The importance of product involvement for predicting advertising effectiveness among young people

Tali Te'eni-Harari and Sam N. Lehman-Wilzig

Bar-Ilan University

Shlomo I. Lampert

Hadassah Academic College, Jerusalem

The current study investigates the role of the product involvement variable in advertising information processing among young people in Israel, aged 4–15, in tandem with three other relevant variables: age group, type of argument and character attractiveness.

The results indicate that ad effectiveness: is significantly and positively influenced by product involvement; is significantly and negatively influenced by age group; is influenced in part by type of argument; and is not influenced by the character in the ad. We offer several explanations and present relevant ramifications regarding these results, especially the importance of product involvement for young people in enhancing advertising effectiveness.

Introduction

The issue of advertising effectiveness among young people has been the subject of considerable debate over the years, with the essence of the discussion centring on the age variable. Conventional wisdom to date has been that *age* is the principal variable influencing the effectiveness of an advertisement when targeting young people (Robertson & Rossiter 1974; Wartella & Ettema 1974; Atkin 1975; Liebert *et al.* 1977; Ward *et al.* 1977; Wartella 1981; Anderson & Lorch 1983; Roedder *et al.* 1983; Van Evra 1990; Gunter & McAleer 1997; Pawlowski *et al.* 1998).

Clearly, age plays a major role in understanding the elaboration process of advertising information among children and teenagers. The advertiser must relate to the various stages of a child's cognitive development in order to create a message that will be understood by the younger target audience. However, it would appear that the age of the child alone cannot adequately address the question of advertising effectiveness. When searching for additional significant variables regarding advertising effectiveness among the young, *product involvement* should be taken into account as well. One should consider product involvement as an important variable since it represents a major variable in consumer studies of adults (Traylor 1981; Celsi & Olson 1988; Brisoux & Cheron 1990; Havitz & Howard 1995; Park 1996; Quester & Smart 1996; Leclerc & Little 1997; Iwasaki & Havitz 1998). However, the subject has yet to be the focus of an in-depth study regarding young people. Thus, the current study focuses on the product involvement variable and re-evaluates the age variable in the elaboration process of advertising among the young.

The present study also investigates whether ad effectiveness is influenced by advertising argument and/or character attractiveness, in light of the importance of these factors in explaining adults' advertising information processing (Petty & Cacioppo 1981; Cacioppo & Petty 1989).

Therefore, the central question of this study is: Which of the following variables – product involvement, age, advertising argument and character attractiveness – significantly influences information processing among young people? The answer should provide us with a better understanding of ad information processing among young people, and thus also aid marketers and advertisers seeking to improve the effectiveness of ads addressed to this young population group. In addition, the findings entail important ethical aspects relevant to advertisers, regulators and educators.

Background

On the concept of involvement

Involvement is created by the personal significance that the individual ascribes to the features of the object (message, situation, product). Because involvement is a matter of interpretation, rather than the stimulus itself, it may be expected that the involvement level of different people will vary

in relation to the same object, due to differences in personality, previous experience, the consumer's socio-demographic status, etc. (Antil 1984).

Petty and Cacioppo (Petty & Cacioppo 1981; Cacioppo & Petty 1989) developed the Elaboration Likelihood Model, which represents an important basis for understanding the elaboration process of advertising data through two separate routes, in accordance with the level of involvement. On the higher involvement level, adults elaborated the data via a central route, and were persuaded by means of a strong argument relating to the product's features, which appeared in the advertisement. On the other hand, on the lower involvement level, adults elaborated the data via a peripheral route, and were persuaded by means of the attractive character appearing in the ad (Petty *et al.* 1983).

These studies underscore the importance of the involvement variable as an integral and inseparable part of the process that occurs during exposure to the advertisement. Zaichkowsky (1986) discussed the relationship between the concept of involvement and the elaboration of the advertisement. In her view, this variable takes on considerable importance in a study of advertising effectiveness. The involvement variable serves as a mediating variable in determining the degree of the advertisement's influence on the viewer. The reason for this is that the involved consumer devotes more attention, perceives the matter as more important and behaves differently from an uninvolved consumer. Despite the existing research on involvement, many researchers are convinced that no complete understanding of the involvement concept has yet been formulated. In the view of some researchers, it is very important that additional research be conducted to examine the issue of involvement (Zaichkowsky 1986; Day *et al.* 1995).

On the product-involvement variable

Product involvement reflects recognition that a particular product category may be more or less central to people's lives, their sense of identity and their relationship with the rest of the world (Traylor 1981). In other words, product involvement is the perceived personal relevance of the product, based on needs, values or interest (Zaichkowsky 1985, 1986).

Researchers studying consumer behaviour attribute a great deal of importance to the product-involvement variable. Studies have shown that product involvement can influence the decision-making process regarding

a product, the extent of the consumer's search for information about the product, the manner in which the consumer's attitudes and preferences regarding the product are affected, and the consumer's perceptions regarding the various alternatives to the same product category (Celsi & Olson 1988; Brisoux & Cheron 1990; Leclerc & Little 1997).

Several studies demonstrate that a consumer with greater product involvement will be more loyal to a particular brand within the same product category (Traylor 1981; Park 1996; Iwasaki & Havitz 1998). Other studies have found that the product-involvement variable is a constant and stable variable relative to many other variables, and that, consequently, it may serve both the marketer and advertiser over the long term (Havitz & Howard 1995; Iwasaki & Havitz 1998; Quester & Smart 1996). However, all the above studies focused on product involvement among adults, while very few have been undertaken regarding product involvement among youngsters.

A study recently carried out to examine the relationship between product involvement and cents-off sensitivity (i.e. sensitivity to price reduction) and brand sensitivity among children found that the child behaves selectively and focuses on products that s/he wants and is involved in. Consequently, the child will notice sales only when they are for products that are relevant to his or her world (Muratore 2003). This study is indicative of the importance of the product-involvement variable among children in relation to the cost of the product. However, the findings heretofore provide only part of the picture regarding the function of product involvement among youngsters. Thus, the present study seeks to expand our understanding of product involvement, by investigating the relationship between ad effectiveness and product involvement among young people.

The processing of advertising as a function of age

As was briefly noted above, a central variable in advertising information processing is age. Numerous research studies have been undertaken over the past few decades to determine the *development of advertising literacy* among young people. *Advertising literacy* is understood as the skills of analysing and evaluating persuasive messages across a variety of contexts and media (Young 2003; Livingstone & Helsper 2006). These studies

examined the awareness of persuasion intent (Robertson & Rossiter 1974; Ward et al. 1977; Donohue et al. 1980; Macklin 1987; Brucks et al. 1988; Van Evra 1990; Young 1990; John 1999; Kunkel 2001; Moore 2004), and the ability to identify a lack of balance and misleading intent (Bever et al. 1975; Ward et al. 1977; Peterson et al. 1984; Peterson & Lewis 1988; Martin 1997; Boush 2001). According to these studies, children evidently start to become more critical towards advertising messages around the age of eight, at that point using the mechanisms at their disposal in order to filter the information passed on by the ad.

In addition, research studies have been undertaken to determine advertising effects among young people. Once again, the findings show that significant changes in the various levels of influence occur at around the age of eight. Up until then, children find it difficult to recall and understand advertisements, although it is evident that there is a high level of positive feeling towards the advertisement on the part of the children, and that the advertisement has a strong influence on the children's behaviour. From the age of eight and up, however, the situation starts to change. Older children have better recall and understanding of the advertisement, but their positive feelings about the ads and their behavioural effect are weaker in comparison to those of the younger ages (Robertson & Rossiter 1974; Wartella & Ettema 1974; Atkin 1975; Liebert et al. 1977; Ward et al. 1977; Wartella 1981; Anderson & Lorch 1983; Roedder et al. 1983; Van Evra 1990; Gunter & McAleer 1997; Pawlowski et al. 1998).

It should be noted, however, that in a recently published, wide-ranging survey of the research literature, evidence was found that children younger than seven years old are the least influenced by advertising, while those over twelve years old are the most influenced (Livingstone & Helsper 2006). In light of this last study's findings, which are contradictory to previous ones, there appears to be a need for a re-evaluation of the age variable's role in predicting ad effectiveness among young people.

Hypotheses

H1: Advertising effectiveness among young people is positively influenced by their level of product involvement, i.e. the higher the involvement, the higher the ad effectiveness.

Based on the above literature survey, it is important to examine whether advertising effectiveness among young people is influenced by product involvement – previously shown to be an important information-processing variable among adults.

H2: Advertising effectiveness among young people is negatively influenced by their specific age, i.e. the older the child, the lower the ad effectiveness.

The current study tested the degree to which ad effectiveness is influenced by a specific age group, a variable found to be important in previous studies of young people. Our hypothesis regarding age is based on the conventional findings.

- H3: Advertising effectiveness among young people is influenced by the advertising argument, i.e. the central argument has higher ad effectiveness than the peripheral argument.
- H4: Advertising effectiveness among young people is positively influenced by the character's attractiveness, i.e. the more attractive the character, the higher the ad effectiveness.

The two additional hypotheses, H3 and H4, are related to variables in the Elaboration Likelihood Model (Petty & Cacioppo 1981; Cacioppo & Petty 1989), where type of argument and ad character were both found to be influential in advertising information processing among adults.

Methodology

Participants

Three age groups participated in this study: young children (4–7), children (8–11) and adolescents (12–15). In order to test significant differences between the three age groups, we chose participants at the median age in each group: 5–6 (111 young children), 9–10 (106 children) and 13–14 (113 adolescents). The choice of these age groups is based on prior research findings dealing with the effect of advertising among young people (Robertson

& Rossiter 1974; Wartella & Ettema 1974; Atkin 1975; Liebert *et al.* 1977; Ward *et al.* 1977; Wartella 1981; Anderson & Lorch 1983; Roedder *et al.* 1983; Van Evra 1990; Gunter & McAleer 1997; Pawlowski *et al.* 1998).

The present study was carried out in public schools (K-8) in conjunction with, and with the approval of, the Ministry of Education, as well as that of the respective principals, teachers, parents (who signed a consent form) and the young people themselves.

Data collection procedures

The study was based on 12 cells of analysis: three age groups × two types of arguments (central/peripheral) × two types of characters (attractive/unattractive).

Research stages

Stage 1: preliminary research

The purpose of the preliminary research was to develop our research tools based on face-to-face in-depth interviews of 61 young people, aged 4–15. The first step was to identify a product with high-involvement variability among young people. Therefore, we queried the youngsters regarding their level of involvement in various products. The second step was to develop the ads: we had to create ads with both strong and weak arguments, presented by attractive and unattractive characters. Therefore, the youngsters were asked about the way they perceived several arguments and characters. As a result, a product with high-involvement variability was selected (i.e. chocolate). In addition, four ads were designed based on the preliminary research results. The differences between the four ads involved two elements: type of argument and character (see Table 1).

Another goal of the preliminary research was to develop the questionnaire for the young respondents regarding the concepts measured (product involvement and ad effectiveness), to ensure that the youngsters would understand the questions and provide authentic answers.

Stage 2: field research

The quantitative field research based on the questionnaire emanating from the preliminary research was carried out among 330 young people.

	Ad arg	gument
	Strong	Weak
Attractive	Mom always says: the tastiest chocolate in the world is 'Shokolak'	Mom always says: the chocolate in the nicest package is 'Shokolak'
Unattractive	The neighbour always says: the tastiest chocolate in the world is 'Shokolak'	The neighbour always says: the chocolate in the nicest package is 'Shokolak'
		Strong Mom always says: the tastiest chocolate in the world is 'Shokolak' The neighbour always says: the tastiest

Each child was interviewed individually, face to face, within the confines of her/his school or kindergarten.

This stage involved using a structured questionnaire. The first section tested the respondent's level of involvement with the product. Afterwards, s/he was shown one printed advertisement (read out loud to the younger cohort; the older children read it by themselves). Thereafter, the child was asked if s/he wished to read/hear it again, and only after a 'no' response did the questioning commence. The last section of the questionnaire included questions testing the ad's effectiveness based on three attitude measures: attitude towards the ad, attitude towards the brand, and purchase intention.

Measures

The dependent measure: advertisement effectiveness

While the construct of ad effectiveness is a concept that is clearly understood, its measurement is far from being obvious. Since there is no single measure to directly gauge ad effectiveness, there is a need to use intervening variables. Previous research in this field has shown that attitude towards the advertisement, attitude towards the brand and purchase intention were the most important measures of ad effectiveness (Lutz 1975; Olson & Mitchell 1975; Mazis & Adkinson 1976; Mackenzie *et al.* 1986).

• Attitude towards the ad. The participant's attitude towards the ad was tested using elements suggested by Mitchell and Olson (1981): good/bad ad; interesting/uninteresting ad; not irritating/irritating; like/dislike.

- These attitudes were scored by the use of the PolliMeter, with response scores ranging from 0 to 100 (see Appendix). All four scores were then combined into a unified index (Cronbach's alpha = 0.706, n = 330).
- Attitude towards the brand. Belch (1982) examined brand attitude using the differential semantic scale relating to four elements: bad/good brand, foolish/wise brand, unfavourable/favourable brand, harmful/beneficial brand. In this study, some of the scales suggested by Belch were changed, as it was found in our preliminary research that the children did not understand some of the concepts. The scales used in the current study were: good/bad brand, smart/stupid brand, healthy/harmful brand (relevant to a food product), and a brand that should be in the home/shouldn't be in the home.

The made-up brand name 'Chocolak' was used instead of the term 'brand', which most youngsters do not fully understand. Here, too, the PolliMeter was employed, and all four scores were combined into one index (Cronbach's alpha = 0.759, n = 330). It is important to emphasise that this index tested the respondents' attitude towards the ad's *brand*, as opposed to product involvement, which focuses on product category.

• *Purchase intention*. In this study, the purchase intention of young people was examined by relating to both the personal purchase intention as well as the intent to request the brand from their parents. The measurement was carried out by means of the PolliMeter. After the measurement, the personal purchase intention and purchase request from parents were combined into one index (Pearson correlation between the two responses: n = 330, r = 0.555, p = 0.000).

The independent measures

Product involvement

The product involvement scale modified for young people was based on the abbreviated inventory developed by Zaichkowsky (1994) regarding levels of product involvement. Zaichkowsky's scale is considered a valid measurement for product involvement (Goldsmith & Emmert 1991); previous research investigating the influence of product involvement has relied on this scale (Celsi & Olson 1988; Brisoux & Cheron 1990; Chow et al. 1990).

However, our preliminary research found that several of the terms in Zaichkowsky's original scale were not fully understood by children, especially the youngest group. As a result, these difficult terms were simplified so that they could be more easily understood by all the age groups tested, which was validated in further probing during the preliminary research.

The young people were asked ten questions about the product:

- 1. is important is unimportant
- 2. is related to my life is unrelated to my life
- 3. says a lot to me says nothing to me
- 4. has value has no value
- 5. is interesting is boring
- 6. is exciting is unexciting
- 7. is attractive is unattractive
- 8. is great is not great
- 9. involves me doesn't involve me
- 10. [I] 'have to have' [it] [I] don't 'have to have' [it].

Another modification of Zaichkowsky's scale was our use of the PolliMeter. The young people gauged their responses to the questionnaire using the PolliMeter's gradated black-to-white sliding scale on one side. Thus, the range of possible responses for each question was 0–100, measured on a numerical scale on the reverse side, rather than a 1–7 numerical scale, as in the original inventory.

Product choice. The results of the preliminary research showed that product involvement could be tested using a single product (chocolate) with a high level of variability in the participants' involvement levels. The results of the comprehensive study also demonstrated considerable variability in the participants' involvement in chocolate within each age group (young children: m = 35.91, sd = 29.24; children: m = 35.37, sd = 25.43; adolescents: m = 45.68, sd = 26.16).

The product involvement scale's internal consistency. After gathering the data in the comprehensive study, the internal consistency of the product involvement questions was tested (Cronbach's alpha = 0.898, n = 330; young children, ages 4-7 = 0.885, n = 111; children ages 8-11 = 0.894,

n = 106; adolescents ages 12-15 = 0.916, n = 113). According to these results, all ten questions were combined into a unified index.

Age group. As noted, this study focused on young people from three age groups: young children (ages 4–7), children (ages 8–11) and adolescents (ages 12–15). The research related to the exact age of the subjects.

The advertising argument. According to Petty et al. (1983), there are different types of arguments, distinguished by the argument's strength and centrality: strong and central arguments (i.e. those that relate to the actual features of the product), as opposed to weak and peripheral arguments. In order to choose a strong and a weak argument, the preliminary research analysed a large number of arguments. In each case, the participant was asked to note the relative importance of the argument. As a result of this preliminary research, two arguments were chosen: for the central argument – 'The best-tasting chocolate in the world' (receiving the highest score among all the age groups) – and for the peripheral argument – 'The chocolate with the most attractive wrapping in the world' (garnering the lowest score among all age groups).

Character attractiveness. According to Petty et al. (1983), the characteristic of an ad character's attractiveness relates to features such as personal characteristics, external appearance and the group to which the character belongs. The present study made use of two different characters: an attractive character and an unattractive character. In order to select an attractive and an unattractive character from the preliminary research, a large number of character types were presented, none identifiable with contemporary brands. Each participant was asked how much s/he liked the character. Based on the results, two characters were chosen: 'mom' (the highest score among all age groups) and 'neighbour' (the lowest score among all ages).

Results

Table 2 presents the results of an analysis of variance (ANOVA) of the *attitude towards the ad* that related to all the independent variables together. The attitude towards the ad was influenced by three out of the four independent variables – product involvement, age and type of argument – while excluding the fourth independent variable, namely character attractiveness.

		n	m	SD	F	df	Sig.
	Low	165	46.52	28.78	10.14	1	0.000
Involvement level	High	165	56.62	27.58	19.14	1	0.000
	4–7	111	65.92	28.21			
Age group	8–11	106	53.85	27.04	48.78	2	0.000
	12–15	113	35.35	21.45			
T. (Peripheral	153	46.81	28.80	7.29	4	0.007
Type of argument	Central	177	55.69	27.85		1	0.007
Character's attractiveness	Unattractive	162	50.50	27.42			0.000
Character's attractiveness	Attractive	168	52.60	29.73	0.02	1	0.880
Interactions between the			32.00	29.73			
Interactions between the			32.00	23.73	F	df	Sig.
	e independent vari		32.00	23.73	F 0.3		- 3
Age × product involvement	e independent vari		32.00	23.73		0 2	0.743
Age × product involvement Age × type of argument	e independent vari		32.00	23.73	0.3	0 2 8 2	0.743
Age × product involvement Age × type of argument Product involvement × type	e independent vari	ables	32.00	23.73	0.3	0 2 8 2 9 1	0.743 0.835 0.224
Age × product involvement Age × type of argument Product involvement × type Age × product involvement	e independent vari	ables	32.00	23.73	0.3 0.1 1.4	0 2 8 2 9 1 7 2	0.743 0.833 0.224 0.736
Age × product involvement Age × type of argument Product involvement × type Age × product involvement Age × character's attractive	e independent vari	ables	32.00	25.73	0.3 0.1 1.4 0.2	0 2 8 2 9 1 7 2 3 2	0.74 0.83 0.22 0.73 0.01
Age × product involvement Age × type of argument Product involvement × type Age × product involvement Age × character's attractive Product involvement × chal	e independent vari	ables	32.00	23.73	0.3 0.1 1.4 0.2 4.4	0 2 8 2 9 1 7 2 3 2 3 1	0.743 0.833 0.224 0.730 0.013
Age × product involvement Age × type of argument Product involvement × type Age × product involvement Age × character's attractive Product involvement × character	e independent vari	ables	32.00	23.73	0.3 0.1 1.4 0.2 4.4 0.0	0 2 8 2 9 1 7 2 3 2 3 1	0.743 0.833 0.224 0.736 0.013 0.863
Age × product involvement Age × type of argument Product involvement × type Age × product involvement Age × character's attractive Product involvement × char Age × product involvement Type of argument × charact	e independent vari	ables s iveness	32.00	23.73	0.3 0.1 1.4 0.2 4.4 0.0 2.4	0 2 8 2 9 1 7 2 3 2 3 1 3 2 5 1	0.743 0.839 0.224 0.730 0.013 0.863 0.099
Interactions between the Age × product involvement Age × type of argument Product involvement × type Age × product involvement Age × character's attractive Product involvement × charact Age × product involvement Type of argument × charact Age × type of argument × charact Age × type of argument × type	e independent vari	ables s iveness		23.73	0.3 0.1 1.4 0.2 4.4 0.0 2.4 3.1	0 2 8 2 9 1 7 2 3 2 3 1 3 2 5 1	0.742 0.833 0.224 0.736 0.013 0.863 0.090 0.077 0.812

Out of the 11 interactions that were examined, only one was found to be significant – the interaction that relates to age and character attractiveness (F = 4.43, df = 2, sig. = 0.013).

Table 3 presents the results of an ANOVA analysis of the *attitude towards the brand*.

The attitude towards the brand was influenced by only two out of the four independent variables, i.e. product involvement and age group, excluding the variables type of argument and character attractiveness. All the interactions that were examined produced insignificant results.

		n	m	SD	F	df	Sig.
Involvement level	Low	165	35.72	26.20	C2 1F	1	0.000
involvement level	High	165	57.18	24.45	62.15	1	0.000
	4–7	111	48.75	33.28			
Age group	8–11	106	46.83	25.39	3.11	2	0.046
	12–15	113	43.83	22.71			
- .	Peripheral	153	45.97	26.83	0.00		0.961
Type of argument	Central	177	46.86	28.12		1	
51	Unattractive	162	45.51	26.77		_	
Character's attractiveness	Attractive	168	47.35	28.22	0.01	1	0.923
		ables					
	·				F	df	Sig
Age × product involvement	·				F		
Age × product involvement Age × type of argument	<u> </u>					2	Sig 0.30° 0.77°
	of argument				1.20	2 2	0.30
Age × type of argument					1.20	2 2 1	0.30
Age × type of argument Product involvement × type	× type of argument				1.20 0.26 2.73	2 2 1 2	0.30° 0.77° 0.100 0.21°
Age \times type of argument Product involvement \times type Age \times product involvement	× type of argument ness				1.20 0.26 2.73 1.56	2 2 1 2 2	0.30° 0.77° 0.100 0.21° 0.044
Age × type of argument Product involvement × type Age × product involvement Age × character's attractive	× type of argument ness acter's attractivenes	S			1.20 0.26 2.73 1.56 3.15	2 2 1 2 2	0.30° 0.77° 0.100
Age × type of argument Product involvement × type Age × product involvement Age × character's attractive Product involvement × chara	× type of argument ness acter's attractivenes × character's attract	S			1.20 0.26 2.73 1.56 3.15 0.50	2 2 1 2 2 1 2	0.30° 0.77° 0.100 0.21° 0.044 0.48°
Age × type of argument Product involvement × type Age × product involvement Age × character's attractive Product involvement × chara Age × product involvement	× type of argument ness acter's attractivenes × character's attract er's attractiveness	s iveness			1.20 0.26 2.73 1.56 3.15 0.50	2 2 1 2 2 1 2	0.30° 0.77° 0.100 0.21° 0.044

Table 4 presents the findings of an ANOVA analysis of the *purchase* intention.

The purchase intention was influenced by only two out of the four independent variables, i.e. product involvement and age group. All the interactions that were examined produced insignificant results.

Looking at Tables 2–4, it is clear that ad effectiveness was influenced by both product involvement and age.

Product involvement had the least impact on attitude towards the ad (F = 19.14, df = 1, sig. = 0.000), a much higher impact on attitude towards the brand (F = 62.15, df = 1, sig. = 0.000) and the highest impact on purchase intention (F = 67.62, df = 1, sig. = 0.000).

		n	m	SD	F	df	Sig.
I	Low	165	33.28	34.17	67.62	1	0.000
Involvement level	High	165	61.70	33.30	67.62	1	0.000
	4–7	111	55.20	38.44			
Age group	8–11	106	46.11	36.12	8.77 2	2	0.000
	12–15	113	41.22	33.97			
T of	Peripheral	153	45.25	36.09	0.46	1	0.500
Type of argument	Central	177	49.43	36.97		1	
Character's attractiveness	Unattractive	162	49.06	36.52		4	0.250
Character's attractiveness	Attractive	168	45.99	36.66	1.327	1	
Interactions between the			43.33	30.00			
Interactions between the			43.33	30.00	F	df	Sig.
	e independent var		43.33	30.00	F 1.06	-	Sig . 0.34
Age × product involvement	e independent var		43.33	30.00		5 2	
Age × product involvement Age × type of argument	e independent var		43.33	30.00	1.06	5 2 3 2	0.34
Age × product involvement Age × type of argument Product involvement × type	e independent var	iables	43.33	30.00	1.06	5 2 3 2	0.34
Age × product involvement Age × type of argument Product involvement × type Age × product involvement	e independent var e of argument × type of argumen	iables	43.33	30.00	1.06 2.78 1.79	5 2 3 2 0 1	0.34 0.06 0.18 0.19
Age × product involvement Age × type of argument Product involvement × type Age × product involvement Age × character's attractive	e of argument × type of argumen	iables t	43.33	30.00	1.06 2.78 1.79 1.64	5 2 3 2 0 1 4 2 2 2	0.34 0.06 0.18 0.19 0.80
Age × product involvement Age × type of argument Product involvement × type Age × product involvement Age × character's attractive Product involvement × cha	e independent var e of argument . × type of argumen eness racter's attractivene	iables t	43.33	30.00	1.06 2.78 1.79 1.64 0.22	5 2 3 2 1 1 2 2 2 1	0.34 0.06 0.18 0.19 0.80 0.98
Age × product involvement Age × type of argument Product involvement × type Age × product involvement Age × character's attractive Product involvement × chal Age × product involvement	e independent var e of argument × type of argumen eness racter's attractivene × character's attrac	iables t	43.33	30.00	1.06 2.78 1.79 1.64 0.22 0.00	5 2 3 2 0 1 1 4 2 2 2 0 1 2 2 2	0.34 0.06 0.18 0.19 0.80 0.98 0.65
Age × product involvement Age × type of argument Product involvement × type Age × product involvement Age × character's attractive Product involvement × char Age × product involvement Type of argument × charact	e independent var e of argument × type of argumen eness racter's attractivene × character's attrac ter's attractiveness	iables t tss tiveness	43.33	30.00	1.06 2.78 1.79 1.64 0.22 0.00	5 2 3 2 1 1 2 2 1 1 2 2 1 1	0.34 0.06 0.18 0.19 0.80 0.98 0.65
Interactions between the Age × product involvement Age × type of argument Product involvement × type Age × product involvement Age × character's attractive Product involvement × charact Age × product involvement Type of argument × charact Age × type of argument × charact Age × type of argument × type	e independent var e of argument × type of argumen eness racter's attractivene × character's attracter's attractiveness character's attractiv	iables t t ss tiveness eness		30.00	1.06 2.78 1.79 1.64 0.22 0.00 0.42 0.32	5 2 2 3 1 4 2 2 2 1 1 2 2 1 3 2 2	0.34 0.06 0.18

The *age variable* was also far from having a uniform impact. It had the highest effect on attitude towards the ad (F = 48.78, df = 2, sig. = 0.000), a marginal effect on attitude towards the brand (F = 3.11, df = 2, sig. = 0.046) and a moderately stronger effect on purchase intention (F = 8.77, df = 2, sig. = 0.000).

On the other hand, only *attitude towards the ad* was influenced by the type of argument, while attitude towards the brand and purchase intention were not influenced by the type of argument. It is also evident that ad effectiveness (attitudes towards the ad, attitude towards the brand, and purchase intention) was not influenced by character attractiveness.

Furthermore, after looking at the interactions among the independent variables in Tables 2–4, it is obvious that there are practically no significant interactions among them (except for two minor interactions out of the 33 possible interactions measured). This fact shows that the independent variables are not correlated with one another (i.e. each stands alone), thereby strengthening the conclusions drawn in the above analysis.

The *hypotheses* were examined *vis-à-vis* the entire research sample (ages 4–15) by means of a univariate ANOVA analysis for each of the three measures comprising the dependent variable: attitude towards the ad, attitude towards the brand and purchase intention. Each of the study's hypotheses relates to one independent variable separately (product involvement, age, type of argument and character attractiveness) and its influence on ad effectiveness. The ANOVA analysis results were separately aggregated in relation to each independent variable presented in Tables 2–4. Following are the detailed results regarding the hypotheses.

Hypothesis 1 examined whether advertising effectiveness among young people is positively influenced by their level of product involvement.

	Involvement level	n	m	SD	F	df	Sig.
Attitude towards the ad	Low	165	46.52	28.78	19.14	1	0.000
Attitude towards the ad	High	165	56.62	27.58		1	
Attitude towards the brand	Low	165	35.72	26.20	52.45	0.000	
Attitude towards the brand	High	165	57.18	24.45	62.15	I	0.000
Purchase intention	Low	165	33.28	34.17	67.63	1	0.000
Purchase Intention	High	165	61.70	33.30	67.62	ı	0.000

As can be seen from Table 5, ad effectiveness was positively influenced by product involvement: attitude towards the ad (F = 19.14, df = 1, sig. = 0.000), attitude towards the brand (F = 62.15, df = 1, sig. = 0.000) and purchase intention (F = 67.62, df = 1, sig. = 0.000). Thus, *Hypothesis 1* was validated.

Furthermore, one can observe that attitudes towards the brand and purchase intention, both product-related factors, were influenced more by product involvement than attitude towards the ad.

Hypothesis 2 examined whether advertising effectiveness among young people is negatively influenced by age.

	Age group	n	m	SD	F	df	Sig.
	4–7	111	65.92	28.21			
Attitude towards the ad	8–11	106	53.85	27.04	48.78	2	0.000
	12–15	113	35.35	21.45			
	4–7	111	48.75	33.28			
Attitude towards the brand	8–11	106	46.83	25.39	3.11	2	0.046
	12–15	113	43.83	22.71			
	4–7	111	55.20	38.44			
Purchase intention	8–11	106	46.11	36.12	8.77	2	0.000
	12–15	113	41.22	33.97			

Table 6 shows that ad effectiveness was negatively influenced by age: attitude towards the ad (F = 48.78, df = 2, sig. = 0.000), attitude towards the brand (F = 3.11, df = 2, sig. = 0.046) and purchase intention (F = 8.77, df = 2, sig. = 0.000). Thus, *Hypothesis 2* was validated.

Yet, the strength of the relationship is highest regarding the age effect on attitude towards the ad, and much less on attitude towards the brand and purchase intention.

Hypothesis 3 examined whether advertising effectiveness among young people is influenced by the type of argument.

	Type of argument	n	m	SD	F	df	Sig.
Attitude towards the ad	Peripheral	153	46.81	28.80	7.29	1	0.007
Attitude towards the ad	Central	177	55.69	27.85		1	
Attitude towards the brand	Peripheral	153	45.97	26.83	0.00	1	0.061
Attitude towards the brand	Central	177	46.86	28.12	0.00	'	0.961
D	Peripheral	153	45.25	36.09	0.46	4	0.500
Purchase intention	Central	177	49.43	36.97	0.46	1	0.500

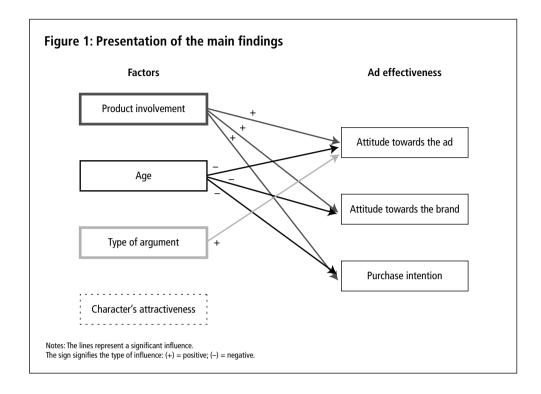
Table 7 shows that ad effectiveness was significantly influenced by the type of argument only regarding attitude towards the ad (F = 7.29, df = 1, sig. = 0.007). Attitude towards the ad was more positive when the argument was central, rather than peripheral. No significant influence was found either on attitude towards the brand (F = 0.00, df = 1, sig. = 0.961) or purchase intention (F = 0.46, df = 1, sig. = 0.500). Therefore, *Hypothesis 3* was rejected: not all elements of ad effectiveness were influenced by the type of argument.

Hypothesis 4 examined whether advertising effectiveness among young people is positively influenced by the character's attractiveness.

	Character's attractiveness	n	m	SD	F	df	Sig.
Accident to the latest	Unattractive	162	50.50	27.42	0.02	1	0.880
Attitude towards the ad	Attractive	168	52.60	29.73	0.02		
Attitude towards the	Unattractive	162	45.51	26.77	0.01		0.022
brand	Attractive	168	47.35	28.22	0.01	ı	0.923
D	Unattractive	162	49.06	36.52	1 227	1	0.350
Purchase intention	Attractive	168	45.99	36.66	1.327	1	0.250

The results shown in Table 8 indicate that ad effectiveness was not significantly influenced by the character's attractiveness: attitude towards the ad (F = 0.02, df = 1, sig. = 0.880), attitude towards the brand (F = 0.09, df = 1, sig. = 0.923) and purchase intention (F = 1.32, df = 1, sig. = 0.250). As a result, *Hypothesis 4* was rejected: none of the ad effectiveness measures was influenced by ad character.

From this overall analysis, one can see that ad effectiveness was influenced mainly by product involvement and age. Figure 1 presents the main results graphically.



Conclusions

Ad effectiveness and product involvement

An overview of the results shows that ad effectiveness is significantly and positively influenced by product involvement. In other words, when the child perceives the product as being relevant and meaningful (a high level of product involvement), her/his attitudes are influenced. On the other hand, when the product is not perceived as relevant and meaningful (a low level of product involvement), the attitude measures are influenced to a significantly lower degree.

An important result arising in this context is that all the components of ad effectiveness were significantly influenced by product involvement. However, it is clear that product involvement had the least impact on attitude towards the ad, a much higher impact on attitude towards the brand and the highest impact on purchase intention. These results show that product involvement has an important role in predicting the purchase intention of youth.

The strong relationship between ad effectiveness and product involvement can be explained by the central role that products play in children's and teenagers' world today. The competitive western consumer culture appears to have a crucial effect on the way children relate to both products and brands. In this kind of culture, the way one presents oneself as successful, up to date and affluent is through owning or using certain products and brands. This encourages young people to ascribe enormous status to the most popular and sought-after products and brands. According to Lindstrom and Seybold (2003) today's youth use brand name purchases as a pillar of their self-image and social status.

In this context, the child's media environment, as a factor serving to reinforce the standing of the brand in the child's life, is also noteworthy. The fact that young people are exposed to non-stop advertising messages further reinforces the status of the product and brand. This intensive exposure introduces young people into a world in which using the 'right' products and brands is the focus of their lives.

Another important point in this context is related to the fact that the product is a major source of information for the child (both the information on the package and the product itself provide the child with very meaningful information). A study carried out by Moore and Lutz (2000) shows that the product, as an information source, is more important in the decision-making process for children than for adults. The reason for this, maintain the researchers, is that children have fewer sources of outside information to help them. Consequently, every information source that the child uses takes on a more central role, with the product itself taking on the most significant role.

It would appear that the combination of the product as an integral part of the child's culture, the inundation of messages regarding products/ brands in the child's media environment, the desire of the child to be part of her/his peer group and the role of the product as a source of information, all render 'important' products a major component in the child's life. The powerful effect of the product is one that crosses age groups; in other words, young people understand the strength and significance of the product in their lives already from a young age, think about and formulate their attitudes, and are influenced accordingly.

Ad effectiveness and age

In addition to the importance of the product involvement variable, it is clear that ad effectiveness is also influenced by age. Our findings show that ad effectiveness (within the realm of attitudes) declines, as the child grows older. These findings reinforce findings from previous research studies (Robertson & Rossiter 1974; Wartella & Ettema 1974; Atkin 1975; Liebert et al. 1977; Ward et al. 1977; Wartella 1981; Anderson & Lorch 1983; Roedder et al. 1983; Van Evra 1990; Gunter & McAleer 1997; Pawlowski et al. 1998), proving once again the negative relationship between age and ad effectiveness.

A highly important result emerging from our study relates to age: all three elements of ad effectiveness (attitude towards the ad, attitude towards the brand and purchase intention) were influenced by the age variable, where the greatest influence was on attitude towards the ad. Thus, the age variable has a central role in predicting attitude towards the advertisement in the young.

Ad effectiveness as a function of advertising argument and leading character

ANOVA analysis shows that the sole effectiveness indicator, which was directly influenced by the type of argument, is attitude towards the ad (i.e. only when the children were asked how much they liked the ad did we find a direct influence of ad content on ad effectiveness). Attitude towards the brand and purchase intention were not significantly influenced by either the type of argument or character. Thus, one can assert that the type of argument has an important role in predicting youth's attitude towards the ad, whereas character attractiveness has no role in predicting it.

These results support the fact that young people judge advertising information based largely on the ad's central element: the product. This is important, as it shows that young people's judgement takes into account the most important aspect of the advertisement, whereas other elements (type of argument and character attractiveness) are less influential on the youngster's attitude.

Further research

It would be fruitful to carry out several more studies to examine additional aspects of this issue. We recommend further study of the factors that influence the level of the child's product involvement. In this context, it is important to examine the influence of the social milieu on the child's level of involvement, especially regarding parents (Palan 1998; Bristol & Mangleburg 2005). In addition, it is important to investigate the level of children's involvement regarding various products, including those that could be harmful or hazardous to their physical and/or emotional health.

Implications

Implications for the advertiser

Planning advertising strategy always begins with a definition of the advertising goals. The present study's results illustrate just how critical the definition of advertising goals is when dealing with youth. When the goal is to create a positive attitude towards the ad among youngsters, one must address the problem differently than when the goal is to create a positive attitude towards the brand and/or strengthen their purchase intention.

When the strategic goal is to create positive attitudes towards the ad, one has to concentrate mainly on two central variables: the type of argument and age. As regards the former, this study's results prove that a central argument is likely to create a more positive attitude towards the ad than a peripheral message. This is an important point because there is a general tendency to prefer peripheral messages in ads directed at youngsters, rather than central arguments relevant to the product itself.

Regarding the variable of age, attitudes towards the ad will tend to be more positive the younger the audience. As a result, one has to adapt the scope and budget of the campaign in accordance with the target audience's age. Since it seems easier to create positive ad attitudes among the youngest audience, one should invest fewer resources in the youngest audience and more in the older age groups. Moreover, the findings here indicate that ad attitudes are not influenced by the attractiveness of the ad's character; thus, there is little justification in devoting large-scale financial resources to enlist an especially attractive character.

When the strategic goal is to create a more positive attitude towards the brand and/or increase purchase intention, one has to focus on the product involvement variable. Thus, it seems that, first and foremost, one must examine the target population's level of product involvement in the relevant product category. We recommend using the modified product involvement scale developed in this study, which is compatible with young people. Advertising messages aimed at the population segment that possesses a relatively low level of product involvement is likely to be less effective regarding attitude towards the brand and purchase intention, due to the audience's lower attentiveness. Therefore, the first marketing objective should be to try to increase the level of involvement in the product category. Our recommendation is to focus the advertising activity on the product category and not only on the brand.

On the other hand, advertising messages aimed at the population segment that possesses a high level of product involvement are likely to attract more attention and potentially be more effective. Advertising activity directed towards this population segment needs to focus more on the brand and less on the product category. Advertising activity *vis-à-vis* the youth segment that is involved in the product is likely to produce more positive attitudes towards the brand and to increase purchase intention.

Implications for media regulators and educators

Two recommendations for media regulators and educators arise from these research results. First, legislators and regulators must understand the importance of the product involvement variable in ad information processing. This is especially true regarding products that could be harmful to young people's physical and mental health, such as high-sugar-content foods and drinks, diet products, non-prescription drugs, relaxing and/or stimulating natural products, and products that could be used as a weapon. We recommend studying the young target audience's involvement in such harmful products and then developing new rules and regulations for advertising of the high-involvement products. Here, too, it is advisable to take into account the differences among the age groups, formulating such new rules based on the advertising potential influence for each specific age group.

Second, educators involved in teaching media literacy and monitoring commercials should understand the centrality of the product in the lives of contemporary youth and its influence on their advertising information processing. Such an understanding will, it is hoped, lead to improved educational tools, enabling youth to better handle marketing and advertising stimuli.

Appendix: The PolliMeter™ – the main measurement device

In order to make the young people's responses as easy as possible, while increasing the validity and reliability of their answers, the study used the PolliMeter (Lampert 1979, 1981; Lampert & Stashevsky 2006) as its main measuring device.

The PolliMeter comprises two basic components: a rectangular scaling device with a sliding coloured ruler that can be moved to the right or the left, in the housing. The participant's side is marked or scaled using the colours black and white. At the outset of each question, the scale is set in a balanced position: 50% black, 50% white. The participant is instructed that black represents a negative attitude and white a positive attitude. The subject is requested to set the scale – adding either more black or more white to the ruler as needed, to reflect her/his response to the question.

The tester's side of the PolliMeter – which the participant cannot see – 'translates' the participant's response into a numerical scale. In other words, the score is calculated by computing X% of the one colour and (100 – X%) of the other. That is, moving the coloured scale to show 100% black would represent the most negative attitude, whereas moving the coloured scale to 100% white would represent the most positive attitude.

The PolliMeter has been selected as the preferred scale among subjects with a low level of education (Lampert 1979, 1981) and among adults (Lampert & Tziner 1985). In recent years, there have been further developments in the PolliMeter, so as to measure not only the final reading, but also the decision-making process (Lampert & Stashevsky 2006).

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About the authors

Tali Te'eni-Harari is a lecturer on the Communications Programme in the Graduate School of Business Administration and the Department of Political Studies at Bar-Ilan University, Israel. Her research specialty field is the effects of advertising on young people.

Shlomo I. Lampert was a founding director of the Graduate School of Business Administration at the Bar-Ilan University in Ramat-Gan, Israel (1991–1995). He became Executive Director of the MBA programme at Bar-Ilan University in 2003 and stayed until 2004. He was then a Founding Chair of Health and Hospitality Management at the Hadassah Academic College in Jerusalem, Israel (2005 to present).

Sam N. Lehman-Wilzig is Associate Professor in the Communications Programme in the Department of Political Studies at Bar-Ilan University. He served as department chairman from 2004–2007 and as head of the Communications Programme from 1997–2007. His research specialty fields are new media and political communication.

Address correspondence to: Tali Te'eni-Harari, Graduate School of Business Administration and the Department of Political Studies, Bar-Ilan University, Ramat-Gan 52900, Israel.

Email: hararit@mail.biu.ac.il

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