advertising by investigating young consumers' attitudes towards targeted/non-targeted ethnic advertisements as well as the moderating role of the strength of ethnic identity in an Eastern society. Eight hundred adolescents from different states within Malaysia were recruited for this research. Data were analysed using a MANOVA, and an independent sample t-test was used to examine group differences based on their exposure to targeted/non-targeted advertising as well as the intensity of ethnic affiliation. The MANOVA results indicate a main effect for advertisement type and the strength of ethnic identity. However, the results reveal no significant interactions. Further analysis of the data suggests that, compared with non-targeted respondents, targeted advertisement respondents have more positive attitudes towards the advertisement and the brand represented as well as greater subsequent purchasing intent. Interestingly, no significant differences were found between strong and weak ethnic identifiers in terms of attitudes towards targeted/non-targeted advertisements.

Keywords: Ethnic targeting, adolescents, targeted/non-targeted groups, strength of ethnic identity, Malay, theory of distinctiveness, theory of cultural schemas

INTRODUCTION

Multiethnic marketing has been rigorously explored in Western societies, providing a rich but limited view of the topic. An insufficient amount of research has focused on the cultural differences within a country when compared with the amount of literature on cross-cultural differences (Pankhania, Lee, & Hooley, 2007). Furthermore, the relevance and applicability of these concepts is limited without examining the issue from the perspective of societies other than Anglo-Saxon societies (SteenKamp & Baumgartner, 1998). Despite the established cultural differences in East and West, it is also important to note that the nature of

© Asian Academy of Management and Penerbit Universiti Sains Malaysia, 2012

these multiethnic societies is inherently different. For example, America's multicultural society is represented as a melting pot whereas Malaysian society is represented as a salad bowl (Asma & Pedersen, 2003). Apart from these extremely important contextual differences, multicultural marketing research has mostly focused on minority groups and has generally ignored the issue from the perspective of young consumers (Appiah, 2001).

Adolescents as a group have remained on the fringes of market research until a recently (Wang, Holloway, Beatty, & Hill, 2007). The fundamental reason why researchers have ignored this important segment is the erroneous assumption that they are similar to adults. Therefore, it was believed that any explanation of adult consumer behaviour might also be applicable to adolescents (Boush, Friestad, & Rose, 1994). However, most psychologists disagree with this assumption. In their view, adolescents differ from children and adults in terms of their cognition, beliefs and attitudes. They thus constitute an independent and unique demographic group (Pechmann, Linda, Loughlin, & Frances, 2005; Thatcher, Walker, & Guidice, 1987). These reasons merit serious study of this important segment of the market. The dynamic nature of adolescents' cognitive and social development makes it inappropriate to consider their behaviour similar to adults, and thus, an intense separate study of their consumer behaviour is required (Thatcher et al., 1987).

One out of six people in the world belongs to this age group (Ellssa, 2000). They are not just a demographic. They also have a unique culture with distinct values, language and identity (Henry, 2003). The exact economic value of this global segment is yet to be established, but some estimates indicate a market size of one hundred to one hundred seventy billion dollars a year in the United States alone (Boush, Marian, & Gregory, 1994; Collins, 2006; Ellssa, 2000). Although the exact market size estimate is not available for Malaysian adolescents, the value is believed to be similar, particularly because they also constitute the largest segment of the population. Adolescents are indispensable for companies seeking a healthy present and secure future in this contemporary consumer world.

Marketers' interest in younger consumers has a twofold objective. First, young consumers have proven to be a lucrative global segment in terms of both size and purchasing power (Keegan & Green, 2008). The resounding commercial value of young consumers stems from the ability of their behaviour and attitudes to predict future changes in a society's sociocultural fabric (Boush et al., 1994; Sellers, 1989; Widdicombe & Woffitt, 1995). Second, their existing consumption pattern has a profound effect on their future behaviour as adult consumers (Guest, 1955). Reaching this segment is not a straightforward issue. It requires a profound understanding of a multidimensional teen culture that is inspired by global and local society values (Ellssa, 2000).

To exploit the benefits of targeting adolescents, marketers need to understand the relevance and applicability of potential targeting variables, such as social status, gender, religiosity, culture, hobbies and ethnicity (Schaefer, Hermans, & Parker, 2005). Specifically, ethnicity is one of the most relevant segmenting variables in the context of multiethnic societies such as Malaysia (Brumbaugh, 1997; Brumbaugh & Grier, 1999; Burton, 2000).

It has been argued that cultural differences among ethnic groups in Malaysia are rooted in the disparate origins of its communities, making the Malaysian consumer market heavily ethnically segmented (Salleh et al., 1998; Mokhlis, 2009). Past research into Malaysian teenagers' influence on family purchase decisions revealed that, more so than other factors, ethnicity was a significant predictor of purchase decisions (Kamaruddin & Mokhlis, 2003). Others investigating Malaysian teens' consumption behaviour report significant differences based on respondents' ethnicity (Mokhlis, 2006).

In a multiethnic society, an ethnic group with a distinctive set of beliefs and behaviours that markedly affect their consumption patterns constitutes a subculture (Sirkeci, 2009). Thus, it is important for marketers to recognise and understand cultural uniqueness in order to deliver value to a particular segment (Sirkeci, 2009; Solomon, Marshall, & Stuart, 2006). However, although ethnic marketing has great relevance and consistent application in Malaysian society, little empirical evidence is available regarding its effectiveness in general and for young consumers in particular.

Following from the above, the present study's objective is to empirically validate the relevance and applicability of ethnic advertising for young consumers of a majority ethnic group in Malaysia. According to the 2005 population census, the total population of Malaysia is nearly 26 million. The Malay and other indigenous groups constitute 65.1% of the total population, with the Chinese composing Malaysia's largest minority (Department of Statistics Malaysia, 2010). "Malay", as defined in article 160(2) of the Malaysian constitution, is a person who professes Islam, habitually speaks the Malay language and conforms to Malay customs (Asma & Pedersen, 2003; De Run, 2004).

To empirically examine the issue, we used quantitative methods to compare the reactions of young Malays towards targeted/non-targeted advertisements. Here, we first provide a brief review of the literature on ethnic advertising, targeted/non-targeted groups and related theories of cultural schemas, followed by detailed sections on research methodology, results, discussions and theoretical and managerial implications.

LITERATURE REVIEW

Ethnic Advertising

Ethnic cues such as language, cultural symbols and values are incorporated in advertisements to elicit a favourable response from the target ethnic group (De Run, 2007; Deshpande & Stayman, 1994; Koslow, Shamdansani, & Touchstone, 1994). The use of ethnic cues in an advertisement is consistent with the postulates of social identity theory (Tajfel & Turner, 1985). The social identity theory hypothesises that recognising the cultural distinctiveness of a target group by advertisers can lead the respondent to a more positive evaluation of the advertisement. Thus, advertisements that depict clear ethnic cues, such as ethnic characters, images, and values held by a target group, tend to generate more positive attitudes towards the advertisement and possibly stronger purchase intent (Appiah, 2001; Appiah & Yung, 2009; Elliott & Wattanasuwan, 1998; Forehand & Deshpandé, 2001; Sierra, Hyman, & Torres, 2009).

Long before incorporating the broader concept of ethnicity in advertising research, the advertising research area was rigorously studied in the United States through the narrow lens of race. Past research investigating the issue studied the effects of model, celebrity and endorser race on subjects' attitudes towards the advertisement (Barban, 1969; Block, 1972; Jackson, Hymes, & Sullivan, 1987; Ronald, Joseph, & Paul, 1979; Whittler, 1989). Despite many researchers having used race and ethnicity interchangeably, race refers to a group that encompasses similar physical attributes while ethnicity describes a group that shares customs, values and language (Appiah & Yung, 2009; Gaylord-Harden, Ragsdale, Mandara, Maryse, & Petersen, 2007). Race can be part of ethnic identity formation but cannot be used interchangeably with the much broader concept of ethnicity (Gaylord-Harden et al., 2007; Phinney, 2007).

The use of the term ethnicity and its role in advertisement effectiveness first appeared in the seminal work of Deshpande, Hoyer and Donthl (1986). They found that Hispanic consumers with strong ethnic identity favoured companies that used Hispanic media and language to advertise their products (Deshpande, Hoyer, & Donthl, 1986). Other researchers on ethnic Hispanics' media preferences report that strong ethnic identifiers are more willing to seek out ethnic media with which they can identify (Webster, 1992; Torres & Briggs, 2007). Furthermore, past research suggests that a minority group's use of its native language positively correlates with high ethnic identifiers compared with low ethnic identifiers (Deshpande & Stayman, 1994; Donthu & Cherian, 1994; Noriega & Blair, 2008).

The introduction of the concept of situational ethnicity aided research progress. Situational ethnicity is how someone feels about his/her ethnic identity in a particular context (Sekhon & Szmigin, 2009; Stayman & Deshpande, 1989; Torres & Briggs, 2007). Previous research has found that consumer response to ethnic advertising is influenced by the context in which the advertisement is placed (Wooten & Galvin, 1993). The context-bound effect of ethnic advertising was highlighted for its relevance to the majority or minority status of an ethnic group. Past research indicates that subjects report an increase in ethnic selfawareness when their ethnicity is featured in a context where the subject's ethnicity is distinct (Deshpande & Stayman, 1994). Others have suggested that an ethnic group's social status may also affect the salience of ethnicity. Research indicates that perceived status difference heightens the salience of an ethnic group and heightens positive responses towards ethnic advertisements (Grier & Deshpande, 2001). Thus, it is reasonable to expect a heightened sense of ethnic awareness from the Malay, who are still economically poor despite being a majority ethnic group.

The Unintended Consequences of Ethnic Targeting

The possibility of generating unintended effects has raised concern regarding the overall effectiveness of an ethnically targeted advertising strategy (Star, 1989). This has led to a number of studies attempting to measure the effect of targeted advertisements on targeted as well as non-targeted ethnic groups (Aaker et al., 2000; Appiah & Yung, 2009; Brumbaugh, 1997; De Run, 2004; Grier & Brumbaugh, 2006). Their results suggest a favourable response by distinct groups towards targeted advertisements compared with non-distinct groups and a negative response by both distinct and non-distinct groups towards non-targeted advertisements (Grier & Brumbaugh, 2006). Similar research in an Eastern context examining Malays and Chinese ethnic groups also supports the finding that non-targeted groups generally have less favourable attitudes towards ethnic advertisements (De Run, 2007).

Appiah (2001), in a United States study, examines the impact of adolescents' strength of ethnic identity on their reaction towards culturally embedded targeted/non-targeted advertisements. His results, while suggesting that black and white respondents react more favourably towards advertisements depicting models and cultural cues from their ethnic group, fail to demonstrate any significant impact of the strength of ethnic identity (Appiah, 2001).

Several researchers have explored the interaction of ethnic primes targeting Asian-Americans and white Americans; the findings suggest that ethnic primes for distinct groups result in more favourable responses than majority groups. However, they also conclude that ethnic primes targeting minority groups

generate negative responses from majority groups (Forehand & Reed, 2002; Torres & Briggs, 2007). Brett et al. (2004), while examining the effect of self-reference on Asian and white Americans, found that advertising consistent with a salient personal dimension generates spontaneous self-reference, as well as more positive attitudes towards the advertisement and the model in that advertisement.

A review of the limited research available on the unintended consequences of ethnic targeting reveals some important gaps in the literature. First, the bulk of the previous research was conducted in Western societies, and thus, empirical validation in Eastern societies is required for these findings to hold practical relevance. Second, research on ethnic advertising has mostly focused on adult groups and may not be generalisable to other demographic groups. The most important and significant of these demographic groups is adolescents. To exploit the benefits of targeting an adolescent group, a marketer needs to understand the relevance and applicability of potential targeting variables. It is therefore important to investigate the practicability and relevance of ethnic targeting for one of the most reachable and lucrative segments in the Malaysian market.

Theory of Distinctiveness and Cultural Schemas

The effectiveness of persuasion depends on its ability to lead an individual to find similarity between the source and himself (Aaker et al., 2000; Williams & Qualls, 1989; Wooten, 1995). This similarity judgment depends on the meaningfulness of the variables that are used to generate such feelings (Aaker et al., 2000; Tajfel, 1981). The more personally salient a variable is, the higher its likelihood of evoking the similarity effect. This phenomenon results from distinct individual traits that play a central role within one's self-concept (Aaker et al., 2000; McGuire, 1984; McGuire & Fujioka, 1978). Prior persuasion experiments on self-schemata have demonstrated that matching a message or a product to an individual's personality characteristics will augment already favourable reactions (Aaker, 1999; Grier & Deshpande, 2001; Wheeler, Petty, & Bizer, 2005).

Studies in the area of social psychology promote the role and importance of distinctive characteristics in an individual's self-concept (Cota & Dion, 1986; McGuire & Fujioka, 1978; McGuire & McGuire, 1979). Ethnicity is one such distinct characteristic for minority groups in a multiethnic society. Ethnicity therefore qualifies as a salient targeted variable for minority groups as compared with majority groups (Deshpande & Stayman, 1994; Forehand & Deshpande, 2001).

However, the study of ethnicity in a social context requires more than simply understanding a group's numeric status. As a social construct, ethnic groups feel the salience of their ethnicity in ways other than their numeric prevalence in

society (Grier & Deshpande, 2001). Many researchers have questioned whether ethnic groups are distinct due to their numeric status or their sociocultural differences (Abrams et al., 1990; Moscovisi, 1975; Tajfel, 1981). Past research affirms that an increased sense of ethnic identity is possible in numerically majority groups if they perceive themselves to have a low social status (Grier & Deshpande, 2001). It is also possible for a majority group to experience heightened ethnic identity if they perceive the progress of a minority group to be economically or politically threatening (Che-Beng, 2000).

In a Malaysian context, it is also possible for ethnicity to serve as a salient and distinct characteristic for a majority group. Malays, while the country's dominant ethnic group, remain economically poorer than other minority groups, particularly the Chinese. This inequality has led to the doctrine of New Economic Policy, an affirmative action program that is designed to retain economic balance in Malaysian society (Che-Beng, 2000). These contextual realities in Malaysia create the possibility that the question of ethnicity as a salient variable may be answered outside the Western construct of dominant and non-dominant groups.

The theory of cultural schemas explores this issue from a cultural perspective. Culture is knowledge regarding a set of beliefs, values and norms that is shared and propagated by a particular group (Resnick, 1991). This conceptualisation of culture allows group members to act and think in a cohesive manner (Sharifian, 2003). Cultural conceptualisations can be grouped into two major categories: cultural schemas and cultural categorisation (Rosch, 1978; Rumelhart, 1980; Sharifian, 2003). Cultural schemas function as a proxy for understanding the real world (Casson, 1983; Singh, 2004). These schemas serve as fundamental elements that formulate the cultural model shared by group members and are less likely to be understood by those outside that group (D'Andrade & Roy, 1987).

In a multicultural society, members of a dominant group are socialised within one cultural model. Conversely, non-dominant groups are socialised within both cultures as a result of media and social interaction with the dominant group (Brumbaugh, 2002; De Run, 2007). These models are stored in memory and can be activated if relevant cues are provided. These findings have serious implications for the impact of advertising that targets majority or minority groups.

Research suggests that advertising reflecting dominant cultural models can activate similar cultural models in both dominant and non-dominant groups (De Run, 2007). Of course, non-dominant group advertising can generate a negative response from a majority group, as they normally do not understand minority group culture. Nevertheless, results from previous research have failed to establish conclusive evidence regarding negative attitudes of dominant groups

towards non-targeted advertising (Brumbaugh, 1997; De Run, 2004; Grier & Brumbaugh, 2006). As members of a dominant culture, Malays have only one cultural model and thus may not respond positively towards advertising that targets Chinese adolescents.

The postulate was tested with the help of the following hypotheses:

- H_{1a}: Majority (Malay) ethnic group members will have more positive attitudes towards the targeted advertisement compared with the non-targeted advertisement.
- H_{1b}: Majority (Malay) ethnic group members will have more positive attitudes towards the brand in the targeted advertisement compared with the non-targeted advertisement.
- H_{1c}: Majority (Malay) ethnic group members will have higher purchase intent for products featured in the targeted advertisement compared with those in the non-targeted advertisement.

The Moderating Role of the Strength of Ethnic Identity

During adolescence, humans face the fundamental challenge of establishing a rational sense of self-identity (Erikson, 1968; Sellers, Copeland-Linder, Martin, & L'Heureux, 2006). Establishing self-identity is particularly important for adolescents so that they can develop a meaningful self through the integration of different components of that self (Erikson, 1968; Feldman & Alto, 1996; Reich, Ramos, & Jaipal, 2000). Self-identity is a dynamic construct. It allows individuals to logically unite their self-concept with other existing perceptions in their lives (Adamson, Hartman, & Lyxell, 1999; Harter, 1983).

The difference between self- and ethnic identity is one of context. Ethnic identity is limited to exploring the role of ethnicity in the development of self-identity (Phinney & Devich-Navarro, 1997; Phinney and Ong, 2007). Past studies exploring identity development in adolescents define ethnic identity as a multidimensional construct that measures a person's inner feelings, daily experiences and interpersonal interactions (Gaylord-Harden et al., 2007; Gong, 2007; Phinney, 1990; Steinberg & Morris, 2001). The possibility that ethnicity could play a more significant role in identity development increases its role in individuals' daily lives. Naturally, this increasing role of ethnic identity also has ramifications for the consumer world.

It is not surprising that several researchers argue that the strength of ethnic identity is a better predictor of ethnic group members' attitudes towards ethnic

advertising, than any other demographic or psychographic variables. Ethnic identity is the intensity of affiliation felt towards one's ethnic group (Deshpande et al., 1986). Past studies suggest that a sense of ethnic identity can affect consumer response to marketing activities, shopping behaviour and purchase intent (Davis & Gandy, 1999; Donthu & Cherian, 1994; Green, 1999; Webster, 1992). Many subsequent investigators report no significant difference between strong and weak ethnic identifiers in attitudes towards targeted advertisements (Appiah, 2001; De Run, 2007). In a recent study, however, United States subjects with strong identities from different ethnic backgrounds showed positive identification with the targeted advertisement (Sierra et al., 2009).

Regarding adolescents' attitudes towards ethnic advertising, research in the United States has indicated that both majority and minority group members who strongly identify with their ethnic culture do not significantly differ from weak identifiers in terms of attitudes towards advertising (Appiah, 2001). These mixed results on the impact of the strength of ethnic identity on advertising attitudes call for further investigation. The following hypotheses were developed on the basis of the available findings in this area:

- H_{2a}: Strong ethnic identifiers will differ from weak ethnic identifiers in terms of attitudes towards a targeted advertisement and the brand represented as well as purchase intent.
- H_{2b}: Strong ethnic identifiers will differ from weak ethnic identifiers in terms of attitudes towards the advertisement and the brand represented as well as purchase intent.

METHODOLOGY

Research Design

The experiment employed a 2(Advertisement Type: Targeted; Non-targeted) × 2(Strength of Ethnic Identity: Strong; Weak) between-subject factorial design to capture the impact of targeted/non-targeted advertisements and the strength of ethnic identity on majority group adolescents. Factorial designs are common in advertising research of this nature (Aaker et al., 2000; De Run, 2007; Grier & Deshpande, 2001). The three dependent variables include (a) attitudes towards the advertisement; (b) attitudes towards the brand; and (c) purchase intent. A number of pre-tests were needed to develop suitable experiment stimuli. These pre-tests included tests to determine suitable products, test to select advertisement models that could be easily identified by their ethnicity, and tests to determine whether subjects perceived the intended advertisements as targeted or non-

targeted. On the basis of these pre-test results, two advertisements were selected to serve as proxies for targeted/non-targeted advertising (refer Figure 1).

The stimuli consisted of a full-colour 8 1/2 x 11-inch photographic advertisement for a fictitious toothbrush brand, "CLEAN A". In line with past research, ethnic-specific cultural cues were embedded in the advertisements while other features remained constant (Appiah & Yung, 2009; Appiah, 2001). The non-targeted advertisement for the Malay group embedded Chinese cultural cues: a red backdrop with firecrackers (embossed with Chinese characters) to indicate a Chinese New Year celebration, and a female Chinese model. The Chinese targeted advertisement was used as a proxy for the non-targeted advertisement to a Malay ethnic group because the Chinese are the largest minority in Malaysia, maintaining a significant media presence compared with other small ethnic groups. Thus, it is more realistic to expect that Malay adolescents will encounter more advertisements targeting Chinese ethnic groups than any other minority group. This provides a more realistic experimental setting than would the use of a different ethnic group advertisement as a non-targeted advertisement for Malay adolescents.



Figure 1. Targeted/non-targeted advertisement for Malay ethnic group

The advertisement used for targeting the Malay ethnic group (Malay ethnicity is a combination of religion, race and language) used a green backdrop embossed with Muslim architectural decor commonly displayed on the walls and roofs of Malay religious buildings. The targeted advertisement for the Malay also depicted a *Halal* logo and a model wearing a headscarf, both common cultural symbols of the Malay ethnic group (Refer Figure 1). An effort was made in both advertisements to depict an equal number of cultural cues so that any attitudinal

difference in a subject's response to the advertisements could be attributed to those cues (Appiah & Yung, 2009).

Measurement Scales and Data Collection

This study applied the questionnaire survey method to verify the hypotheses. A questionnaire was developed using established scales, with slight modifications to suit the context. This study intentionally attempted to convert other types of scales to Likert-type scales. There are multiple reasons for this scale modification. First, the target group of this study was teenagers, most with no prior experience using semantic differential scales. In addition, Likert-type scales use a statement format and are easy to understand even without prior experience in filling out questionnaires.

The study used five different scales. Some scales were originally semantic differentials while others were Likert-type scales. If all the scales had retained their original format, inconsistent measurement schemes would have distracted respondents' attention from providing their opinions to solving the issue of scale variations. Many researchers have successfully converted semantic differential scales into Likert-type scales (Ching, 2007; De Run, 2007).

Table 1 presents the scales used in this research. The first section of the questionnaire contains demographic variables such as age, self-reported ethnicity, gender, and other personal information. The second section contains questions regarding dependent and independent variables used in this research.

Table 1
Scale used in this research

Measure	Author	No. of items
Purchase intention	Yi (1990)	3
Attitude towards brand	Gardner (1985); De Run (2004)	4
Attitude towards advertisement	De-Run (2004)	5
Self reference	Whittler (2002); Choi Lee, Nalini, & Brett (2002)	4
Strength of ethnic identity	Phinney (1997), De Run (2004)	5

Undergraduate marketing students of Universiti Malaysia Sarawak were recruited as data collection enumerators. Students were recruited to facilitate collection of the data from different states of Malaysia. They were formally briefed about the data collection method. After the briefing, each student was given 10 booklets containing the test advertisement and the questionnaire. The advertisement type was predetermined for each enumerator in order to ensure that the overall sample

would represent both targeted/non-targeted respondents. The students were instructed to collect data by personally visiting public or private schools located in their native states during the months of February and March 2009. This was an assignment for their marketing research course.

A booklet, presented to each respondent, contained an introduction of the research and a brief explanation of its purpose. The booklet also contained instructions on how to fill out the questionnaire, a copy of the questionnaire and one of the experimental (targeted/non-targeted) advertisements. The introduction proclaimed that the marketing department of the "CLEAN A" toothbrush had requested that the author test their upcoming print advertisement. They were asked to view the advertisement for "CLEAN A" (fictitious brand) toothbrush as they might normally encounter print advertisements in a magazine or newspaper of their choice (Mackenzie & Spreng, 1992). Once they finished viewing the advertisement, respondents were asked to return it to the enumerator and fill in the questionnaire regarding the advertisement and related information. The format of questionnaire is presented in Appendix.

The data for the main study were collected in groups of 10 to 15 respondents at a time. Respondents were randomly assigned one of the two experimental advertisements. Using a stratified convenience sampling method, we recruited 800 respondents who ethnically self-identified as Malay and who were between 14 and 19 years of age. Respondents who failed to answer the self-reported ethnicity question or who completely ignored a section of the questionnaire were removed from further analysis. Seven hundred and forty questionnaires were deemed suitable. A description of the sample is presented in Table 2.

Data were tested for reliability and normality. Testing the normality of data was important because it is the key requirement for the data analysis methods employed in this study (MANOVA, ANOVA and SEM). In the first stage, the Box Whisker and Stem and Leaf Plots were used to detect any outliers for individual variables in the data. These observations are typically extreme scores on a given variable with the potential to seriously influence the normality of data. If these outliers' values are less than 1% of the data and are not extreme, leaving them alone is more appropriate (Meyers, Gamst, & Guarino, 2006).

If the outliers are less than 5% of the data, recoding is suggested. As the percentage of outlier values in the data was less than 5%, extreme values were recoded up or down to the nearest value (Tabachnick & Fidell, 2001; Shammout, 2007). After data recoding, each variable value was converted into a Z score to identify the remaining outliers. A Z score that exceeds the threshold value of \pm 0.5 is considered a potential outlier and should be removed from the data. The Z

score values indicate no further violation of the normality assumption (Hair Jr. et al., 2007; Meyers et al., 2006).

Table 2

Description of sample

Descriptive Statistic		
N		740
Gender	Male	42.4
	Female	57.6
Age	14–15	15.9
	16–17	58.3
	18–19	25.6
Location (% of data collected)	Sarawak	53.61
	Sabah	6.66
	Kuala Lumpur	6.5
	Kedah	6.1
	Perak	2.7
	Terengganu	1.6
	Kelantan	2.4
	Pahang	5.2
	Johor	3.7
	Selangor	2.4
	Perlis	5.0
	Penang	56.5
	Negeri Sembilan	51.2

Scale reliability was established using Cronbach's alpha, which offers confirmatory factor analysis and measures construct reliability for the scales used for each group (Table 3). The confirmatory factor analysis of the strength of the ethnic identity scale resulted in the removal of two items. These items related to "marrying in one's own group" and "speaking my ethnic group language at home." These items were removed because of low factor loading for the first item (below the cut-off criteria of 0.40) and error covariance for the latter with the item "I speak my ethnic group language with fluency." Data normality was established with the help of skewness and kurtosis, as well as by visual examination of Q-Q plots.

Table 3
Measurement model evaluation

Construct	Group	No. of items	Mean	Stand. dev	Cronbach's Alpha	C. R.
Attitude towards the Ad	MGT	5	5.27	0.87	.72	.72
	MGNT	5	4.31	0.94	.70	.84
Attitude towards the Brand	MGT	4	5.27	0.86	.71	.73
	MGNT	4	4.29	1.00	.76	.78
Purchase intention	MGT	3	5.00	1.13	.81	.85
	MGNT	3	4.36	0.90	.76	.77
Self Reference	MGT	3	4.13	1.18	.70	.71
	MGNT	3	3.39	1.14	.63	.63
Strength of ethnic identity	MGT	3	3.97	0.85	.63	.63
	MGNT	3	3.90	0.69	.60	.61

Note: MGT = Malay Group Targeted, MGNT = Malay Group Non-Targeted, C. R. = Construct Reliability

RESULTS

Manipulation Checks

Self-reference

Manipulation checks are important for ensuring the reliability of results. In the existing research context, ethnic cues in the advertisement were used as a surrogate for targeted/non-targeted advertising. It was hypothesised in this research that use of ethnic cues in the advertisements would result in a significantly higher level of self-reference from the target group compared with the non-targeted group.

Self-reference was measured using four items on a seven-point Likert-type scale (Choi et al., 2002). The average composite score of these items was used to measure subjects' self-reference towards targeted/non-targeted advertisements. An independent sample *t*-test was conducted to compare subjects' self-reference with regard to targeted/non-targeted ethnic advertisements. The result of the independent sample *t*-tests indicates that the manipulation was successful, as

target group have significantly higher amounts of self-reference regarding targeted advertisements compared with non-targeted advertisements (Table 4).

Table 4 *Independent sample t-test (Malay group) for self-reference by advertisement type*

Advertisement type	N	Mean	Std. deviation	t	df	p
Malay	391	4.13	1.18	- 8.31	738	.000*
Chinese	349	3.39	1.14	- 0.31	130	.000

^{*}Significance p < .05

The aggregate average score of the items for each scale of the dependent variable was computed. A two-way multivariate analysis of variance between subjects was conducted on three dependent variables: attitudes towards the advertisement, attitudes towards the brand and purchase intent. Strength of ethnic identity was the composite of the mean score of the items used to measure the construct. The subjects were grouped into strong and weak ethnic identifier categories, using the split mean procedure. This method is consistent with previous research in similar contexts (Appiah, 2001; De Run, 2004; Donthu & Cherian, 1994). Subjects who scored higher than the mean value were categorised as strong ethnic identifiers; those who scored below the mean value were placed into the weak ethnic identifier group.

Box's M test of equality of covariance was not significant (F = 1.07, p < .321), indicating homogeneity of the covariance matrix. Therefore, multivariate F test was examined using Wilks' Lambda. Barlett's test of sphericity was also significant (p < .0001), indicating that sufficient correlation exists between the dependent variates in the model.

The main effect for advertisement type (Wilks' Lambda = .177, F = 51.99, p < .001) and strength of ethnic identity (Wilks' Lambda = .04, F = 1.62, p < .042) were significant. The two-way MANOVA interaction effect was not significant (Wilks' Lambda = .004, F = 1.001, p < .3992).

The next step in the data analysis process was to test the individual hypothesis with the help of the independent sample *t*-test. The independent sample *t*-test by advertisement type investigates the difference between majority group members regarding attitudes towards a targeted/non-targeted ethnic advertisement, attitudes towards the advertisement brand and purchase intent. The results revealed that Malay group adolescents have more positive attitudes towards the targeted advertisement and the brand in the advertisement as well as higher

purchase intent for the product in the targeted advertisement compared with the non-target advertisement (Table 5).

Table 5
Results of independent sample t-test for Aad, Ab, and PI by Ad type

Advertisement type	Dep. variable	N	Mean	Std. dev.	t	df	Sig. (2-tailed)
Malay	Aad	391	5.27	0.87	14.32	738	.000*
Chinese		349	4.31	0.94			
Malay	Ab	391	5.27	0.86	12.97	689	.000*
Chinese		349	4.29	1.00			
Malay	PI	391	5.00	1.13	7.40	689	.000*
Chinese		349	4.36	0.90			

^{*}Significance P < .05

Notes: Aad-Attitude towards advertisement; Ab-Attitude towards the brand; PI-Purchase intention

Table 6
Summary result for the targeted /non targeting effects hypotheses

Hypotheses	Results
H _{1a} : Majority ethnic group will have more positive attitude towards the advertisement, for targeted advertisement compared to non-targeted advertisement	
H _{1b} : Majority ethnic group will have more positive attitude towards the branch in the advertisement for targeted advertisement compared to non-targeted advertisement	
H _{1c} : Majority ethnic group will have higher purchase intention for targeted advertisement compared to non-targeted advertisement	l Accepted

^{*}Significance p < .05

Table 7 presents the results of hypotheses regarding the impact of the strength of ethnic identity on adolescents' reaction to targeted/non-targeted advertisements, the brand represented and subsequent purchase intent. Split mean procedure was adopted to identify strong and weak ethnic identifiers. The results indicate that the strength of ethnic identity is a better predictor of attitudinal and behavioural outcome for targeted ethnic advertisements. For non-targeted advertisements, there was no significant difference between strong and weak ethnic identifiers in attitudes towards the advertisement, attitudes towards the brand or purchase intent.

Table 7 Independent sample t-test for Aad, Ab, and PI by strength of ethnic identity for targeted/non-targeted advertisement

Variable	Ad type	SEI	N	Mean	Std. deviation	t	df	Sig. (2-tailed)
And	Molovi	High	144	5.37	0.85	1.74	200	002
Aad	Malay	Low	247	5.21	0.89	1./4	389	.082
	Chinasa	High	118	4.37	0.94	0.5.5	2.47	202
	Chinese	Low	231	4.28	0.94	.855	347	.393
A 1.	N f - 1 -	High	144	5.44	0.83	2.01	200	002*
Ab	Malay	Low	247	5.17	0.86	3.01	389	.003*
	Chinasa	High	118	4.36	0.09	016	2.47	260
	Chinese	Low	231	4.25	1.03	.916	347	.360
DI	N f - 1 -	High	144	5.23	1.07	3.15	389	002*
PI	Malay	Low	247	4.86	1.14			.002*
	Cl. i	High	118	4.36	0.93	0.05	5 245	060
	Chinese	Low	231	4.35	0.88		347	.960

*Significance p < .05 Notes: SEI – Strength of ethnic identity, Aad – Attitude towards advertisement, Ab – Attitude towards the brand, PI – Purchase intention

Summary result for the strength of ethnic identity effects hypotheses

Hypotheses	Results
H _{2a} : Majority ethnic group will have more positive attitude towards the advertisement, for targeted advertisement compared to non-targeted advertisement	Partially accepted**
H _{2b} : Strong ethnic identifiers will differ from weak ethnic identifiers in terms of their attitude towards advertisement, brand in the advertisement and purchase intentions for non-targeted advertisement	Rejected

^{*}Significance p < .05

Note: For H_{2a} attitude towards the advertisement the difference was significant at p < .10

DISCUSSION

Recent research in the area of ethnic advertising suggests that companies generally lack the cultural competency to connect with their ethnic audiences (Alexander, 2006; Appiah & Yung, 2009). Past research also suggests that the mere presence of an ethnic character in an advertisement is not sufficient to generate the desired level of connectivity from intended audiences (Appiah, 2001; Forehand & Deshpande, 2001). Companies require that ethnic primes such as symbols, characters and values of the intended group culture be embedded in their advertisements to ensure the effectiveness of their targeting strategy (Pitts, Whalen, O'Keefe, & Murray, 1989).

The results of hypothesis testing indicate that the targeted Malay group had more favourable attitudes toward advertisements and brands and greater purchase intent compared with the non-targeted Malay group. Past research exploring the issue of target advertising strategies has comprehensively documented the favourable responses of targeted groups when compared with non-targeted groups (Aaker, 1999; Aaker et al., 2000; Brumbaugh, 2002; De-Run, 2007, Sierra et al., 2009). These results suggest that ethnicity is a salient variable for a Malay majority ethnic group.

This finding is quite understandable once the sociopolitical and economic factors in Malaysia are considered. The Malay are the centre of an affirmative action program focused on reducing socioeconomic backwardness in Malay and other native ethnic communities (Shumsul, 2003). Therefore, it is not surprising to find that ethnicity is a salient characteristic in the ethnic identity development of Malay adolescents. This finding also indicates that ethnicity can be used as a viable target variable for majority group adolescents in Malaysia.

Past research has used multiple theories from the social sciences to support and justify findings. These theories include the theory of cultural scripts, the theory of distinctiveness, accommodation theory, in-group bias theory, cultural schemas theory and identification theory. For example, those who use cultural script theory to justify their results claim that advertising as a communication source can easily transmit cultural themes that hold a unique value for a group (Triandis et al., 1984). This communication strategy has a tendency to generate positive response from those belonging to that group (Sierra et al., 2009, Triandis et al., 1984). Therefore, congruent ethnic cues in the targeted advertisement appear to function as a source of cultural image depiction and thus resulting in more positive attitudes and greater purchase intent compared with non-targeted groups.

Many researchers have used the theory of distinctiveness to explain why ethnicity-specific cultural cues generate more favourable attitudes towards target

advertisements (Appiah & Yung, 2009; McGuire, 1984). The theory suggests that a person's distinctive characteristics are more salient to that person. Thus, ethnicity, being more salient to a minority group, generates more favourable responses towards target advertisements. However, the results of this research show that ethnicity can be salient for majority groups as well and can therefore generate positive reactions towards target advertisements.

Some researchers have suggested that ethnic targeting may not be relevant for younger members of a majority ethnic background (Appiah, 2001). However, in an Eastern context, these results are the first of their kind to demonstrate that the presence of ethnic cues in an advertisement does help younger target consumers from a majority ethnic background to make positive associations with the target advertisement. These results also validate the idea that theoretical developments from the West do not have straightforward application in Eastern societies (Steenkamp & Baumgartner, 1998).

However, the strength of ethnic identity appears not to affect adolescents' attitudes towards targeted/non-targeted advertising. These results are consistent with past studies in the area of ethnic advertising. In a recent attempt to investigate the effects of racial congruency and ethnic identification, Morimoto and La Ferle (2008) studied the issue from an Asian-American perspective. Their results indicated that Asian models were perceived to be more credible than Caucasian and that advertisements with Asian models were preferred by Asian-Americans. Nevertheless, strength of ethnic identification fails to generate significant differences in attitudes or behavioural intent towards advertising (Morimoto & La Ferle, 2008). Past studies have also failed to find a significant difference between strong and weak ethnic identifiers in their attitudes towards target advertisements (De Run, 2004, Deshpande et al., 1986; Green, 1999, Morimoto & La Ferle, 2008).

Furthermore, in the case of adolescents, it was found that majority group members who strongly identify with their ethnic culture did not differ significantly in their attitudes from weak identifiers (Appiah, 2001). One could argue that the use of an ethnically charged product may be a prerequisite for triggering the effect of the strength of ethnic identity (Morimoto & La Ferle, 2008). While the results are consistent with much of the previous research in the area of ethnic advertising, it is important to explore the possible reason for these non-significant results.

One potential explanation can be drawn from the literature on adolescent ethnic identity development. The research in this area suggests that adolescents pass through different stages of ethnic identity development before achieving a mature identity (Marcia, 1980). It would therefore be more appropriate to assess the

adolescent stage of ethnic identity before investigating any differences in their attitudes towards target advertising. Perhaps this method would reveal significant differences in those attitudes.

THEORETICAL AND MANAGERIAL IMPLICATIONS

Insufficient research has explored the effect of ethnic targeting on targeted/non-targeted adolescent groups within a Malaysian context. These effects were explored in terms of majority group members' reactions towards the advertisement and the brand represented as well as their purchase intent.

The theories of distinctiveness and cultural schemas were used to investigate any group differences stemming from the strength of ethnic identity and exposure to targeted/non-targeted advertisements. The main postulate of distinctiveness theory is that the salient features of an individual personality are more distinct to that person (McGuire & Fujioka, 1978). This theory is generally used to justify the positive effect of targeting minority groups (De Run, 2006; Deshpande et al., 1986). In the past, it was argued that ethnicity is more salient to minority groups; thus, ethnic advertising is more relevant for minority groups. However, the results of this research indicate that majority or minority status is not the only factor contributing to the salience of one's ethnicity. Rather, ethnicity can also be a salient characteristic for majority ethnic group adolescents.

These research results suggest that advertisers can use ethnicity as a target variable for majority ethnic groups in Malaysia. As the results indicate that advertisements embedded with ethnic cues generate more favourable attitudes towards the advertisement and the represented brand, companies targeting a particular ethnic group may benefit from running such advertisements (Davis & Gandy, 1999; Sierra et al., 2009). Of course, these managerial implications are subject to the methodological and contextual limitations of this research. We suggest that these managerial implications be viewed considering these limitations.

LIMITATIONS AND FUTURE RESEARCH DIRECTION

Several important contextual and methodological limitations need to be acknowledged in this study. From a methodological perspective, this study has several limitations. First, the use of print advertisements may have limited application in this digital age. Most teenagers are technology oriented; therefore, the use of television or web-based commercials could be more relevant for this age segment. The choice of product was also an important limitation. These

results are based on a moderate level of product involvement. However, the results could be different for high- or low-involvement products. Finally, the absence of the Halal logo in non-targeted advertising may further explain the less positive attitudes among Malay adolescents. This limitation is particularly relevant because many toothpaste brands use Halal certification on their packaging.

Methodological and contextual limitations are always helpful in identifying directions for future research. Further studies could consider adding other ethnic groups into their experimental design. Replicating this study in other Eastern societies in order to draw more reliable conclusions can also expand the research. One important methodological shortfall was the absence of direct comparison for targeted/non-targeted advertisements. Future research can incorporate repeated measures to investigate whether these methodological differences have a significant impact on the outcome of targeted/non-targeted advertising. This study used only one type of product. Thus, a natural extension of this study could investigate adolescent reactions towards products with different involvement levels.

CONCLUSION

This research demonstrates that ethnicity is a useful variable for targeting majority (Malay) adolescents in a multiethnic Eastern society. It appears that majority (Malay) ethnic group members are able to identify and connect with the salient ethnic cues in the target advertisement. Therefore, in contrast with multiethnic Western societies, Malay majority group adolescents' ethnicity is relevant to their identity. On the other hand, the strength of ethnic identity fails to predict any significant difference in adolescents' reactions towards non-targeted advertising. These results indicate that a strong affiliation with one's group does not equate to negative attitudes towards other groups.

REFERENCES

- Aaker, J. L., Brumbaugh, M., & Grier, S. (2000). Non-target markets and viewer distinctiveness: The impact of target marketing on advertising attitudes. *Journal of Consumer Psychology*, 9(3), 127–140.
- Aaker, J. L., & Williams, P. (1998). Empathy versus pride: The influence of emotional appeals across cultures. *Journal of Consumer Research*, 25, 45–57.
- Adamson, L., Hartman, S. G., & Lyxell, B. (1999). Adolescent identity a qualitative approach: Self-concept, existential question and adult contacts. *Scandinavian Journal of Psychology*, 40, 21–31.

- Alexander, A. (2006). Closing cultural divide opens vast opportunities for retailers. *Drug Store News*, 28 (13 February), 12–14.
- Appiah, O. (2001). Ethnic identification on adolescent's evaluation of advertisements. *Journal of Advertising Research*, September–October, 7–18.
- Appiah, O., & Yung, L. (2009). Reaching the model minority: Ethnic differences in responding to culturally embedded targeted and non-targeted advertisements. *Journal of Current Issues and Research in Advertising*, 31(1), 27–41.
- Asma, A., & Pedersen, P. B. (2003). *Understanding multicultural Malaysia: Delights, puzzles & irritations*. Selangor, Malaysia: Prentice Hall.
- Barban, A. (1969). The dilemma of integrated advertising. *Journal of Business*, 42(October), 477–496.
- Bleach, G., Belch, M., & Ceresino, G. (1985). Parental and teenage influence in family decision making. *Journal of Business Research*, April, 163–176.
- Block, C. (1972). White backlash to Negro ads: Facts or fantasy? *Journalism Quarterly*, 49(Summer), 258–262.
- Bocock, R. (1993). Consumption. London: Routledge.
- Boush, D., Marian, F., & Gregory, M. (1994). Adolescent scepticism toward TV advertising and knowledge of advertiser tactics. *Journal of Consumer Research*, 21(1), 165–175.
- Brett, M., Christina, K. L., & Yang, F. (2004). The influence of ad model ethnicity and self-referencing on attitudes. *Journal of Advertising*, 33(4), 27–37.
- Brumbaugh, A. (2002). Source and non-source cues in advertising and their effects on the activation of cultural and sub cultural knowledge on the route to persuasion. *Journal of Consumer Research*, 29(September), 258–269.
- Brumbaugh, A., & Grier, S. (1999). Noticing cultural differences: Ad meaning created by targets and non-target markets. *Journal of Advertising*, 28(1), 79–93.
- Burton, D. (2000). Ethnic identity and marketing: A critical review. *Journal of Marketing Management*, 16(1), 853–877.
- Casson, R. (1983). Schemata in cognitive anthropology. *Annual Review of Anthropology*, 12, 429–462.
- Che-Beng, T. (2000). Ethnic identities and national identities: Some examples from Malaysia. *Identities*, 6(4), 441–480.
- Ching, C. (2007). The relative effectiveness of comparative and non-comparative advertising: Evidence of gender difference in information processing strategy. *Journal of Advertising*, 36(1), 21–35.
- Choi, L. C., Fernandez, N., & Brett, A. S. (2002). Using self-referencing to explain the effectiveness of ethnic minority models in advertising. *International Journal of Advertising*, 21(3), 367–379.
- Collins, C. (2006). *Status of US brands slip globally among teens*. Retrieved November 2007, from www.csmonitor.com/2006/0216/p13s01-usec.html
- Cota, A., & Dion, K. (1986). Salience of gender and sex composition of ad hoc groups: An experimental test of distinctiveness theory. *Journal of Personality and Social Psychology*, 50(4), 770–776.
- D'Andrade, & Roy, G. (1987). A folk model of the mind. In D. Holland, & N. Quinn (Eds.), *Cultural models in language and thought* (pp. 112–148). London: Cambridge University Press.

- Davis, J. L., & Gandy, H. O. (1999). Racial identity and media orientation: Exploring the nature of constraint. *Journal of Black Studies*, 29(January), 367–397.
- Department of Statistics Malaysia (2010). *Malaysian population by age group*. Retrieved from http://www.statistics.gov.my.
- De-Run, E. (2004). *Unintended effects of ethnically targeted advertising*. Unpublished PhD dissertation, University of Otago.
- De-Run, E. (2006). Does targeting really works? The perspective of dominant ethnic group. *International Journal of Business and Society*, 6(1), 27–51.
- De-Run, E. (2007). Ethnically targeted advertising: Views of those not targeted. *Asia Pacific Journal of Marketing and Logistics*, 19(3), 265–285.
- De Run, E., & Fah, S. C. (2006). Language use in packaging: The reaction of Malay and Chinese consumers in Malaysia. *Sunway Academic Journal*, *3*, 133–145.
- Deshpande, R., Hoyer, D., & Donthl, N. (1986). The intensity of ethnic affiliation: A study of the sociology of Hispanic consumption. *Journal of Consumer Research*, 13(2), 214–220.
- Deshpande, R., & Stayman, D. (1994). A tale of two cities: Distinctive theory and advertising effectiveness. *Journal of Marketing Research*, 31(1), 57–64.
- Donthl, N., & Cherian, J. (1994). Impact of strength of ethnic identification on Hispanic shopping behaviour. *Journal of Retailing*, 70(4), 383–393.
- Ellssa, M. (2000). *The 100 billion allowances: Accessing the global teen market*. New York: John Wiley and Sons Inc.
- Forehand, M., & Deshpande, R. (2001). What we see make us who we are: Priming ethnic self-awareness and advertising response. *Journal of Marketing Research*, 7, 336–348.
- Forehand, M., & Reed, A. (2002). Identity salience and the influence of differential activation of the social self-schema on advertising response. *Journal of Applied Psychology*, 87(6), 1086–1099.
- Gaylord-Harden, N., Ragsdale, B., Mandara, J., Maryse, H., & Petersen, A. (2007). Perceived support and internalizing symptoms in African American adolescents: Self-esteem and ethnic identity as mediators. *Journal of Youth and Adolescence*, *36*(January), 77–88.
- Gong, I. (2007). Ethnic identity and identification with the majority group: Relations with national identity and self-esteem. *International Journal of Intercultural Relations*, 31, 503–523.
- Green, C. (1999). Ethnic evaluations of advertising: Interaction effects of strength of ethnic identification, media placement and degree of racial composition. *Journal of Advertising*, 28(1), 49–64.
- Grier, S., & Brumbaugh, A. (2006). Insight from a failed experiment: Direction for the pluralistic multiethnic research. *Journal of Advertising*, 35(3), 35–46.
- Grier, S., Brumbaugh, A., & Thornton, C. (2006). Crossover dreams: Consumer responses to ethnic-oriented products. *Journal of Marketing*, 70(April), 35–51.
- Grier, S., & Deshpande, R. (2001). Social dimensions of consumer distinctiveness: The influence of social status on group identity and advertising persuasion. *Journal of Marketing Research*, 2, 216–224.
- Guest, L. P. (1955). Brand loyalty: Twelve years later. *Journal of Applied Psychology*, 39(December), 405–408.

- Hair Jr. J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2007). *Multivariate data analysis* (6th ed.). New Jersey: Prentice Hall International, Inc.
- Harter, S. (1983). Development perspectives on self-system. In P. H. Mussen (Ed.), *Handbook* of *child psychology* (Vol. 4, pp. 275–386). New York: John Wiley and Sons.
- Jackson, C. (1997). Initial and experimental stages of tobacco and alcohol use during late childhood: Relation to peer, parent, and personal risk factors. *Addictive Behaviour*, 22(5), 685–698.
- Jackson, L., Hymes, R. W., & Sullivan, L. A. (1987). The effects of positive information on the evaluation of Black and White targeted by Black and White subjects. *Journal of Personality and Social Psychology*, 127(3), 309–316.
- Kamaruddin, A. Z., & Mokhlis, S. (2003) Consumer socialization, social structural factors and decision-making styles: A case study of adolescents in Malaysia. *International Journal of Consumer Studies*, 27(2), 145–156.
- Keegan, W. J., & Green, M. C. (2008). Global marketing (5th ed.). Upper Saddle River, NJ: Pearson Education International.
- Koslow, S., Shamdansani, N., & Touchstone, E. (1994). Exploring language effects in ethnic advertising: A sociolinguistic perspective. *Journal of Consumer Research*, 20(March), 575–585.
- Marcia, J. E. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology* (pp. 159–187). New York: Wiley.
- McGuire, W. (1984). Search for the self: Going beyond self-esteem and the reactive self. New York: Academic, Press.
- McGuire, W., & Fujioka, T. (1978). Salience of ethnicity in the spontaneous self-concept as a function of ones ethnic distinctiveness in the social environment. *Journal of personality and social psychology*, 365, 511–520.
- McGuire, W., & McGuire, C. (1979). Effects of household sex composition on the salience of one's gender in the spontaneous self-concept. *Journal of Experimental Social Psychology*, 15(1), 77–90.
- Meyers-Levy, J. (1989). The influence of sex role on judgment. *Journal of Consumer Research*, 14, 522–530.
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2006). *Applied multivariate research: Design and interpretation*. Thousand Oaks, CA: SAGE Publications.
- Mokhlis, S. (2009). Malaysian Chinese consumers: Their ethnic attitudes and shopping orientations. *International Journal of Business and Management*, 4(11), 62–74.
- Morimoto, M., & La Ferle, C. (2008). Examining the influence of culture on perceived source credibility of Asian Americans & the mediating role of similarity. *Journal of Current Research in Advertising*, 30(1), 49–61.
- Moscovisi, S. (1975). Social influence and social change. London: Academic Press.
- Noriega, J., & Blair, E. (2008). Advertising to bilinguals: Does the language of advertising influence the nature of thoughts? *Journal of Marketing*, 72(5), 69–83.
- Pankhania, A., Lee, N., & Hooley, G. (2007) Within-country ethnic differences and product positioning: A comparison of the perceptions of two British subcultures. *Journal of Strategic Marketing*, 15, 121–138.

- Pechmann, C., Linda, L., Loughlin, S., & Frances, L. (2005). Impulsive and self-conscious: Adolescent's vulnerability to advertising and promotion. *Journal of Public Policy and Marketing*, 24(2), 202–221.
- Phinney, J. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counselling Psychology*, *54*(3), 271–281.
- Phinney, J., & Devich-Navarro, M. (1997). Variations in bicultural identification among African American and Mexican American adolescents. *Journal of Counselling Psychology*, 7(1), 3–32.
- Phinney, J. (1990). Ethnic identity in adolescent and adults: Review of research. *Psychological Bulletin*, 108(3), 499–514.
- Phinney, J., & Ong, A. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counselling Psychology*, 54(3), 271–281.
- Pitts, R. E., Whalen, J., O'Keefe, R., & Murray, V. (1989). Black and White response to culturally targeted television commercials: A values-based approach. *Psychology & Marketing*, 6(winter), 311–328.
- Reich, W. A., Ramos, J. M., & Jaipal, R. (2000). Ethnic identity and interethnic dating in portages young adults. *Asian Journal of Social Psychology*, *3*, 153–161.
- Resnick, L. B. (1991). Shared cognition: Thinking as social practice. In L. B. Resnick, J. M. Levine, & S. D. Teasley (Eds.), *Perspectives on socially shared cognition* (pp. 1–20). Washington, DC: American Psychological Association.
- Ronald, F. B., Joseph, F. H. Jr., & Paul, J. S. (1979). Consumer's level of prejudice and response to black models in advertisements. *Journal of Marketing Research*, 26(August), 341–345.
- Rumelhart, D. E. (1980). Schemata: The building blocks of cognition. In R. J. Spiro, B. Bruce, & W. F. Brewer (Eds.), *Theoretical issues in reading and comprehension* (pp. 33–58). Hillsdale, NJ: Erlbaum.
- Salleh, M. A., Teo, B., & Pecotich, A. (1998). Malaysia: Consumer behaviour and the future. In A. Pecotich, & C. J. Schultz (Eds.), *Marketing and consumer behaviour in East and Southeast Asia* (pp. 451–492). Sydney: McGraw-Hill.
- Schaefer, A. D., Hermans, C. M., & Parker, R. S. (2005). A cross-cultural exploration of advertising scepticism and media effects in teenagers. *Marketing Management Journal*, 15(2), 29–42.
- Sekhon, K., & Szmigin, I. (2009). The bicultural value system undertaking research among ethnic audiences. *International Journal of Market Research*, 51(6), 751–771
- Sellers, P. (1989). The ABC's of marketing to kids. Fortune, 8 May, 114–117.
- Sellers, R. M., Copeland-Linder, N., Martin, P. P., & L'Heureux, L. R. (2006). Racial identity matters: The relationship between racial discrimination and psychological functioning in African American adolescents. *Journal of Research on Adolescence*, 16(2), 187–216.
- Shammout, A. B. (2007). Evaluating an extended relationship marketing model for Arab guests of five-star hotels. Unpublished PhD Dissertation, School of Hospitality, Tourism and Marketing Faculty of Business and Law, Victoria University.
- Sharifian, F. (2003). On cultural conceptualisations. *Journal of Cognition and Culture*, 3(3), 187–205.

- Shumsul, H. M. (2003). The role of state in managing ethnic tensions in Malaysia. *The American Behaviorial Scientist*, 47(3), 240–267.
- Sierra, J. J., Hyman, M. R., & Torres, I. M. (2009). Using a model's apparent ethnicity to influence viewer responses to print ads: A social identity theory perspective. *Journal of Current Issues and Research in Advertising*, 31(2), 41–61.
- Singh, N. (2004). From cultural models to cultural categories: A framework for cultural analysis. *The Journal of American Academy of Business*, September, 94–101.
- Sirkeci, I. (2009). Ethnic marketing potential in New England and Wales: Evidence from 2001 census. *Asian Journal of Marketing*, 2(1), 1–9.
- Solomon, M. R., Marshall, G. W., & Stuart, E. W. (2006). *Marketing, real people, real choices*. New Jersey: Pearson-Prentice Hall.
- Star, S. H. (1989). Marketing and its discontents. *Harvard Business Review*, 12, 148–154. Stayman, D., & Deshpande, R. (1989). Situational ethnicity and consumer behaviour.
- Journal of Consumer Research, 16(December), 361–371. SteenKamp, J., & Baumgartner, H. (1998). Assessing measurement invariance in cross-
- national consumer research. *Journal of Consumer Research*, 25, 78–90. Steinberg, L. D., & Morris, A. S. (2001). Adolescent development. *Annual Review Psychology*, 52, 83–110.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston: Allyn & Bacon.
- Tajfel, H. (1981). *Human groups and social categories*. Cambridge, England: Cambridge University Press.
- Thatcher, R. W., Walker, R. A., & Guidice, S. (1987). Human cerebral hemispheres develop at different rates and ages. *Science*, 236 (May), 1110–1113.
- Triandis, H. C., Gerardo, M., Lisansky, J., & Betancourt, H. (1984). Simpatia as a cultural script of Hispanics. *Journal of Personality and Social Psychology*, 47(6), 1363–1375.
- Torres, I. M., & Briggs, E. (2007). Identification effects on advertising response: The moderating role of involvement. *Journal of Advertising*, 36(3), 97–108.
- Wang, S., Holloway, B. B., Beatty, S. E., & Hill, W. W. (2007). Adolescent influence in family purchase decisions: An update and cross-national extension. *Journal of Business Research*, 4(4), 1–8.
- Webster, C. (1992). The effects of Hispanic subculture identification on information search behaviour. *Journal of Advertising Research*, 32(5), 54–62.
- Wheeler, S. C., Petty, R. E., & Bizer, G. Y. (2005). Self-schema matching and attitude change: Situational and dispositional determinants of message elaboration. *Journal of Consumer Research*, 31(4), 787–797.
- Whittler, T. (1989). The effects of actor race in commercial advertising: Review and extension. *Journal of Advertising*, 20, 54–56.
- Whittler, T., & DiMeo, J. (1991). Viewers' reactions to racial cues in advertising stimuli. *Journal of Advertising Research*, 31(December), 37–46.
- Widdicombe, S., & Woffitt, R. (1995). *The language of youth subcultures: Social identity and action*. London: Harvester Wheatsheaf.
- Williams, J., & Qualls, W. (1989). Middle class black consumers and intensity of ethnic identification. *Psychology and Marketing*, *6*, 263–286.
- Wooten, D. (1995). One of a kind in a full house: some consequences of ethnic and gender distinctiveness. *Journal of Consumer Psychology*, 4, 205–224.

Wooten, D., & Galvin, T. (1993). A preliminary examination of the effect of context-induced felt ethnicity on advertising effectiveness, *Advances in Consumer Research*, 20(1), 253–256.

APPENDIX

Scales used and their respective items

- 1. The toothbrush advertisement is easy to understand (Attitude towards the advertisement)
- 2. The advertisement is appropriate
- 3. The advertisement is informative
- 4. The toothbrush advertisement is pleasant
- 5. The toothbrush ad is exciting
- 6. The brand in the advertisement is good (**Brand attitude**)
- 7. I like quite a lot the brand in the advertisement.
- 8. The brand in the advertisement is pleasant.
- 9. The brand in the advertisement is of good quality.
- 10. It is likely that I will buy this brand shown in the advertisement (purchase intention)
- 11. It is possible that I will buy this brand shown in the advertisement
- 12. It is probable that I will buy this brand shown in the advertisement
- 13. The advertisement is very persuasive (**Advertisement cognition**)
- 14. The advertisement is objective
- 15. The advertisement is very meaningful
- 16. The advertisement is very realistic
- 17. The advertisement is appealing to my individual values
- 18. The clean A tooth brush brand deliver excellent cleaning for teeth (**Brand cognition**)
- 19. The clean A tooth brush brand help improve gum health
- 20. The clean A tooth brush brand remove odour
- 21. The clean A tooth brush brand remove teeth stains
- 22. The clean A tooth brush brand work gently on teeth
- 23. The advertisement seemed to be written for my ethnic group (**Self reference**)
- 24. The advertisement made me think about my own experiences with my culture
- 25. The advertising model is a person whom I want to be like
- 26. The advertisement model is a person who speaks for the group of which I am a member
- 27. I always speak my ethnic language at home (Strength of ethnic identity)
- 28. I prefer to socialized with my own ethnic group members
- 29. I always prefer food of my ethnic group
- 30. I must marry within my own ethnic group
- 31. I fluently speak language of my ethnic group